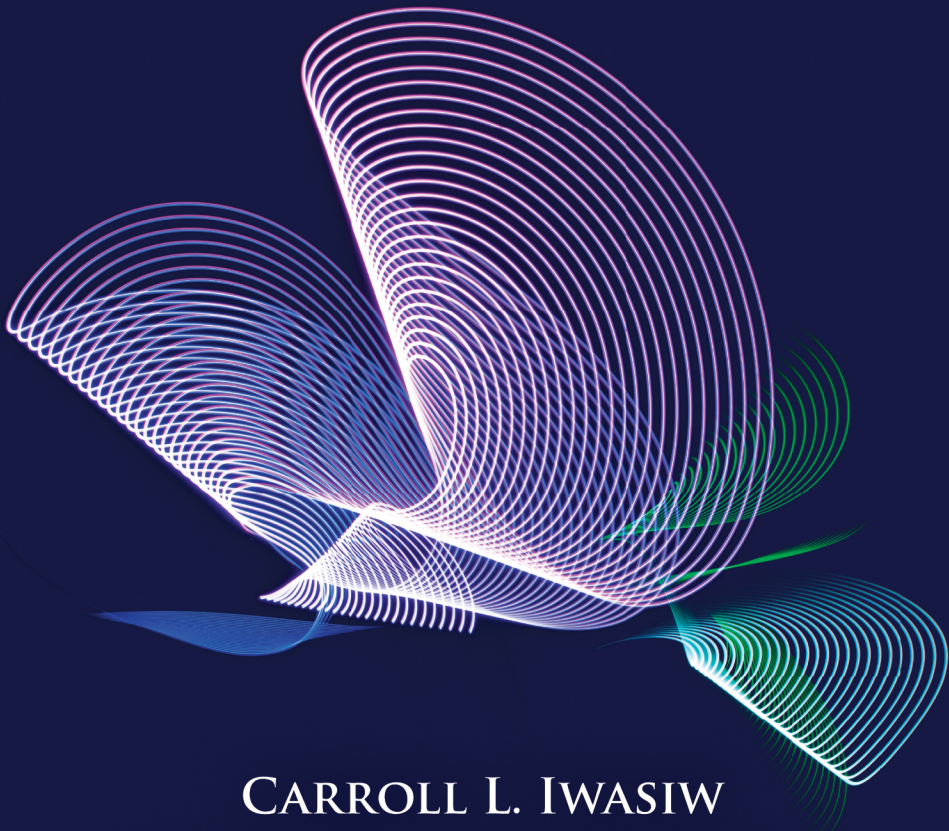


FOURTH EDITION

CURRICULUM DEVELOPMENT

IN NURSING EDUCATION



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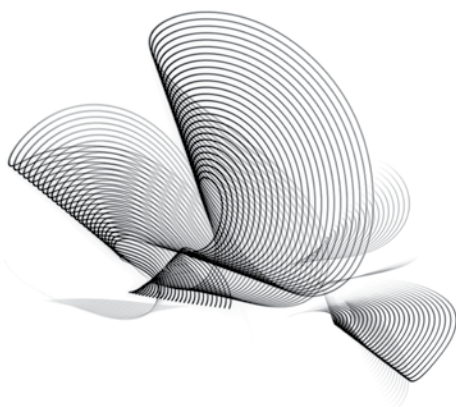
MARY-ANNE ANDRUSYSZYN

DOLLY GOLDENBERG

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CARROLL L. IWASIW, EDD, MSCN

Professor Emeritus, Arthur Labatt Family School of Nursing,
Western University, London, Ontario, Canada

MARY-ANNE ANDRUSYSZYN, EDD, MSCN, RN, FCNEI

Professor, Arthur Labatt Family School of Nursing,
Western University, London, Ontario, Canada

DOLLY GOLDENBERG, PHD, MA, MSCN

Adjunct Professor, Arthur Labatt Family School of Nursing,
Western University, London, Ontario, Canada



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Preface

The fourth edition of *Curriculum Development in Nursing Education* is once again written for all those engaged in developing, implementing, and evaluating new curricula, or refreshing existing curricula, in nursing education. Experienced or recently appointed nursing faculty, graduate students, teaching assistants, and those who aspire to become nurse educators will find something of value that they can consider or apply.

The term *curriculum* is meant to convey the totality of philosophical approaches, design, courses, teaching-learning and evaluation strategies, interactions, learning climate, human and physical resources, and curricular policies. The premise that a curriculum should be evidence-informed, context-relevant, and unified continues in this *Fourth Edition*. Faculty development, ongoing appraisal, and scholarship remain core processes of curriculum work in the model presented.

Chapter headings, subheadings, and configurations have remained relatively unchanged. However, more current nursing education ideas, perspectives, and applications have been included throughout. Chapter goals have been replaced with questions to help focus readers' attention. Some new tables and figures have been added, and those retained from the *Third Edition* have been updated and/or modified to enhance clarity. A summary, descriptions of faculty development, ongoing appraisal, and scholarship activities relevant to the chapter topic, synthesis activities that comprise a hypothetical case with questions and additional questions for readers' consideration in their own setting, and chapter references are part of all chapters except the first. All cases were newly developed for this edition of the book. The cases and accompanying questions can be used as starting points for faculty development conversations or as learning activities for graduate classes.

Part I is entitled *Introduction to Curriculum Development in Nursing Education: The Evidence-Informed, Context-Relevant, Unified Curriculum*.

Chapter 1, *Creation of an Evidence-Informed, Context-Relevant, Unified Curriculum*, begins with definitions of curriculum generally. Then, introduced and elaborated upon is the idea that a curriculum must be informed by evidence about students, nursing education and practice, and clients; relevant to its context; and unified, wherein the components are logically, visibly, and consistently related to the premises of the curriculum. The Model of Evidence-Informed, Context-Relevant, Unified Curriculum Development is overviewed in Chapter 1. The model has been modified slightly in this edition to differentiate between formative and summative evaluation.

Included in Part II, *Core Processes of Curriculum Work*, are the three core processes: faculty development, ongoing appraisal, and scholarship. Chapter 2, *Faculty Development for Curriculum Work and Change* includes Albert Bandura's Social Cognitive Theory and Social Cognitive Theory of Human Agency as perspectives relevant to faculty change during curriculum work. Chapter 3, *Ongoing Appraisal in Curriculum Work*, is largely unchanged. Chapter 4, *Scholarship in Curriculum Work*, continues to differentiate scholarliness and scholarship, and in Table 4-1, provides examples of how curriculum scholarship can be evidenced. The three core processes are seen as continuous and necessary components of curriculum work, and therefore are incorporated into all subsequent chapters.

Part III, *Preparation for Curriculum Development*, continues to emphasize that curriculum development requires considerable logistical preparation. Chapter 5, *Determining the Need and Gaining Support for Curriculum Development*, has been reorganized to reduce redundancy and give more prominence to the importance of the school leader's encouragement and tangible support. Chapter 6, *Deciding on the Curriculum Leader and Leading Curriculum Development*, adds two theories: bridge leadership and shared leadership. The application of leadership theories to curriculum leadership has been strengthened. *Organizing for Curriculum Development*, Chapter 7, addresses both the curriculum leader's and faculty members' responsibilities. Some content has been reorganized and there have been many small additions within the sections, resulting in an updated chapter.

Part IV, *Development of an Evidence-Informed, Context-Relevant, Unified Curriculum*, has six chapters that parallel the phases of the Model of Evidence-Informed, Context-Relevant, Unified Curriculum Development. As such, the main ideas of the chapters remain unchanged, although current perspectives have been included and tables have been updated or modified for clarity. Chapter 8, *Data Gathering for an Evidence-Informed, Context-Relevant, Unified Curriculum*, offers an overview of contextual factors: the forces, situations, and circumstances within and outside the school of nursing that influence the curriculum.

Approaches for gathering contextual data are described. Chapter 9 is *Analyzing and Interpreting Contextual Data for an Evidence-Informed, Context-Relevant, Unified Curriculum*. Following a clarification of terms, detailed information is included about the analysis and interpretation of contextual data. *Establishing Philosophical and Educational Approaches for an Evidence-Informed, Context-Relevant, Unified Curriculum*, Chapter 10, has been reorganized to reduce repetition. Theories for digital learning have been included; andragogy has been linked to the science of learning; and attention has been given to concept-based teaching, learning, and curriculum, as well as to competency-based curricula. Chapter 11, *Formulating Curriculum Goals and Outcomes for an Evidence-Informed, Context-Relevant, Unified Curriculum*, presents Atkinson's cognitive and affective taxonomies more fully. Processes for formulating goals and outcome statements are proposed. Chapter 12, *Designing an Evidence-Informed, Context-Relevant, Unified Curriculum* describes various program types, delivery, models, designs, and curriculum organizing strategies. New program models are included. Considerable attention is given to the process of designing an evidence-informed, context-relevant, and unified curriculum. In Chapter 13, *Creating Courses for an Evidence-Informed, Context-Relevant, Unified Curriculum*, information is provided about course details, designing courses, and planning individual classes. Creation of concept-based courses is also described. Figures and tables have been updated with new content.

Part V is entitled *Implementation and Evaluation of an Evidence-Informed, Context-Relevant, Unified Curriculum*. In Chapter 14, *Ensuring Readiness for and Fidelity of Curriculum Implementation*, two concepts related to implementation are emphasized: readiness (the state of preparedness to introduce and enact the curriculum) and fidelity (the extent to which the curriculum is implemented as conceived). A new fidelity of implementation model developed specifically for educational interventions, is used as an organizing framework. Chapter 15, *Planning Curriculum Evaluation*, has been reorganized to make clearer the differences between curriculum and program evaluation, summative and formative evaluation, and internal and external evaluation. Evaluation models are summarized.

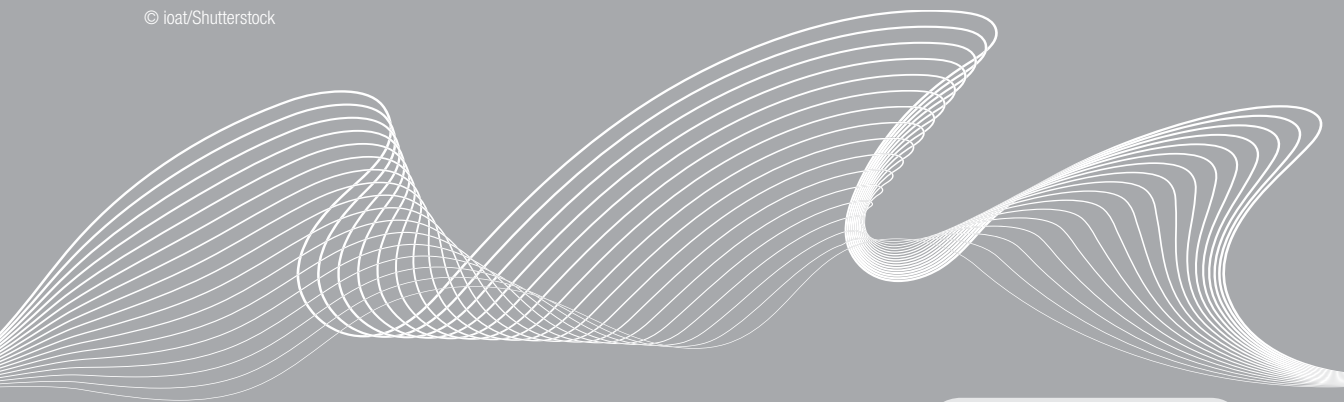
Part VI, *Nursing Education by Distance Delivery* has one chapter, Chapter 16, *Curriculum Considerations in Nursing Education Offered by Distance*. Emphasized is the idea that technology should not take precedence over pedagogy, but rather that a suitable confluence is necessary. Following an interpretation of delivery of nursing education by distance, necessary resources and ethical considerations are outlined. Curriculum considerations for course and class design, implementation, and evaluation are described. Teaching strategies are linked to their effects on students.

In summary, this *Fourth Edition* is replete with accessible and evidence-informed guidance about curriculum development and evaluation. Even though each unit could be expanded with exemplars and deeper discussion, we believe that the information shared will make the process of curriculum development and evaluation a valuable, constructive, and transparent process for novice and senior academicians in nursing and other professional disciplines.



Acknowledgments

We thank our families, colleagues, graduate students, and friends for their continued support, ideas, and encouragement during the writing of this edition of our text. Their presence, forbearance, and good humor have always been valued. We are also deeply grateful to family and friends, now gone, who have influenced our lives and careers. Without them, this book and its preceding editions would not have been possible.



PART

I

Introduction to Curriculum Development in Nursing Education: The Evidence-Informed, Context-Relevant, Unified Curriculum

Creation of an Evidence-Informed, Context-Relevant, Unified Curriculum

CHAPTER PREVIEW

Curriculum development in nursing education is a scholarly and creative process intended to produce an evidence-informed, context-relevant, unified curriculum. It is an ongoing activity in nursing education, even in schools with established curricula. In this text, the term *schools* is used to encompass Schools, Faculties, and Colleges of Nursing.

The extent of curriculum development ranges from regular refinement of class activities to the creation of a completely original and reconceptualized curriculum. In this text, curriculum development activities are presented individually for ease of description and comprehension. However, emphasis is on the idea that the curriculum development process does not occur in ordered, sequential stages or phases. The process is iterative, with some work occurring concurrently, and with each new decision having the potential to affect previous ones.

This chapter begins with definitions and conceptualizations of *curriculum* and an *evidence-informed, context-relevant, unified curriculum*. These are followed by a description of curriculum development in nursing education. Next, the Model of Evidence-Informed, Context-Relevant, Unified Curriculum Development is presented. The model comprises a summary of the major aspects of the curriculum development process, serving as an advance organizer for this text. Additionally, attention is given to some of the interpersonal issues that can influence the curriculum development team, and hence, the completed work. The ideas about the curriculum development process introduced in this chapter are discussed more comprehensively in succeeding chapters.

The term *curriculum work* is used in this chapter and throughout the text as a shorthand method of referring to all or some of the activities of curriculum

development, implementation, and evaluation. The context will make evident the activities to which the term refers.

QUESTIONS ADDRESSED IN THIS CHAPTER

- How is *curriculum* conceptualized?
- What is an evidence-informed, context-relevant, unified curriculum?
- How can the scholarly nature of curriculum development be enhanced?
- What is the Model of Evidence-Informed, Context-Relevant, Unified Curriculum Development in Nursing Education?
- What is the role of interpersonal dynamics in curriculum development?

Definitions and Conceptualizations of Curriculum

Curriculum is defined as “a course; specifically, a regular course of study or training, as at a school or university” (OED Online, 2016). The word comes from the Latin *currere*, to run, or to run a course (Wiles & Bondi, 2011), and originally meant the knowledge passed from one generation to the next (Wiles, 2005). A common understanding of curriculum is a program of studies with specified courses leading to an academic certificate, diploma, or degree.

Another perspective of curriculum is “a desired goal or set of values that can be activated through a development process, culminating in experiences for learners” (Wiles & Bondi, 2011, p. 5). These authors further state that the extent to which the experiences represent the envisioned goals is dependent on the effectiveness of the curriculum developers.

A more specific and expansive view is:

The curriculum is a set of plans made for guiding learning . . . usually represented in retrievable documents of several levels of generality, and the actualization of those plans in the classroom, as experienced by the learners and as recorded by an observer; those experiences take place in a learning environment that also influences what is learned. (Glatthorn, Boschee, Whitehead, & Boschee, 2016, p. 4)

This definition emphasizes accessible written plans, witnessed and documented classroom experiences, and the milieu in which the experiences occur.

Parkay, Anctil, and Hass (2014) give attention to the ideas of theoretical and research bases for curricula and a societal context in their definition:

The curriculum is all of the educational experiences learners have in an educational program, the purpose of which is to achieve broad goals and

related specific objectives that have been developed within a framework of theory and research, past and present professional practice, and the changing needs of society. (p. 3)

They explain that:

- The curriculum is preplanned and based on information from many sources.
- Objectives and instructional planning should be based on theory and research about society, human development, and learning.
- Curriculum decisions should be based on criteria.
- Students play an important role in the experienced curriculum.

Many other conceptualizations exist: a written document, planned experiences, a reflection of social emphases, planned learning outcomes, hidden or visible, and living or dead (Hensen, 2010). Hensen summarizes these definitions and interpretations into three categories: means versus ends, content versus experiences, and process versus plan. Oliva (2009) also reduces the many views of curriculum to three categories. These focus on purpose, what the curriculum does or is meant to achieve; the context in which the curriculum is implemented, possibly revealing the underlying philosophy, such as a learner-centered curriculum; and strategy or particular instructional or learning processes. Somewhat similarly, Wiles (2005) categorizes definitions according to the emphasis on curriculum as subject matter, a plan, an experience, or outcomes. Combining some of the foregoing ideas, and drawing on ideas of complexity thinking, Hussain, Conner, and Mayo (2014) view curriculum as “six partial and coupled facets that exist simultaneously: curriculum as structure, curriculum as process, curriculum as content, curriculum as teaching, curriculum as learning and curriculum as activity” (p. 59).

Following an analysis of curricula, and the meanings of *curriculum* and *educational program* in North America and Europe, Jonnaert, Ettayebi, and Defise (as cited in Jonnaert & Therriault, 2013) created the following definition:

A curriculum is a system made up of a series of educational components. Articulated among themselves, these components permit the orientation and operationalization of an education system through pedagogical and administrative action plans. It is anchored in the historical, social, linguistic, political, religious, geographical and cultural characteristics of a country, region or locality. (p. 405)

This characterization points to the relationships among curricular components, including administrative features. It also gives importance to the context in which the curriculum is operationalized. Further, Jonnaert and Therriault (2013) believe that a curriculum can exist in six forms: a subject of study, a process

of curriculum development, a product of the development process, a reference framework for reform, a subject of adaptation, and a means of regulating an education system.

Lunenberg (2011) offers a category that is markedly different from those previously described: *the nontechnical approach*. This refers to ideas about curriculum and teaching that are more aesthetic, emotional, political, and visionary, and less concerned with the methods and procedures of curriculum development, implementation, and evaluation. For example, *narrative pedagogy* is a phenomenological, interpretative approach in which storytelling is the basis for interpretation and learning. Storytelling and co-interpretation of experiences, not content, is at the heart of classroom activity (Diekelmann & Diekelmann, 2009; Ironside, 2015). In a somewhat similar vein, Freire (1970/2001) views education as a process of *conscientization*, the development of critical awareness of one's social reality through reflection and action, and curriculum as the creation of knowledge by learners and teachers together, within the context of their lives (Freire, 1998). Based on the real-life situation of students, the curriculum is problem focused, not subject based, inherently interdisciplinary, and highly relevant to students (Warner, 2012). Related to Friere's ideas of critical social pedagogy, other pedagogies have emerged as philosophies, teaching methods, and bases for curriculum, for example, feminist pedagogy (Light, Nicholas, & Bondy, 2015), and transformative learning (Cranton, 2016; Mezirow, Taylor, & Associates, 2009). The premises of the nontechnical approaches can overlap and may be combined, as exemplified in critical feminist pedagogy (Chow, Fleck, Fan, Joseph, & Lyter, 2003), often extending to include matters of race, culture, and sexuality. In descriptions of these education and learning approaches, attention is given to the underlying philosophies and to the processes of personal transformation, dialogue, reflection, inclusion, and democracy that should occur within and among students and teachers. The logistics of a formal curriculum, such as course sequencing, are not the focus of nontechnical curriculum approaches, although in professional programs, such as nursing, the nontechnical approaches can be used within the structure of a formal curriculum.

Finally, Joseph (2011) offers a perspective on curriculum unlike the preceding ideas. She conceptualizes curriculum as *culture* with "complex sociopolitical, political, and ethical layers of meaning" (p. 3), and recognizes that many cultures can exist simultaneously within an educational setting. Because curriculum is a "process for transforming educational aims and practices" (p. 3), it requires inquiry and introspection.

The definition of curriculum is important, because definitions "convey educators' perceptions, and in turn, these perceptions affect how a curriculum is used and indeed, even whether it is used at all" (Hensen, 2010, p. 9). Additionally, the

definition specifies the scope of work to be completed by curriculum developers (Wiles & Bondi, 2011).

Despite differing definitions and conceptions, a curriculum is implemented with the intention that learning will occur and student potential will be unlocked. In professional programs, there is a written plan that usually contains philosophical statements and goals or outcomes; indicates some selection, organization, and sequencing of subject matter and learning experiences; and integrates evaluation of learning. These elements, among others, are addressed within the Model of Evidence-Informed, Context-Relevant, Unified Curriculum Development and in subsequent chapters.

Curriculum or Program?

Although the term *nursing curriculum* is often used interchangeably with *nursing program*, the latter is broader in scope. The nursing program is comprised of the nursing curriculum; the school of nursing culture; administrative operations of the school; faculty members' complete teaching, research, and professional activities; the school's relationships with other academic units, healthcare and community agencies, and professional and accrediting organizations; institution-wide support services for students and faculty; and support for the school of nursing within and beyond the parent institution. In brief, the nursing program includes activities and relationships that influence the quality and nature of the student experience but extend beyond the student experience itself.

Nursing Curriculum as Evidence-Informed, Context-Relevant, and Unified

In this text, *nursing curriculum* is defined as the *totality of the philosophical approaches, curriculum goals or outcomes, overall design, courses, strategies to ignite learning, delivery methods, interactions, learning climate, evaluation methods, curriculum policies, and resources*. The curriculum includes all matters that affect nursing students' learning and progression and that are within the authority of the school of nursing. This conceptualization aligns with ideas of curriculum as a plan, experiences, processes, means, strategy, culture, and as being visible.

Evidence-Informed

A curriculum that is evidence-informed is based on systematically and purposefully gathered evidence about:

- Students, learning, teaching, evaluation, and nursing education practices and trends

- Clients and their responses to health situations
- Nursing practice
- The context in which the curriculum will be offered and graduates will practice nursing

The evidence that is gathered is then subject to interpretation by curriculum developers. Plans are created, appraised in accordance with the realities of the school of nursing, and then finalized by the consensual judgment of nurse educators. As such, the curriculum is informed by evidence, but not based solely on evidence. Therefore, the term *evidence-informed* and not *evidence-based* is used.

An evidence-informed curriculum is dynamic, evolving as new evidence becomes available. Ongoing modification in response to new evidence ensures that the curriculum remains current.

Context-Relevant

A curriculum that is context-relevant is:

- Responsive to students; current and projected societal, health, and community situations; and current and projected imperatives of the nursing profession
- Consistent with the mission, philosophy, and goals of the educational institution and school of nursing
- Feasible within the realities of the school and community

This type of curriculum is defined by, and grounded in, the forces and circumstances that affect society, health care, education, recipients of nursing care, the nursing profession, and the educational institution. Although there will be significant similarities in the nursing curricula of many schools, those that are most strongly contextually relevant will have unique features reflective of local and/or regional circumstances. However, a context-relevant curriculum is not simply reactive to current circumstances; it also reflects attention to projections about the future. As such, a context-relevant curriculum is forward looking and prepares graduates for current nursing practice and the type of nursing practice that could or should exist now and in the future.

Unified

A curriculum that is unified contains curricular components that are conceptually, logically, cohesively, and visibly related, specifically:

- Philosophical approaches, professional abilities, and curriculum concepts are evident in the curriculum goals or outcomes.
- Level and course learning goals or outcomes/competencies are derived from the curriculum goals or outcomes.

- Course titles reflect the philosophical approaches and curriculum concepts.
- Strategies to ignite learning and opportunities for students to demonstrate learning are consistent with the curriculum goals or outcomes, and philosophical and educational approaches.
- The language of the philosophical approaches and curriculum concepts are used in written materials and teaching-learning interactions.

The cohesion and connections between and among all aspects of the curriculum are evident. This unity is apparent in written curriculum documents and the curriculum that is enacted daily.

In summary, a curriculum that is evidence-informed, context-relevant, and unified is grounded in evidence about nursing education, nursing practice, students, and society, and is appropriate to the situation in which it is offered. The curriculum is forward looking and organized in a coherent fashion with clear relationships among the curricular elements so that its unified nature is visible.

Curriculum Development in Nursing Education

Curriculum development in nursing education is a scholarly and creative process intended to produce an evidence-informed, context-relevant, unified nursing curriculum. The ultimate purpose is to create learning opportunities that will build students' professional knowledge, skills, values, identity, and confidence so that graduates will practice nursing professionally, that is, safely and competently in changing social and healthcare environments, thereby contributing to the health and quality of life of those they serve.

Curriculum development is scholarly work. It is an intellectual endeavor encompassing purposeful data gathering, logical thinking, careful analysis, presentation of cogent arguments, and precise writing. The curriculum development process is also creative, requiring imaginative and flexible thinking, openness to new ideas, tolerance for ambiguity and uncertainty, and risk taking. Overall, curriculum work is characterized by interaction, cooperation, change, and possibly conflict; comprised of overlapping, interactive, and iterative decision making; shaped by contextual realities and political timeliness; and influenced by the personal interests, styles, philosophies, judgments, and values of the curriculum developers.

The complex processes that lead to a substantial revision of an existing curriculum or creation of a new curriculum provide an opportunity for faculty members to expand their scholarly work, develop and implement fresh perspectives on the education of nursing students, and influence the culture of the school of nursing. Additionally, curriculum development provides an avenue

to strengthen the school's impact on the community and to gain support from members of the educational institution, community, and nursing profession.

The curriculum development process has no absolute end. Once developed, the nursing curriculum undergoes refinements and modifications as it is implemented, researched, and evaluated, and as new evidence becomes available about teaching, learning, students, society, health, health care, nursing education, and nursing practice. A nursing curriculum cannot remain static, inert, and unaltered because the evidence that informs the curriculum and the circumstances in which it is offered are constantly changing. The alterations (some minor, some extensive) made during the life of the curriculum reflect faculty members' ongoing efforts to offer a strong curriculum that is relevant to its context and to the students experiencing it.

Model of Evidence-Informed, Context-Relevant, Unified Curriculum Development in Nursing Education

Although written and schematic representations of curriculum development are generally linear and sequential, this is not how nursing curricula are actually developed. Curriculum development is an integrated and recursive process, with each decision influencing concurrent and subsequent choices, and possibly leading to a rethinking of previous ideas. A cohesive nursing curriculum results from ongoing communication among groups working simultaneously and/or serially on different aspects of curriculum development, review and critique of completed work, and confirmation of decisions.

The iterative and recursive nature of curriculum work cannot be illustrated accurately in a two-dimensional representation because depicting the multiple and repetitive interactions that occur between and among the individual elements of curriculum development would result in a crowded and confusing model. Therefore, we present a model of the curriculum development process in nursing education that appears linear, sequential, and fixed. However, chapter descriptions of each element of the model and the feedback loops make evident that the process is interactive and that no element is completed without reference to other elements.

The Model of Evidence-Informed, Context-Relevant, Unified Curriculum Development in Nursing Education describes the overall process for nursing curriculum development and is illustrated in **Figure 1-1**. The model is multidimensional, with three core processes of curriculum work: faculty development, ongoing appraisal, and scholarship. Also included in the model are the specific elements of curriculum development, and feedback loops that denote the dynamic nature of curriculum development, implementation, and evaluation.

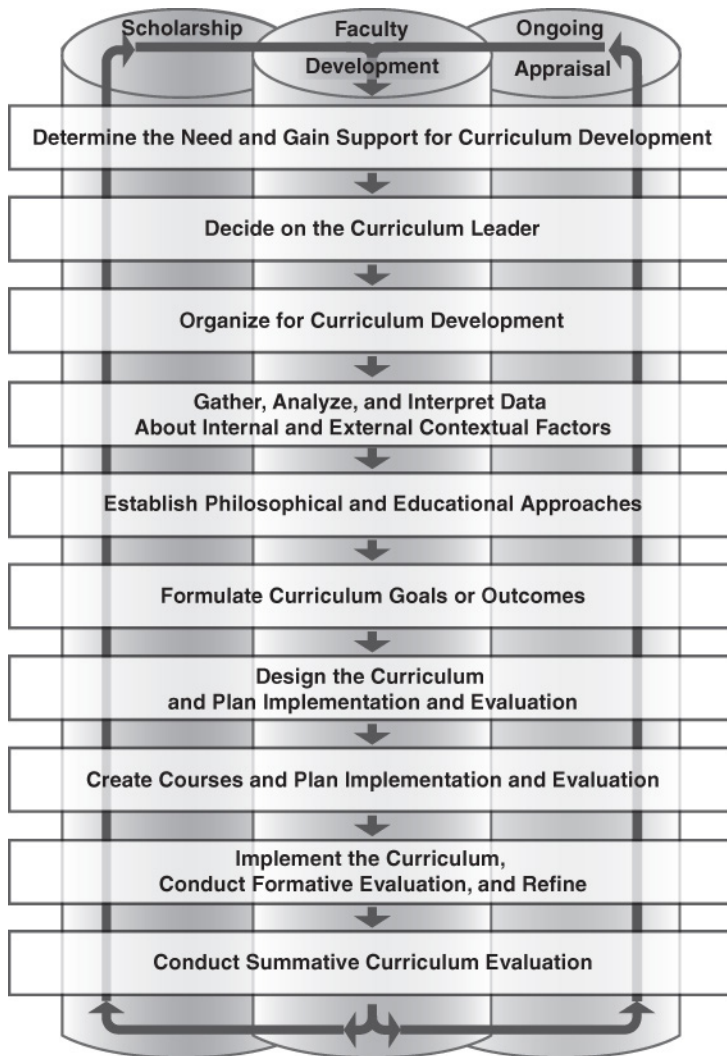


Figure 1-1. Model of Evidence-Informed, Context-Relevant, Unified Curriculum Development.

The model is applicable to all levels of nursing education and to all forms of curriculum delivery.

Core Processes of Curriculum Work

All aspects of faculty development are enhanced by attention to three core processes: faculty development, ongoing appraisal, and scholarship. These core processes permeate all activities leading to a sound curriculum.

Faculty Development

Faculty development is necessary for all aspects of curriculum work because many nursing faculty and other stakeholders may have little or no preparation in educational theory. An evidence-informed, context-relevant, unified curriculum can result only when the developers understand the processes of curriculum development. Therefore, deliberate and ongoing faculty development is essential to:

- Ensure that those engaged in curriculum development acquire the necessary knowledge and skills to contribute meaningfully to the processes and decisions of curriculum development
- Implement and evaluate the curriculum as intended

Individuals' openness to new ideas and methods is fundamental to curriculum work, and this openness is nurtured through faculty development activities. Members' changing perspectives are indicative of personal development, intellectual growth, and emerging commitment to the developing curriculum.

Ongoing Appraisal

Ongoing appraisal is *the deliberative, continuous, repeated, and careful critique of curriculum ideas, products, and processes during and after their creation, implementation, and evaluation*. Ongoing appraisal of all aspects of the processes and products of curriculum development is inherent to the overall endeavor. Review and critique are necessary to ensure that:

- Completed work is consistent with the basic curriculum tenets and is of an appropriate quality.
- The processes in place are effective and satisfactory to members of the curriculum development team.

Scholarship

Scholarship is a central activity of academia, and therefore, ought to be a core activity of all curriculum work. This scholarship can include formal research, expository or analytical publications, and presentations to peers and stakeholders. Topics could include the processes experienced, insights gained, and work completed. Such activities elevate curriculum work from a local initiative to knowledge development and dissemination, thereby advancing the science of nursing education.

Figure 1-2 is a model of the relationship of the three core processes to curriculum development, implementation, and evaluation. The core processes are foundational to intellectual rigor in curriculum work.

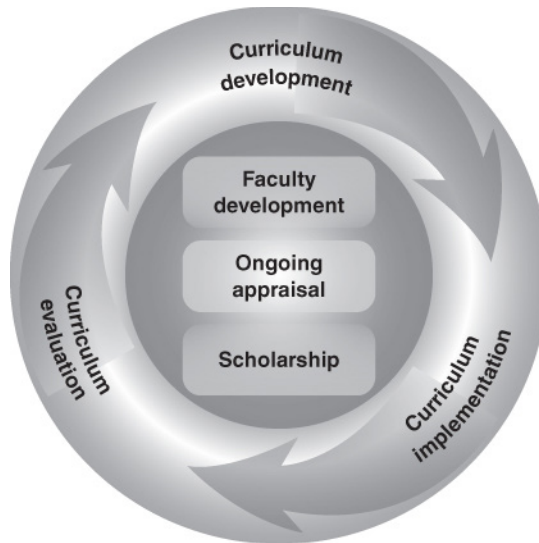


Figure 1-2. Core processes of curriculum work.

Curriculum Development Activities

Determine the Need and Gain Support for Curriculum Development

When a decision is made to open a school of nursing or to introduce a new program within an existing school, curriculum development is necessary. More typically, however, curriculum development begins with an acknowledgment that the existing curriculum is no longer working as effectively as desired. This recognition can arise from altered circumstances within the school (e.g., changing faculty or student profile), or outside the school (e.g., changed nursing practice or accreditation standards).

When there is a desire to develop a nursing curriculum, support is needed from nursing faculty, educational administrators, and other stakeholders, such as students and nursing leaders. Gaining support for the curriculum development enterprise includes describing the logical reasons for altering the curriculum and appealing to the values held collectively by members of the school and educational institution. Faculty members' support and commitment are essential for curriculum development to proceed. Additionally, administrative support (e.g., altered work assignments, secretarial assistance, promotion and tenure considerations) provides evidence of institutional backing for the initiative. Curriculum development is contingent upon adequate resources to complete the work.

Decide on the Curriculum Leader

It is vital that a leader to guide the curriculum development process be determined. This individual can be appointed, elected, or given the position by consensus, according to the usual practices within a school of nursing. It is expected that the leader be knowledgeable about curriculum development, possess managerial skills to coordinate the logistics, and have the support of faculty and other stakeholders.

Organize for Curriculum Development

Attention to the logistical matters that will lead to a successful outcome is essential. Organizing for curriculum development requires consideration of, and decisions about leadership, the decision-making processes, committee structures and purposes, and approaches to getting the work done.

Gather, Analyze, and Interpret Data About Internal and External Contextual Factors

Systematic data gathering about the environment in which the curriculum will be implemented and in which graduates will practice nursing is critical to ensure that the curriculum is relevant to its context. Data are gathered about specific contextual factors. The contextual factors are *the forces, situations, and circumstances that exist both within and outside the educational institution and that have the potential to influence the school and its curriculum*. These are interrelated, complex, and, at times, seamless and overlapping. Internal contextual factors exist within the school and the educational institution; external contextual factors originate outside the institution.

Typically, information is obtained about internal factors of history; philosophy, mission, and goals; culture; financial resources; programs and policies; and infrastructure. Similarly, data are gathered about the external contextual factors: demographics, culture, health care, professional standards and trends, technology, environment, and socio-politico-economics. It is necessary to determine precisely which data are required about each contextual factor, as well as the most appropriate data sources. The data are then analyzed and interpreted to deduce the core curriculum concepts and key professional abilities that graduates will need in order to practice nursing safely.

Establish Philosophical and Educational Approaches

Information about philosophical approaches suitable for nursing education, along with the values and beliefs of the curriculum development team, lead to the development of statements of philosophical approaches relevant for the school and curriculum. Reaching resolution about the philosophical approaches is a

critical milestone in curriculum development, because all aspects of the finalized curriculum should be congruent with espoused values and beliefs and the concepts that form the philosophical approaches. Along with the philosophical approaches is the identification of educational approaches consistent with them.

Formulate Curriculum Goals or Curriculum Outcome Statements

The curriculum goals or outcome statements reflect broad abilities of graduates, each representing an integration of cognitive, psychomotor, and affective actions. Goal or outcome statements are written to incorporate the desired abilities of graduates, philosophical approaches, and core curriculum concepts. They are a public statement of what can be expected of graduates.

Design the Curriculum and Plan Curriculum Implementation and Evaluation

The term *curriculum design* refers to the configuration of the course of studies. In designing the curriculum, faculty and other members of the design team determine level goals or outcomes/competencies; nursing courses, required non-nursing support courses, and elective courses; course sequencing; relationships between and among courses; delivery methods; and associated policies. Brief course descriptions and draft course goals or competencies are prepared for nursing courses. As the curriculum is being designed, plans for its implementation are discussed concurrently to assess its feasibility and how it can be introduced while the current curriculum is being phased out. Implementation planning also includes such matters as informing stakeholders, attending to contractual agreements and logistics, and planning ongoing faculty development.

Curriculum evaluation is an organized and thoughtful appraisal of those elements central to the course of studies undertaken by students, and of graduates' abilities. The aspects to be evaluated include the philosophical and educational approaches, curriculum goals or outcome statements, overall design, courses, strategies to ignite learning, interactions, learning climate, evaluation methods, implementation fidelity, curriculum policies, resources, and actual outcomes demonstrated by graduates. Like planning for implementation, planning curriculum evaluation should occur simultaneously with discussions about design.

Design Courses and Plan Course Implementation and Evaluation

Designing courses requires attention to the following components: purpose and description, course goals or course outcomes/competencies, strategies to ignite learning, concepts and content, classes, guidelines for student learning activities, opportunities for students to demonstrate learning, and evaluation of student learning. Each course must be congruent with the curriculum intent

and clearly relate to intended curriculum goals or outcomes. As a mirror of the process of designing the curriculum and planning curriculum implementation and evaluation, planning for course implementation and evaluation should occur concurrently with decision making about course design.

Implement the Curriculum, Conduct Formative Evaluation, and Refine

Curriculum implementation begins when the first course is introduced and continues for the life of the curriculum. Successful implementation is dependent on faculty and student adoption of the curriculum tenets and the use of congruent educational approaches and methods to evaluate learning. The curriculum evaluation plan is put into action simultaneously with curriculum implementation. Ongoing formative evaluation results in small refinements that ease implementation, fill identified gaps, and/or remove redundancies.

Conduct Summative Evaluation of the Curriculum

Once completely implemented, the entire curriculum is evaluated to determine whether all elements are appropriate and congruent with one another, and to ascertain graduates' success. Internal curriculum evaluation is undertaken by members of the school of nursing, whereas external curriculum evaluation is generally conducted as a part of program evaluation and approval or accreditation by provincial, state, regional, or national bodies.

Feedback Loops

The feedback loops in the model reflect the idea that at every stage of curriculum work, appraisals are made about the appropriateness and fit of one element with previous elements, and the possibility of modification. The feedback loops signify that the curriculum is dynamic, subject to change as information about its effectiveness and appropriateness is gathered. Additionally, the feedback loops illustrate the connections among the curriculum development, implementation, and evaluation activities and the core curriculum processes.

Interpersonal Dimensions of Curriculum Development

Interpersonal dynamics are a feature of all curriculum work. The nature of the dynamics is dependent on curriculum developers' talents, personalities, goals, knowledge, experiences, and values, and the culture of the school. Although the graphic depiction of the Model of Evidence-Informed, Context-Relevant, Unified Curriculum Development in Nursing Education can appear straightforward, its operationalization is not.

A wide range of thoughts, behaviors, and emotions can occur during curriculum development, including learning, conflict, cooperation, resistance, eagerness, formation of group alliances, power struggles, commitment to shared goals, sadness, and satisfaction. For curriculum development to be successful, it is important that all members feel recognized, valued, and appreciated for ideas they offer and the work they complete. The human dimension is a constant and requires attention even when the tasks and deadlines of curriculum development are pressing.

Curriculum deliberations occur in collaboration with colleagues whose values may be divergent. Because values affect perspectives and choices, they are a powerful (although sometimes unrecognized) influence on curriculum development. Consequently, it is incumbent upon curriculum developers to reflect on their ideals and beliefs, discuss them openly with colleagues, and consider how these influence their preferences about the developing curriculum. Clarification of individual and collective values is integral to curriculum development and can be essential in times of emotional debate or apparently irresolvable conflict.

The dynamics of influence and power are also part of curriculum development and its aftermath. Faculty members with either informal or formal power in the school may influence the process in directions not supported by all, and consequently, some faculty and other stakeholders might feel devalued, resentful, or powerless. New informal leaders can emerge during curriculum development with a resulting loss of influence by others. The processes of developing and implementing a new curriculum can lead to shifts in the dynamics within and outside the school, and with associated changes in the real or perceived advantages and disadvantages experienced by individuals. Relational conflicts, such as power struggles or incivility, may arise during curriculum development and these can have “injurious effects on both task- and social-based aspects of group effectiveness” (Manata, 2016).

Curriculum development and implementation represent a significant change for faculty members in which they progress from established ways of being, to a state of uncertainty, and then to new understandings and practices. Collegial support and reinforcement sustain this progress. Collectively, faculty can create and institute strategies to recognize their progress, offer encouragement to each other, and celebrate their successes. In these ways, both faculty cohesion and the curriculum are strengthened.

The interpersonal dimension of curriculum work is a matter that requires ongoing attention by all participants. The success of the curriculum is dependent on the dedication of all members, and this is most likely to develop when individuals communicate openly and supportively with one another, feel valued, and believe their ideas are contributing to quality nursing education.

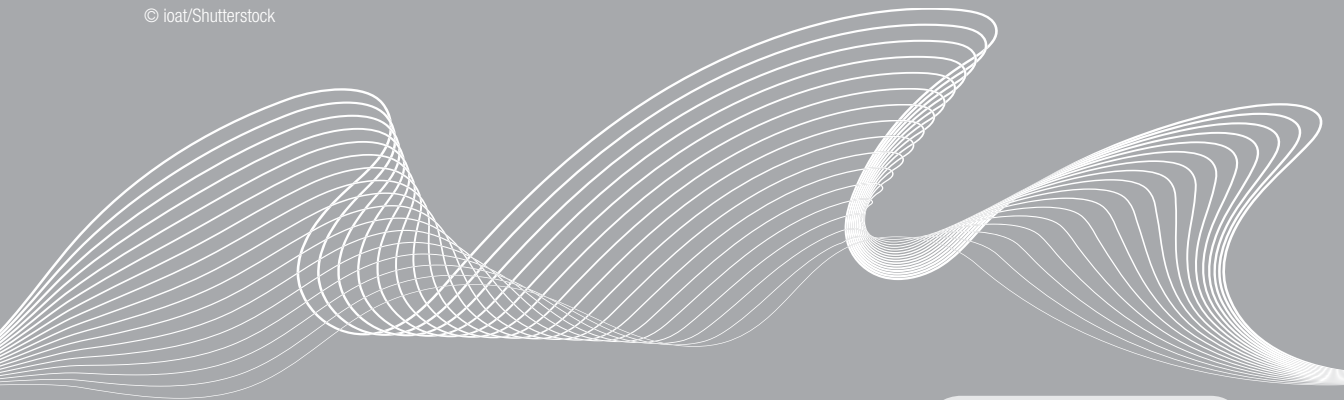
CHAPTER SUMMARY

Curriculum development in nursing is a scholarly and creative endeavor that faculty members and other stakeholders undertake with the aim of preparing graduates who will practice nursing professionally in constantly changing environments. There are many views of *curriculum* in the literature. However, in this text, the nursing curriculum is defined as the totality of the philosophical approaches, curriculum goals or outcomes, overall design, courses, strategies to ignite learning, delivery methods, interactions, learning climate, evaluation methods, curriculum policies, and resources. The Model of Evidence-Informed, Context-Relevant, Unified Curriculum Development in Nursing Education describes a process for developing a curriculum that is informed by evidence, relevant for the context in which the curriculum will be offered and graduates will work, and unified visually and conceptually. Core to the model are faculty development, ongoing appraisal, and scholarship. Curriculum development begins with the recognition that a new curriculum is needed and may seem to be complete when the newly created curriculum is implemented. However, development of an evidence-informed, context-relevant, unified curriculum is really a dynamic process, because evaluation and subsequent refinement are constant, even during implementation. Successful curriculum work is contingent on dedicated participants whose efforts are valued and who are supported during all aspects of curriculum development, implementation, and evaluation.

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PART



Core Processes of Curriculum Work

Faculty Development for Curriculum Work and Change

CHAPTER PREVIEW

This chapter begins with descriptions of the purpose, meanings, and necessary conditions of faculty development. The relationship of faculty development, curriculum work, and change is explained to support the premise that faculty development is a core and ongoing component of all curriculum work. Faculty development for curriculum work is presented according to its purpose, goals, participants and their responsibilities, activities, and benefits. Theoretical perspectives on change are briefly described next, with application to curriculum work. Then, strategies to support faculty during change and ideas for responding to resistance to change are offered. Synthesis activities include a case study for readers' critical analysis and questions for consideration when planning faculty development.

QUESTIONS ADDRESSED IN THIS CHAPTER

- What are the purposes of faculty development generally, and for curriculum work and change specifically?
- Under what circumstances can faculty development occur?
- Why is faculty development seen as a core process of curriculum development, implementation, and evaluation?
- What are the responsibilities, strategies, and benefits associated with faculty development for curriculum work?
- How does change relate to curriculum work?
- What are some helpful strategies to support faculty during change?
- How can resistance to curriculum work and faculty development be addressed?

Faculty Development

Purpose and Meaning of Faculty Development

Faculty development is the process of continuing professional development for academics. The traditional purpose has been to develop faculty members (including graduate students and post-doctoral scholars) as teachers and evaluators of learning. This aim has been expanded to include emphases on the development of members as scholars, professionals, and citizens of an organization. Activities related to all these may involve the creation of a community of learners (Brooks, 2011; Malinsky, DuBois, & Jacquest, 2010; POD Network Executive Committee, 2016; Taylor, 2010).

Faculty development programs are generally based in an institutional educational development office and are intended for members of all academic units. Additionally, topics relevant to a particular academic unit may be planned and conducted by members of that unit, either alone or in conjunction with the staff of the institutional educational development office.

Through participation in faculty development programs and individual development activities, faculty members have attributed various meanings to their own development as academics. These meanings are hierarchal, with each description encompassing those previous:

- Becoming more productive in their work output
- Achieving credibility and recognition
- Making ongoing improvements in their work
- Accumulating personal knowledge and skills
- Expanding the depth and sophistication of knowledge in their academic field
- Contributing to disciplinary growth or social change (Åkerlind, 2005)

From these meanings, the overall purpose of faculty development activities can be deduced: *to contribute to the growth and development of faculty members in all their academic roles so that their capacity to advance their discipline and influence change is expanded.*

Necessary Conditions for Innovation and Faculty Development

The “conditions that are important for securing faculty buy-in and support” (Furco & Moely, 2012, p. 129) for an educational innovation are:

- Explicit and clearly communicated goals for the innovation, which are consistent with faculty values and concerns
- Opportunities for faculty to gain skill with the innovation and explore their questions, without excessive demands on their time

- Institutional commitment to ongoing support for the innovation
- Rewards for faculty involvement in the form of readily perceived professional development or through the faculty reward system

The development and implementation of a new or modified nursing curriculum is a significant educational innovation, the purpose of which should be endorsed by faculty and other curriculum development participants after an exploration of their values. Planned faculty development, a core process of curriculum work in nursing, is the ongoing embodiment of:

- A response to an agreed-upon educational innovation that is consistent with values held by members of a school of nursing
- The provision of opportunities for faculty and other curriculum participants to gain curriculum skills and explore questions about curriculum
- An institutional commitment to provide tangible support for curriculum work
- Professional development during curriculum work

Relationship of Faculty Development, Curriculum Work, and Change

Curriculum work entails significant challenges and changes to current assumptions and practices, the nature of activities undertaken, composition of teams, interpersonal relationships, and expectations for individuals and groups. Curriculum design or redesign and the subsequent implementation require change from an established curriculum and familiar work patterns based on tacit assumptions, beliefs, and norms, to an altered curriculum and expectations based on new assumptions, beliefs, and norms that evolve and become explicit as curriculum work progresses. Thus, curriculum redesign influences, and possibly changes, the culture of a school of nursing.

Educational and evaluation approaches, interactions, course content, and sites for students' professional practice could be altered with curricular changes. Additionally, there may be shifts in interpersonal dynamics, teaching assignments, and membership of teaching teams. Similarly, subsequent curriculum evaluation can lead to curriculum modifications, which may necessitate further change.

Because faculty members have extensive involvement in curriculum development and implementation plans, and in opportunities to introduce aspects of the redesigned curriculum into the existing one, transition to a new curriculum might be expected to occur easily and with full faculty support. Unfortunately, the process may not be smooth, because change often involves some loss of what is valued and adoption of new perspectives and behaviors. Accepting

and endorsing the need for change, working toward the change, and living successfully in the changed circumstances all require personal adjustment. This adjustment occurs through self-reflection, critical thinking, altered views, and support, and does not happen in a scheduled, linear fashion. It is determined by individual interests, motivations, and readiness.

Successful curriculum change is generally dependent upon the acquisition of new skills and perspectives by those who will implement the reconceptualized curriculum. As an affirmation of the importance of ongoing learning by faculty members, Latimer and Thornlow (2006) reported that grantees in funded projects to expand geriatric content in undergraduate nursing programs “unanimously contend that faculty development is the single most necessary precursor to the successful implementation and maintenance of geriatric curricular enhancements” (p. 79). Similarly, a funded faculty development program was the basis of curriculum transformation in a college of education, resulting in internationalization of the curriculum (Niehaus & Williams, 2016).

The content and nature of faculty development are defined by both curricular and change processes. In turn, learning gained during faculty development will influence the curriculum work and the change. Moreover, faculty development activities are a means to sustain change and promote continued growth within a school of nursing.

Ongoing, systematic, and integrated professional development is necessary to ensure that the group understands the proposed change, particularly when a change in practice is a goal (Haviland, Shin, & Turley, 2010). Faculty development activities provide a means for participants to gain the knowledge and skills necessary for curriculum work. They are also an avenue to support participants during the changes associated with creating, implementing, and evaluating a new or revised curriculum. As such, faculty development is a core and pervasive process of all curriculum work.

Figure 2-1 depicts the continuous, synchronous, and interrelated nature of curriculum work, faculty development, and change.



Figure 2-1. Synchronous, intertwining, and infinite nature of curriculum development, faculty development, and change.

In situations where group-based faculty development is limited or absent, it can be expected that curriculum development will be affected. Therefore, to support curriculum work and change, the curriculum leader has a responsibility to provide the necessary information informally and likely will need to offer intensive guidance during curriculum development. Without some form of faculty development, the quality of the developing curriculum will be compromised.

Faculty Development for Curriculum Work

Necessity of Faculty Development for Curriculum Work

“For real curriculum change to occur, [there must be] well-conceived, comprehensive faculty development programs” (Licari, 2007, p. 1509). The development program needs to include attention to the skills related to all aspects of curriculum work, and it should “help faculty members navigate from the current steady state . . . through the unknown white-water rapids inevitably created by curriculum change” (Licari, 2007, p. 1509). Faculty development supports knowledgeable curriculum work, professional growth, and the advancement of nursing education practice.

A core competency of nurse educators is to “participate in curriculum design and evaluation of program outcomes” (National League for Nursing [NLN], 2012, p. 18). Among the components of this competency is “knowledge of curriculum development, including identifying program outcomes, developing competency statements, writing learning objectives, and selecting appropriate learning experiences and evaluation strategies” (NLN, 2012, p. 18).

However, graduates of master’s and doctoral programs may not have academic preparation in this aspect of the nurse educator role (Benner, Sutphen, Leonard, & Day, 2010; Booth, Emerson, Hackney, & Souter, 2016; Dearmon, Lawson, & Hall, 2011; Suplee & Gardner, 2009) because of the emphases on advanced practice roles and research in graduate nursing programs. Additionally, faculty development about the curriculum development process itself is rarely planned, perhaps because of an unexamined assumption that teachers innately know how to develop curricula, or because curriculum development activities have traditionally received little (if any) credit toward promotion and tenure decisions (Diamond, as cited in Trudeau, 2014). The result is that knowledge about nursing curriculum may be limited to personal experience, and knowledge of curriculum development processes may be absent (Goldenberg, Andrusyszyn, & Iwasiw, 2004). Thus, many nursing faculty are not equipped to undertake curriculum development or to fulfill the educator role other than in the way that they experienced it as students (Bartels, 2007). Therefore, continuing education related to nursing education is necessary to achieve and

maintain role competencies (Frank, 2015), and this can occur through planned faculty development.

Faculty competence in curriculum design, implementation, and evaluation is foundational to an educationally sound curriculum. Because it cannot be assumed that all faculty members are fully versed in educational matters, it is incumbent on school leaders to provide opportunities for relevant knowledge and skills to be acquired.

Faculty development is a core activity of curriculum work and is a catalyst for the creation and operationalization of a new vision for the curriculum. Through faculty development activities, novices can be guided to think beyond their individual areas of nursing practice expertise and their own educational experiences, to the possibilities for an entire curriculum. The interactions and synergy occurring in development sessions may also prompt seasoned faculty to consider new approaches to the nursing curriculum.

Curriculum redesign requires faculty members to extend their thinking beyond their own experiences and preferences. They need to consider the future of nursing practice, the philosophical approaches and concepts that should underpin nursing practice and curricula, suitable curriculum goals or outcomes, curriculum design, and experiences that will allow students to achieve the expectations. To develop an evidence-informed, context-relevant, unified curriculum in a timely fashion, faculty and other stakeholders will likely require assistance with the curriculum development process itself, as well as with curriculum implementation and evaluation. Accordingly, it is necessary for faculty development to occur in tandem with curriculum development and to be viewed as a core component of curriculum work.

Faculty development related to all aspects of curriculum development, implementation, and evaluation is particularly timely because of the nursing faculty shortage and impending retirement of a large cohort of faculty (American Association of Colleges of Nursing, 2017; Canadian Association of Schools of Nursing, 2016; Feldman, Greenberg, Jaffe-Ruiz, Villard Kaufman, & Cignarale, 2015; Nardi & Gyurko, 2013). Presumably, it is the senior faculty members who are most experienced in curriculum work and who are more likely to have formal preparation in curricular matters. Over time, therefore, there could be fewer members knowledgeable about curriculum work and able to mentor and guide others. Accordingly, opportunities should be provided to develop or enhance the curriculum skills of novice and mid-career nurse educators, and to capitalize on the expertise of senior faculty.

Purpose and Goals of Faculty Development for Curriculum Work

The purpose of faculty development for curriculum work is *to contribute to the growth and development of nursing faculty in all aspects of curriculum work,*

so that (1) their capacity and self-efficacy to develop, implement, and evaluate an evidence-informed, context-relevant, unified curriculum is enhanced, and (2) their ability to influence and advance nursing education practice is expanded. This purpose encompasses all aspects of curriculum work for which faculty and other curriculum participants might require additional knowledge, skills, and support. It also explicitly notes that growth in knowledge and skill can lead to greater professional influence.

The goals of faculty development related specifically to curriculum work are for faculty members to:

- Enhance knowledge and skills about curriculum development and curriculum evaluation.
- Transform views to match the perspectives of the new curriculum.
- Become comfortable with changing roles and relationships.
- Gain skill in new approaches for teaching-learning and evaluation of student learning. (Bevis, 2000)

All are of equal importance and are achieved synergistically. Other goals can emerge in accordance with the learning needs of curriculum developers.

Enhance Knowledge and Skills About Curriculum Development and Curriculum Evaluation

Knowledge about curriculum development and curriculum evaluation processes varies among faculty members and other stakeholders. Some will know a great deal; others will be familiar with course planning, but not the entire curriculum design process. Some will know about course evaluation, but not about evaluation of the complete curriculum. To make certain that the curriculum development process is as smooth as possible, faculty development focused specifically on curriculum work is necessary. Knowledge of the total process will lead to an appreciation of the:

- Time required for curriculum development
- Work accomplished by task groups
- Importance of shared understandings and consensus

Moreover, detailed information about each aspect of curriculum development, implementation, and evaluation will allow groups to develop a critical path for fulfilling their responsibilities and increase the likelihood that work will be completed in the manner required and within the scheduled timeframe.

Transform Views of Curriculum

Another goal for faculty development is the transformation of individual and collective views of all aspects of the curriculum and its foundational tenets. This

reconceptualization is based on faculty development opportunities intended to assist members to design, implement, and evaluate a curriculum reflecting a new view. The transformation is strengthened and crystallized as faculty “live” the altered curriculum.

Become Comfortable with Changing Roles and Relationships

Altered faculty roles could be a consequence of curriculum redesign, that is, changed relationships with students, colleagues, clients, and administrators. The role change may involve a shift in activities, power, equity, and authority. If so, exploration of these ideas and the enactment of new relationships warrant explicit attention.

Gain Skill in New Approaches for Teaching-Learning and Evaluation of Student Learning

A necessary goal of faculty development is to become comfortable with new strategies that align with the curricular philosophical and educational approaches, and goals or outcomes. Through development activities related to teaching and to evaluation of student learning, faculty members can gain the skills, and thus the self-efficacy, necessary to:

- Implement the curriculum consistently and successfully.
- Ensure that students experience the chosen philosophical and educational approaches in all teaching-learning encounters and have opportunities to achieve expectations.
- Develop methods that match curriculum tenets to ignite and evaluate student learning.

Participants in Faculty Development Activities

Faculty members are the key players in the curriculum development, implementation, and evaluation processes, that is, in:

- Decisions to be made
- Committee work to be accomplished
- Facilitation and evaluation of student learning according to the tenets of a redesigned curriculum
- Appraisal of curriculum evaluation results

Consequently, the success of curriculum work is largely dependent upon knowledgeable and willing faculty members and development activities planned with and for them.

Importantly, others who are part of the curriculum development process, such as students, clinicians, and administrators, should also be included in

faculty development activities. Participation in these learning opportunities will expand stakeholders' knowledge and skills about curriculum processes, strengthen their commitment and connections, and deepen their understandings about the school of nursing and the intent of its educational offerings.

Responsibility for Faculty Development

Programs related specifically to curriculum development, implementation, and/or evaluation consistent with curriculum tenets are not typical offerings of an institutional educational development unit. Therefore, faculty development related to nursing curriculum work is the responsibility of a school of nursing undergoing curriculum redesign and change, although aspects may be planned in partnership with a central unit, and/or with other relevant units in the academy. Identification of specific faculty development needs can be undertaken by the school leader, the curriculum leader, a faculty development committee, or individual faculty members. Typically, it is a combination of these.

The school leader has the responsibility to invest in and support the development of faculty in order to minimize knowledge gaps in all academic spheres, including curriculum work. Formal leadership confers the responsibility to act as a change agent and to operationalize professional development to “foster the future of the organization” (Kenner & Pressler, 2006, p. 2). School leaders are a primary force in initiating change, assisting faculty in their development (Smolen, 1996), creating an empowering and respectful work environment, and ensuring that stakeholders are involved in the school's activities. Moreover, the school leaders' support for faculty development signals its importance and conveys that value is accorded to ongoing learning related to nurse educator roles.

Faculty members have a professional obligation to ensure they are competent in their role functions, to continue to improve as nurse educators, and to engage in activities that enhance their effectiveness (NLN, 2012) and that of others. Therefore, they have a responsibility to:

- Identify own development needs
- Attend and engage fully in faculty development activities
- Be open to new ideas
- Commit to employing new knowledge, skills, and perspectives as they engage in curriculum work
- Contribute to the development of colleagues during faculty development activities and curriculum work

Responsibility for creating and providing formal faculty development opportunities could rest with knowledgeable and experienced faculty members who have a solid theoretical and experiential foundation in nursing education.

Their participation could be to lead formal and informal sessions, provide guidance to novices, and/or purposefully mentor others. These activities likely occur spontaneously within a learning culture, yet may need to be formalized for faculty development for curriculum work.

Faculty Development Activities for Curriculum Work

Faculty development activities could be formal, informal, collaborative, self-managed, individual, or group-based. All educational strategies used for student learning can be employed. **Table 2-1** includes examples of formal and informal strategies for faculty development. Ideas about content and processes for faculty development specific to various aspects of curriculum work are offered in later chapters.

As the curriculum design progresses, educational strategies consistent with the curricular philosophy ought to be employed. In this way, participants will gain knowledge related to the content of the learning session, while simultaneously observing and experiencing the approaches to be enacted in the future.

FACULTY DEVELOPMENT STRATEGIES	
Formal	Informal
• Audiovisual materials	• Buddy system
• Communities of interest	• Dialogue and feedback
• Conferences	• Handbooks
• Group meetings	• Learning circles
• Faculty meetings	• Luncheon meetings
• Forums	• Meetings with department heads
• Lectures by experts and/or knowledgeable colleagues	• Mentorship
• Online learning activities	• Modeling
• Peer coaching	• Networking
• Podcasts	• One-on-one discussions
• Postgraduate courses	• Online group discussions
• Practice teaching	• Peer support
• Retreats	• Readings
• Seminars	• Shadowing
• Tours, visits	• Tutoring
• Workshops	
• Videos	

It is incumbent upon all curriculum stakeholders to reach shared understandings about curriculum work, nursing education, nursing practice and health care, the curriculum tenets, educational processes, and relationships between and among students, faculty, practitioners, and clients. Planned and spontaneous discussions about these topics serve faculty development purposes and advance curriculum development processes.

Because faculty development is ongoing, a preliminary schedule should be agreed upon. It is recommended that each session's topic, format, time, location, and leader be decided early so that participants can plan to attend. However, schedules and topics require some flexibility to allow for changes to meet participant obligations, newly identified or urgent needs, and other contingencies. If a development activity is offered at the time when members are about to engage in a particular aspect of curriculum work, they are likely to see the need for the activity and to participate willingly.

Through curriculum development work, faculty come together, learn and grow together, accept that change is inevitable, and take ownership and pride in the future. When faculty development is enacted as a core component of curriculum work, individuals' personal investment in the curriculum and the school of nursing is increased.

Benefits of Faculty Development for Curriculum Work

Faculty development for curriculum work results in essential benefits for the school of nursing, specifically the greatly enhanced potential for curriculum developers to:

- Create a shared vision for the curriculum (Oliver & Hyun, 2011).
- Design an evidence-informed, context-relevant, unified curriculum.
- Implement and evaluate the curriculum in accordance with the underlying tenets.
- Apply new learning about curriculum in future situations.
- Increase their sense of efficacy and agency in curriculum decisions.

Planned and ongoing faculty development demonstrates the school's commitment to faculty members and their professional growth, increases job satisfaction, and is a method to support personal and curriculum development. Curriculum developers may feel valued because of the school's investment in them. Additionally, formalized, systematic development activities can enhance faculty recruitment and retention (Heinrich & Oberleitner, 2012).

A program of faculty development can also contribute to a learning culture within a school, a culture where individual and team learning of all members (faculty, stakeholders, and students) is given attention and accorded value, and in which systems are created to support and share learning (Holyoke, Sturko, Wood, & Wu, 2012). In such an environment, members may feel secure in

group learning and connected to others through mutual learning, acceptance, appreciation, support, and respect.

Faculty and stakeholders who participate in development related to curriculum work have the potential, individually and collectively, to experience benefits consistent with those reported earlier in this chapter. Learning the skills of curriculum work will increase participants' competence and enable them to become more efficient and effective, thereby reducing frustration and the need to redo work. Increased knowledge and skills could lead to credibility and possibly external recognition, as well as forming the bases for making ongoing improvements and feeling a sense of pride in completed work. Additionally, personal skills, such as negotiation, collaboration, and consensus building, can accrue from curriculum work. There is potential to expand the depth and sophistication of knowledge about nursing education, and, if scholarship projects about curriculum work are undertaken, to influence nursing education practice beyond the local environment.

Faculty Development for Change

Within the context of concentrated curriculum work, change occurs within individuals and within the operations and culture of the school of nursing. These happen synergistically, although alterations in personal behavior, such as engaging in curriculum development and testing new teaching approaches, generally precede a noticeable shift in the school culture. As new behaviors begin, the school culture is modified, and the cultural shift then reinforces the altered behaviors. The processes of behavior and cultural change are intertwined and will be ongoing throughout curriculum implementation and beyond.

The changes associated with curriculum work can give rise to feelings and behaviors ranging from eager anticipation and full engagement, to a “wait and see” attitude with reluctant participation, to anxiety, and even to resistance. In addition to expanding participants' knowledge and skills in curriculum work, faculty development can also support personal and professional growth during the changes associated with curriculum work. Therefore, attention to the cognitive, psychological, and behavioral aspects of change is important. Consideration should be given to how faculty might experience change, how the school's culture might influence and be affected by change, and strategies to support faculty during change.

Theoretical Perspectives on Change: Application to Curriculum Work

Numerous change theories have been developed, and most have relevance for curriculum work. Four theories that seem most pertinent for the complexities of curriculum work are presented in alphabetical order.

Diffusion of Innovations

This frequently cited theory addresses change within a social system and gives attention to groups within it. According to Rogers (2003), diffusion is “a kind of social change, defined as the process by which alteration occurs in the structure and function of a social system” (p. 6). An innovation is an idea or practice that is viewed as new, and this is communicated over time among the members of a social system. Acceptance follows an S-shaped curve within a social group, with some members accepting and enacting the change readily, others being slower to accept the change, and still others rejecting it completely. The major tenet of the theory is that people undergo a five-step process: awareness, interest, evaluation, trial, and adoption (Hallahan, 2013).

The rate of adoption is related to the following characteristics of the innovation:

- Relative advantage of the new idea over current practice
- Compatibility with existing values and past experiences of potential adopters
- Complexity of the new idea or practice
- Trialability, or the ability to test the innovation on a limited basis
- Observability of the results of the innovation to others

People do not accept innovations at the same rate or with the same degree of enthusiasm. Individuals experiment with the innovations, “assess their acceptability, evaluate them, find (or fail to find) meaning in them, develop feelings (positive or negative) about them, challenge them, worry about them, complain about them, ‘work around’ them, gain experience with them, modify them to fit particular tasks, and try to improve or redesign them—often through dialogue with other users” (Greenhalgh, Robert, Macfarlane, Bate, & Kyriakidou, 2004, p. 598).

Planned dissemination, including the necessary systems changes to sustain the innovation, can increase the rate and level of adoption more than the pace of informal dissemination. Formal and informal communication channels, status of individuals, and decision-making processes all influence the diffusion of innovations (Greenhalgh, Robert, Bate, Macfarlane, & Kyriakidou, 2005). Yet, in spite of the best plans, some individuals may actively oppose and even sabotage the innovation (Rogers, 2003).

The interplay among personal and external factors in the acceptance of an innovation was demonstrated in a study that examined pharmacists’ practice following the granting of prescribing privileges, an example with applicability to the nursing profession. The characteristics of the innovation, pharmacist self-efficacy, systems readiness, communication, and influence of respected colleagues all affected the prescribing behaviors. The adopters were

knowledgeable about prescribing practices, had their knowledge confirmed by testing, attended to formal communication about prescribing, and had mentors, while those who did not prescribe stated that the time required, system readiness, and available supports were insufficient (Makowsky, Guirguis, Hughes, Sadowski, & Yuksel, 2013).

The Diffusion of Innovations Theory and the study cited above are useful for understanding individuals' and groups' acceptance of the need for curriculum change, their commitment to it, and their readiness to engage in curriculum work and faculty development. They point to the necessity of involving respected opinion leaders and formal leaders in faculty and curriculum development activities so they can demonstrate to peers the value of these endeavors, share positive evaluations of the activities, and make visible the learning they have gained. Their formal and informal diffusion of knowledge and skills relevant to curriculum work may increase the self-efficacy of participants and ultimately improve the quality of the curriculum.

It is important to recognize that the pace at which individuals accept the need for curriculum redesign and faculty development can vary. Therefore, avenues should be available to allow respectful inclusion of those who initially rejected the need for curriculum change and for them to catch up through faculty development. Additionally, as each aspect of the curriculum (the innovation) is implemented (trialed), its merit will be evaluated, and the innovation accepted, modified, or rejected. Finally, it is wise to remember that curriculum change involves systems and culture change, and the innovation can be sustained only if there are adequate resources in place and if a majority continues to support the change.

Organizational Change in Cultural Context (OC³ Model)

Culture is the shared patterns of behaviors and interactions, meanings, values, beliefs, norms, assumptions, and expectations operational in a group or organization. It influences the social and psychological environment; develops over time; is expressed in language, symbols and artifacts, and is transmitted to new members through formal and informal socialization (McCalman & Potter, 2015; Schein, as cited in McCalman & Potter, 2015).

From an ethnographic analysis of change in a research-intensive university, Latta (2009) developed a model of bilateral interaction in which organizational change and organizational culture influenced one another. According to the model, an understanding of the culture is a necessary starting point for the change process. Readiness for change can be enhanced by highlighting discrepancies between the current status and the ideal cultural commitments, and then linking a vision for change to the current and ideal cultures. Subsequently, cultural knowledge can be used to inform change initiatives and strategies.

Existing norms, values, and strengths might be reinforced or built upon to move the organization toward the espoused ideals. New rituals or behaviors can be introduced, and these can contribute to a cultural shift. Tacit elements of a culture can accelerate or slow a planned change, and support or resistance to a change can be related to these, or to cultural elements that have not been taken into account. Cultural dynamics influence the outcome of the change initiative, either positively or negatively. In turn, the change process and its tangible outcomes have an effect on organizational culture.

The OC³ model includes ideas that are important to understand how culture, curriculum work, and faculty development influence one another. The dominant organizational culture provides meaning and stability, and change jeopardizes the meanings people have about the school, the curriculum, and the stability of their position within the culture. When a culture is at risk of change, shared learning and dialogue helps a group to reduce anxiety, regain equilibrium, and develop new ways of expressing themselves (McCalman & Potter, 2015; Schein, as cited in Owings & Kaplan, 2012).

Although a full cultural analysis is beyond the scope of those initiating or leading curriculum change, or planning and offering faculty development activities, there is merit in considering the cultural context of the school. One might first ask if the culture of the school is conducive to innovation (Batra, Duff, & Smith, 2014). Other ideas to consider include: *How might the current culture affect curriculum work and faculty development? What are the espoused and enacted norms, values, assumptions, beliefs, emotional climate, interaction patterns, perceptions, political status, and social practices that could be built upon? Which are particularly valued by members? What aspects of the culture might be changed by faculty development and curriculum work? Who are the powerful individuals and might they be agents for change, or might their power be threatened by change?*

Social Cognitive Theory and Social Cognitive Theory of Human Agency

Social Cognitive Theory

Social Cognitive Theory is a theory of learning and change, and posits that human learning and functioning involve reciprocal interactions among cognitive-affective, behavioral, and environmental components. A key feature of social cognitive theory is *self-efficacy*, an individual's prospective judgement about his/her ability to carry out a behavior at a certain level. Four sources of self-efficacy information are:

- Vicarious experience: observing the experiences of models
- Enactive mastery experiences: gaining success with the required performance (the most powerful source of information)

- Verbal persuasion: encouragement by others
- Influences from physiological and affective states while observing or enacting the behavior

The information undergoes cognitive appraisal as individuals evaluate their efficacy for performing the behavior (Bandura, 1986, 1997). They assess their similarity to the model, credibility of those offering encouragement, and the thoughts and feelings they experienced while performing the task. They then judge themselves as capable of performing the behavior (self-efficacious) or not.

Self-efficacy is task-specific, although, the “task” can encompass a broad range of performance, such as administration or curriculum development. Self-efficacy has been demonstrated to be a strong predictor of behavior. Interventions to build participants’ self-efficacy have yielded positive behavioral changes in the realms of health promotion (e.g., Cooke et al., 2016; Tsay, 2003), mental health (e.g., McCusker et al., 2016; Yarborough, Leo, Yarborough, Stumbo, & Janoff, 2016), nursing education (e.g., Chan, 2015; Walker, 2016), and professional development (e.g., Carney, Brendefur, Thiede, Hughes, & Sutton, 2016; Fitzgerald & Schutte, 2010).

In addition to judging their own self-efficacy for a task, people can also appraise the collective efficacy of a group. Perceptions of group efficacy reside in the minds of members and contribute to the interactions that influence group achievement (Bandura, 2006).

Social Cognitive Theory of Human Agency

The Social Cognitive Theory of Human Agency (Bandura, 2001, 2006) evolved from Social Cognitive Theory (Bandura, 1997). Bandura (2001, 2006) has proposed an agentic perspective on human development, adaptation, and change. Agency is the capacity to influence one’s functioning and life circumstances. There are four core properties of human agency:

- Intentionality is the capacity to make a proactive commitment to bring about a course of action or to purposively carry out a plan.
- Forethought is the ability to envision the future and provides “direction, coherence, and meaning to one’s life” (Bandura, 2001, p. 7). Forethought is manifest in activities such as goal setting, anticipation of consequences of actions, and creating actions likely to produce desirable outcomes. Forethought motivates and guides behavior.
- Self-reactiveness is “self-regulation of motivation, affect, and action . . . governed by a set of self-referent subfunctions, [that] include self-monitoring, performance self-guidance via personal standards, and corrective self-reactions” (Bandura, 2001, p. 8).

- Self-reflectiveness is a metacognitive capacity to examine one's own thoughts and actions, personal efficacy, motivation, values, and the meaning of one's pursuits.

Through functional self-awareness, people make corrective adjustments as necessary.

The core and pervasive foundation of human agency is a belief in personal efficacy. Without a belief that it is possible to produce the desired outcomes through personal action, there is no motivation to act or to persevere.

People function within social situations and their agency is enacted within these situations. Within interpersonal interactions, people are the environment for each other, and a single action can be an agentic influence, a response, or an environmental outcome. In both group and individual situations, people who have developed competencies, self-regulatory skills, and enabling beliefs in their efficacy are able to generate a wide array of options that are likely to lead to their desired futures.

There are three types of agency and successful functioning results from a blending of them. Through *personal agency*, exercised individually, people influence what they can control directly. They may exercise *proxy agency* (i.e., influencing others who have resources to obtain the outcomes they desire) in situations they cannot control directly. Through *collective agency*, individuals pool their resources to achieve goals. The resulting collective efficacy is a reflection of the interdependent efforts (Stajikovic & Nyberg, cited in Bandura, 2012).

The relevance of Bandura's theories is that they provide guidance for faculty development to enhance individual and collective skill and efficacy for curriculum work and change. By incorporating the sources of efficacy information, and encouraging group reflection, faculty development leaders can create an environment that promotes individual and collective agency. Moreover, the idea of collective agency is important in curriculum work: although an individual may lack self-efficacy for a particular curriculum task, group efficacy may be sufficient to complete the work at the specified standard.

Transtheoretical Model of Behavior Change

This model addresses behavior change of an individual as the desired outcome and integrates changes in attitudes, intentions, and behavior. The model incorporates four theoretical concepts central to change: stages, internal processes (cognitive and affective), self-efficacy (a feeling of confidence to enact the desired behavior), and decisional balance (weighing the advantages and disadvantages of changing).

Behavioral change is conceptualized as a spiral, and this pattern represents the reality that people do not change in a straightforward, linear manner. Rather, at certain times, individuals can revert to former stages and then proceed again toward

the desired change. A return to previous stages is considered a natural part of the change cycle. The following stages represent a continuum of motivational readiness:

- **Precontemplation:** Person sees no need to change.
- **Contemplation:** Person thinks about the benefits and losses of change and admits to desiring change, but there is no intent to act.
- **Preparation:** Person plans to make a specific change soon and may make small attempts at change.
- **Action:** Person makes an overt commitment to change and practices the new behavior over time.
- **Maintenance:** Person is able to avoid relapses to former stages for 6 months or more, although the temptation can persist for several years (Norcross, Krebs, & Prochaska, 2010; Prochaska & Velicer, 1997).

Participation in faculty development and curriculum work can be conceptualized as encompassing a change in faculty attitude toward the current curriculum, a decision and intention to create a new curriculum, and an adjustment in behavior to engage in new activities. Curriculum implementation may require altered attitudes toward students, other faculty, and roles; new ways of interacting; and changed content and teaching and evaluation strategies (i.e., behaving in new ways). Faculty development activities can provide the knowledge, skills, and environment that enhance self-efficacy and support individual and collective change. Participation in faculty development represents action to change attitudes and behavior.

The appeal of this model of individual change is that it acknowledges that acceptance, practice, and continuation of a change are not linear processes. Rather, recycling to previous stages is seen as a natural occurrence. Reference to this theory during curriculum work provides a means to understand why some curriculum participants may question the value of new curriculum ideas that they formerly accepted, or may return to previous teaching styles during periods of stress and later reengage in the intent of the changed curriculum. Understanding of this model allows faculty members to be patient with themselves and each other and to recognize when additional support is needed to enhance self-efficacy and commitment to a changing curriculum.

Nature of Faculty Development for Change

The overall purposes of faculty development for change is to build the capacity of nursing faculty to:

- Participate in the creation of an altered school culture.
- Engage in new behaviors.
- Give and receive support during change.
- Find positive meaning in a changed reality.

The achievement of this purpose rests on the commitment of faculty members to:

- Expand their individual and group self-efficacy for change.
- Increase their knowledge of change theory and processes.
- Strengthen a sense of community among members.

All faculty development related to curriculum work is inherently development for change. Cognitive development is addressed through the acquisition of new knowledge and application of that knowledge. Practice in new behaviors, such as teaching strategies, reflects a commitment to, and support of, behavioral change and expanded self-efficacy. Moreover, peer support during the acquisition of new skills and group learning contribute to individual and group self-efficacy for curriculum work and change, and to a sense of community.

It is worthwhile to give purposive attention to change theories and the processes inherent in change (Fiedler, 2010). By explicitly reviewing change processes, faculty and other curriculum developers acquire a means to recognize, label, and accept as normal the processes and reactions associated with change. Such collective meaning-making provides a common frame of reference (McCalman & Potter, 2015) as participants experience the cultural, academic, and personal changes that are part of curriculum work.

The psychological dimension of change may require specific attention. Personal reactions can include enthusiasm, cautious acceptance, or rejection. For some, a curriculum change may represent a change in the psychological contract an individual perceives to exist with the school of nursing, that is, the implicit agreements and beliefs held about the employment relationship. These include perceptions about the mutual obligations, values, expectations, and aspirations that exist outside the formal employment contract (Argyris, as cited in Owings & Kaplan, 2012). Change requires adjustments to individuals' mental maps of what should be. Some accept renegotiation of the psychological contract as a normal part of academic life; others may experience varying degrees of uncertainty and stress, particularly if they have believed that the current curriculum and their role in it will be stable.

Activities to support faculty during curriculum work and change are suggested in **Table 2-2**. The Transtheoretical Model of Behavior Change is used as the organizing framework for the table, because individuals must transform for real change to occur in a curriculum. As well, the *Precontemplation* and *Contemplation* stages parallel the *Determine the Need and Gain Support for Curriculum Development* phase of the Model of Evidence-Informed, Context-Relevant, Unified Curriculum Development in Nursing Education. Ideas are also drawn from the Diffusion of Innovations Theory (Rogers, 2003), the OC³ Model (Latta, 2009), Social Cognitive Theory (Bandura, 1977, 1986, 1997), Social Cognitive Theory of Human Agency (Bandura, 2001, 2006, 2012), and research related to self-efficacy interventions.

Table 2-2: Activities to Support Faculty and Curriculum Change Organized According to Stages of the Transtheoretical Model of Behavior Change	
Participants' Stage of Change	Activities to Support Change
<p>Precontemplation: no intention to change</p>	<ul style="list-style-type: none"> • Engage faculty in discussion about the possibility of curriculum change • Elicit ideas about frustrations, disappointments, and satisfaction experienced within the current curriculum
<p>Contemplation: serious consideration of a curriculum change within a specified time</p>	<ul style="list-style-type: none"> • Review school and university mission and goals and discuss how strongly the current curriculum supports them • Engage faculty in discussion about the pros and cons of curriculum change for students, graduates, faculty members, school of nursing, stakeholders, and the educational institution • Initiate deliberations among faculty and the school leader about the possibility of removing barriers to faculty involvement in curriculum development • Encourage supportive members to share their reasons for wanting curriculum redesign
<p>Preparation: a commitment to change the curriculum</p>	<ul style="list-style-type: none"> • Engage in discussion about faculty values related to nursing education and nursing practice • Obtain group agreement to proceed with curriculum development, emphasizing ideas of group agency • Identify initial faculty development needs and initiate faculty development related to enhancing individual and group efficacy for curriculum work • Ensure resources to support curriculum work • Identify a curriculum leader • Organize for curriculum development • Encourage group development of a vision and goals related to curriculum work • Offer faculty development related to change • Provide faculty development related to the preliminary work of curriculum development
<p>Action: active engagement in curriculum work and faculty development</p>	<ul style="list-style-type: none"> • Provide formal and informal faculty development related to the processes of curriculum work and change • Plan for ongoing support and encouragement • Emphasize group learning • Trial ideas from the developing curriculum in the current curriculum if possible • Encourage group reflection related to curriculum work • Provide rewards for involvement in faculty and curriculum development activities (e.g., public acknowledgment and praise, credit toward promotion and tenure) • Create rituals to acknowledge achievement of major milestones in curriculum work • Use new terminology • Disseminate information about the redesigned curriculum • Welcome those who have been reluctant to participate

Table 2-2: Activities to Support Faculty and Curriculum Change Organized According to Stages of the Transtheoretical Model of Behavior Change (continued)	
Participants' Stage of Change	Activities to Support Change
Maintenance: sustained curriculum engagement and adherence to curriculum tenets	<ul style="list-style-type: none"> • Publicize successes • Plan faculty development activities for aspects of curriculum implementation that are problematic • Provide continuing support for those who are struggling • Focus on shared problem-solving • Share stories about the progress achieved and new perceptions of the curriculum and the school • Identify new values, beliefs, and meanings

Data from Prochaska, J. O., & Velicer, W. F. (1997). The transtheoretical model of health behavior change. *American Journal of Health Promotion, 12*(1), 38–48; Norcross, J. C., Krebs, P. M., & Prochaska, J. O. (2010). Stages of change. *Journal of Clinical Psychology, 67*, 143–154.

Resistance to Change

Even though members of a school of nursing collaboratively agree to proceed with curriculum development, some may be resistant to the need for curriculum redesign or faculty development. “Because change disrupts the homeostasis or balance of the group, resistance should always be expected” (Marquis & Huston, 2012, p. 169). This may be particularly evident in academic environments where faculty members have a great deal of autonomy and construct their own minicultures that (1) encompass their research, teaching, and service obligations; and (2) constitute their psychological contract with the school. Curriculum development and change could represent a significant intrusion into these personal academic worlds, a potential loss of privacy and autonomy in teaching, and reduced research time (Tagg, 2012).

Those who feel their academic homeostasis is being unduly disrupted may behave in ways to undermine the momentum of the majority. The resistance can be overt or covert. Overt resistance could be evidenced in behaviors such as refusing to participate in curriculum and faculty development, or openly criticizing the direction of the developing curriculum. Covert resistance may not be recognized until a pattern of behavior is evident, for example, repeated lateness for meetings, failure to complete agreed-upon work, or attempts to misdirect group attention to historical curricular matters. Passive-aggressive covert resistance is sabotage: while apparently supportive of curriculum development, the resister works behind the scenes to undermine curricular ideas and those who are working on the curriculum.

Resistance cannot be ignored, particularly if the individual(s) involved will have responsibilities in the changed curriculum. Moreover, as time passes, festering resistance undermines resisters' commitment to the employing institution and their perceptions of organizational effectiveness. These effects can be ameliorated with supportive leadership (Jones & Van de Ven, 2016).

To counteract the negativity that resisters might project, every effort should be extended to help them feel that their contributions are needed and valued. Although it is necessary to be sensitive to individual readiness for change, curriculum and faculty development efforts cannot be delayed for a few people if the majority is prepared to move forward.

Responding to Resistance to Change

First, it is important to allow resisters to explain their positions. Ignoring the resistance may deprive the larger faculty group of a valuable resource (Bareil, 2013), specifically, the insights that could have importance for a redesigned curriculum. However, if the resistance continues after the objections are heard and answered, it must be confronted directly. Otherwise, there is implicit permission for the resistance to continue and this may be interpreted to mean that the resisters have more power than the collective faculty group.

Once continuing resistance becomes apparent, it should be addressed as soon as possible. The goal is to have the resister agree to replace the unacceptable behavior with actions that are supportive of the group's efforts, or, at the absolute minimum, not detrimental to the group's work and plans.

There are many possible sources of resistance to curriculum change, and although colleagues may attribute particular motivations to those opposing it, the precise reasons might never be revealed. However, it is not necessary to know the underlying rationale before addressing the behavior.

If group pressure does not lead to a modification of the resister's behavior, it will likely be necessary for the school leader to intervene. Possible strategies to respond to individual and group resistance have been proposed by a number of authors (Bareil, 2013; Jones, & Van de Ven 2016; Owings & Kaplan, 2012; Raza & Standing, 2011), and these are incorporated into **Table 2-3**. All strategies should be implemented with respect, in private as appropriate, and in a manner that allows the resister to feel safe and heard.

An Alternate Perspective

To lessen the stress often experienced when resistance is prolonged or unrelenting, it may be helpful for faculty members to reframe the situation to make the discord or dissent seem less personal. Viewing resistance as a conflict of

Table 2-3: Possible Responses to Reasons for Resistance to Change, Curriculum Redesign, and Faculty Development	
Reasons for Resistance to Faculty Development and Curriculum Change	Possible Responses of School Leader, Curriculum Leader, and/or Faculty Majority
Belief in the value of current curriculum and way of being within the curriculum	<ul style="list-style-type: none"> • Explore which aspects of the curriculum and role are valued and why. • Explore objections to the idea of changing the curriculum. • Validate the individual's commitment to student success and to the school. • Suggest that involvement in curriculum and faculty development is the best way to ensure continuation of what is valued. • Make evident how aspects of the current curriculum might be taken into account in curriculum redesign.
Skepticism about quality of envisioned curriculum	<ul style="list-style-type: none"> • Explore concerns. • Be open to the possibility that the resister is correct. • Acknowledge that the resister's input has assisted in the examination of the issue, along with others' views.
Interpretation of change as personal criticism	<ul style="list-style-type: none"> • Validate the progressive nature of the current curriculum at the time it was developed. • Emphasize that redesigning the curriculum was a collaborative group decision. • Reiterate what will be gained by a changed curriculum. • Listen actively to the resister's issues (e.g., losses, fears), and if possible attempt to lessen the frequency of verbalization of concerns. • Emphasize that the resister's strengths are needed for faculty and curriculum development activities. • Validate the resister's past contributions and express confidence in the individual's ability to be successful.
Belief in own curriculum development expertise; hence no need for faculty development	<ul style="list-style-type: none"> • Acknowledge experience and knowledge that resister has accumulated. • Propose that the resister share expertise by leading some faculty development sessions or mentoring others. Assign this involvement as part of workload if possible. • State consequences of nonparticipation.
Fear of reduced status or not fitting into new curriculum	<ul style="list-style-type: none"> • Emphasize that all faculty are uncertain about their place in the changed curriculum, particularly in the early stages when the future curriculum is undefined. • Encourage participation in curriculum and faculty development as a means of ensuring that the resister will have a valued place in the future curriculum. • Stress that faculty development activities will prepare all faculty for the envisioned curriculum.

(continued)

Table 2-3: Possible Responses to Reasons for Resistance to Change, Curriculum Redesign, and Faculty Development (continued)	
Reasons for Resistance to Faculty Development and Curriculum Change	Possible Responses of School Leader, Curriculum Leader, and/or Faculty Majority
Fear that inadequate skills and knowledge will be revealed	<ul style="list-style-type: none"> • Relate anecdotes from school or personal history when faculty felt they could not succeed in changed circumstances, yet did achieve. • Propose the idea that many faculty may wonder if they “have what it takes” to function in the future curriculum. • Encourage the school leader to attend faculty development activities to underscore that everyone has learning needs and to give importance to attendance.
Lack of confidence in colleagues’ ability to develop an acceptable curriculum	<ul style="list-style-type: none"> • Agree that not all faculty are equally experienced in nursing education generally, and in curriculum development particularly. • Underscore that the curriculum development process is inherently a form of faculty development, and therefore colleagues will enhance skills as the project unfolds. • Emphasize that formal and informal faculty development will occur concurrently with curriculum development, thereby expanding colleagues’ skills and knowledge. • Indicate that curriculum development is an opportunity for the resister to share particular expertise in nursing education, thereby gaining prestige by becoming a model for less experienced faculty.
Lack of confidence in own ability to contribute meaningfully	<ul style="list-style-type: none"> • Emphasize that all faculty are uncertain about undertaking curriculum development. • Remind the resister that ongoing faculty development is intended to ensure that all faculty will have access to pertinent perspectives and be able to contribute to curriculum work. • Relate the strengths that the resister can bring to curriculum development.
Lack of interest or disinclination to expend effort required for change, curriculum redesign, and faculty development	<ul style="list-style-type: none"> • Explore reasons and remove barriers if possible. • Remind the resister that curriculum and faculty development are shared responsibilities for all faculty. • Discuss how the resister expects to be effective in future curriculum if not involved in its creation and in faculty development. • Employ all strategies to help the resister feel that contributions are needed and valued. • Consider an alternate assignment in the school of nursing if possible, and as a last resort.

Table 2-3: Possible Responses to Reasons for Resistance to Change, Curriculum Redesign, and Faculty Development (continued)	
Reasons for Resistance to Faculty Development and Curriculum Change	Possible Responses of School Leader, Curriculum Leader, and/or Faculty Majority
Concern that faculty and curriculum development will interfere with research, manuscript preparation, and/or progress toward tenure	<ul style="list-style-type: none"> • Acknowledge that faculty and curriculum development require intensive effort. • Discuss scholarship potential of curriculum work. • Describe how curriculum work can contribute to promotion and tenure. • Consider the feasibility of some faculty "opting out" of curriculum development for short periods at critical points of research activity or career progress.
Heavy workload	<ul style="list-style-type: none"> • Examine how workload could be altered to include participation in curriculum and faculty development activities.
Misoneism (fear of newness, innovation, or change)	<ul style="list-style-type: none"> • Provide as much support as possible to enhance acceptance of change.
Unrevealed personal reasons	<ul style="list-style-type: none"> • Accept that no one can cause another to change. • Accept that it is not possible to respond constructively to what is unknown.

values, beliefs, rights, and obligations could lead to changed understandings and reactions by all involved. Presented in **Table 2-4** are possible perspectives on conflict areas about the need for faculty and curriculum development. A different view and emotional distance could make the situation more tolerable and reduce the tendency to attribute malicious motives to a resister. Explicit use of conflict resolution strategies may be in order.

Faculty members are responsible for their own reactions and behaviors. Some might choose to reject curriculum redesign and faculty development, content to remain out of step with colleagues, despite efforts to support them through change. It is wise to remember that changing another person's behavior might not be achievable. However, it is possible, and it may be necessary to change one's own reaction so as not to be consumed with anxiety, anger, and the endless creation of appeasement tactics.

Although it is antithetical to nursing's concern with individuals' well-being and emotional comfort, it may be wise to stop giving attention, and thus importance, to the views of persistent resisters. It is preferable to focus on the goals and tasks of curriculum work and prepare for a reconceptualized curriculum with a motivated, critical mass of growth-seeking colleagues, while allowing space for resisters to join the group's curriculum work.

Table 2-4: Possible Perspectives on Conflict Areas About Need for Curriculum Development, Faculty Development, and Change		
Possible Conflict Areas	Possible Perspectives on Conflict Areas	
	Resister	Faculty Majority
Values	<ul style="list-style-type: none"> • Stability • Experience • Personal values 	<ul style="list-style-type: none"> • Change • Personal growth • Shared values
Beliefs	<ul style="list-style-type: none"> • Quality education = current curriculum, teaching, and evaluation methods • Personal value as a teacher and nurse is expressed in current curriculum • Curriculum and faculty development and change are a repudiation of current practices • Expertise is expressed through criticism 	<ul style="list-style-type: none"> • Quality education = new curriculum, teaching, and evaluation methods • New curriculum will enhance growth as teachers and nurses • Curriculum and faculty development will expand knowledge and skills • Improvement and growth are achieved through shared critique
Interpretation of the meaning of <i>academic freedom</i>	<ul style="list-style-type: none"> • Individual decision making about curriculum • Maintenance of present programs 	<ul style="list-style-type: none"> • Collegial decision making and adherence to curriculum decisions made by total faculty group • Planning and implementation of a context-relevant, evidence-informed, unified curriculum
Obligations	<ul style="list-style-type: none"> • Adherence to current (correct) way of doing things • Preparation of graduates for existing nursing practice 	<ul style="list-style-type: none"> • Openness to new ideas • Preparation of graduates for future nursing practice

CHAPTER SUMMARY

Faculty development is a core process of curriculum work, that is, curriculum development, implementation, and evaluation. Identifying learning needs and planning activities to enhance knowledge, skills, and efficacy as participants engage in curriculum work will maximize a successful change. Change theories help to explain the processes that individuals and groups can experience during all aspects of curriculum work, and they can provide ideas related to support for faculty during change. A wide spectrum of faculty development activities should be considered to support faculty and stakeholders during curriculum work and change, and the most suitable should be selected. However, it is realistic to acknowledge that not all faculty members will welcome change; some might prefer to maintain the status quo. Nonetheless, a faculty development program as it relates to curriculum work and change is essential for a successful outcome and should be planned to enhance the capacity and self-efficacy of faculty to participate fully.

SYNTHESIS ACTIVITIES

The Braithwaite College of Nursing case is an example of how members of one school of nursing responded to the provision of faculty development related to curriculum work and change. The questions following the case should help readers apply ideas from the chapter. Additional questions are provided to assist readers as they consider faculty development for curriculum work and change in their own situations.

■ Braithwaite College of Nursing

Braithwaite College of Nursing is located in a mid-sized university that was established in 1952. The undergraduate nursing program has had many curricula, changing every 8–10 years with revisions occurring during the life of each curriculum. The most recent complete change was 9 years ago.

There is a general feeling that it is time for either a major overhaul of the curriculum, or the development of an entirely new curriculum. This feeling has gained momentum because of falling (but still acceptable) pass rates on the NCLEX-RN[®] and a recognition of healthcare trends, such as the ever-growing use of technology by providers and clients, increasing acceptance of complementary modalities, aging and culturally diverse populations, and so on. Although these ideas are touched upon in the current curriculum, many members believe that they require deeper attention.

Like other colleges of nursing, Braithwaite has a mixture of tenured faculty at different career stages and untenured faculty. Of the 18 tenured faculty members:

- Two have doctorate degrees in Education and are nearing retirement.
- Eight are middle- and late-career faculty with PhD degrees in Physiology, Psychology, and Sociology.
- Seven are middle-career faculty with PhDs in Nursing.
- One is newly tenured and has a PhD in Nursing.

Most tenured faculty members teach in graduate and undergraduate courses, including undergraduate professional practice (clinical) courses. All have programs of research and most participated in the development of the current curriculum.

Additionally, there are nine full-time, nontenure track faculty members with PhDs in Nursing or DNS degrees who teach undergraduate theory and professional practice courses. Teaching is their prime responsibility, although some are engaged in research as well. They are hoping to move

from their contract positions to tenure-track positions when senior faculty members retire. Thirty-six masters-prepared, part-time faculty members teach professional practice courses only. None of these full-time or part-time members participated in the development of the current curriculum.

Shared decision making has been the pattern in Braithwaite College of Nursing. Therefore, the Undergraduate Chair, Dr. Joanne Pringe, leads a discussion at a faculty meeting about the need for curriculum development. She gains formal support for curriculum development, even though important questions about the process have been raised: *Who has the time and/or knowledge to engage in curriculum development? Who is willing to do so?*

Dr. Saavi Chaudrary, the College Dean, responds to these concerns by commenting that:

- The undergraduate curriculum is the business of all faculty members.
- She is willing to fund a 1-day workshop to review curriculum development processes.
- She recognizes the importance of faculty research programs and views undergraduate education as being equally important.

Dr. Chaudrary asks Dr. Pringe to develop a tentative workshop plan and date. The purposes of the workshop are to:

- Ensure that all faculty are familiar with the overall processes of curriculum development.
- Determine an implementation date for a changed curriculum.
- Consider a plan for curriculum development.

Dr. Pringe chooses a date at the end of the teaching term when most full-time faculty should be available. Nonetheless, approximately one-third of all full-time members indicate that they will be unable to attend, some because of research or conference commitments, some for unstated reasons. One of the members nearing retirement says she will not participate in curriculum work because she will have retired before a new curriculum can be introduced, and “the curriculum should be developed by those who are going to live it.” Although invited, none of the part-time faculty members have agreed to attend the workshop.

■ Questions and Activities for Critical Analysis of the Braithwaite College of Nursing Case

1. How might Dr. Chaudrary respond to full-time faculty who will not attend the workshop? To part-time faculty?

2. Assess the purposes of this one-day workshop.
3. How can motivation for the workshop be built?
4. Consider whether Dr. Chaudrary ought to consult with members of the university faculty development office about the workshop. How might they help? What might be the advantages and drawbacks in their involvement?
5. How might the attendees interpret the absence of some faculty from the workshop? How might their absence affect plans for curriculum development?
6. Who is (are) the possible workshop leader(s)? What could they offer?
7. Describe the advantages and disadvantages of a 1-day retreat.
8. Decide how much faculty development, and about what topics, might be necessary for this faculty group. Explain the decisions.
9. Will faculty development about change be necessary for this group? Justify the answer with reference to change theories.

■ Questions and Activities for Consideration When Planning Faculty Development in Readers' Settings

1. Who could be the best champion for the faculty development process? How can faculty development proceed if there is no strong champion?
2. What might be the benefits and challenges associated with initiating faculty development activities?
3. Describe the faculty development activities that faculty currently accept or reject. Hypothesize about the reasons for this and how these reasons could influence faculty development for curriculum work and change.
4. Analyze the congruence between faculty development for curriculum work and change and the culture of the school.
5. Consider the activities proposed in Table 2-2. Which would be most constructive in helping faculty move smoothly through the transition from the current to the envisioned curriculum? Why? Propose other suitable activities.
6. What resources (human, physical, material, fiscal) can the school access to support faculty development initiatives during curriculum development?

7. Identify the key elements of a faculty development program to support curriculum development and change.
8. Use the theoretical perspectives on change in this chapter to plan faculty development activities. Are there ideas about assisting faculty during change or about the school culture that point to the use of another change theory or framework?
9. Design a preliminary faculty development program to support curriculum work.

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Ongoing Appraisal in Curriculum Work

CHAPTER PREVIEW

Ongoing appraisal is continuous critique of curriculum ideas and products, and is an inherent part of all curriculum work. This core process of curriculum work is a professional activity undertaken by faculty members while in the midst of their endeavors. In this chapter, a definition of *ongoing appraisal* is presented, followed by descriptions of its purposes and criteria for appraising curriculum work. Ongoing appraisal processes, including the inherent cognitive processes are explained. Some questions are offered as a guide for ongoing appraisal. Attention is briefly given to the interpersonal aspects of ongoing appraisal. The chapter concludes with a summary, a case for analysis, and questions for readers to consider in their own settings.

QUESTIONS ADDRESSED IN THIS CHAPTER

- What is *ongoing appraisal* and why is it a core process in curriculum development, implementation, and evaluation?
- What purposes are realized by ongoing appraisal?
- What are the cognitive processes inherent in ongoing appraisal?
- How do interpersonal dynamics influence ongoing appraisal?

Definition, Purposes, and Bases of Ongoing Appraisal

Ongoing appraisal is the deliberative, continuous, reiterative, and careful critique of curriculum ideas, products, and processes during and after their creation, implementation, and evaluation. It involves:

- Constant monitoring and analytical comparison between proposed ideas and what has already been decided to assess coherence, consistency, and comprehensiveness
- Comparison to tacit or explicit quality standards

The purposes of ongoing appraisal are to ensure that:

- An evidence-informed, context-relevant, unified curriculum is developed, one that will prepare graduates to practice professional nursing competently and ethically.
- The curriculum is logically and philosophically consistent.
- Gaps and redundancies in the curriculum are identified and corrected before implementation.
- The curriculum is implemented and evaluated in a manner true to the curriculum intent.
- Decisions and processes inconsistent with the curriculum intent are identified early, and the necessary alterations made.
- The curriculum work is of a suitable quality.

Ongoing appraisal, quality assurance, and continuous quality improvement share the overall aim of the “ongoing and overall pursuit of excellence” (Halstead, 2017). Quality assurance is generally a management function with formal procedures and criteria to assess processes and products, including (in education) policies and procedures, programs, students, faculty, learning resources, information systems, and so forth (Manatos, Sarrico, & Rosa, 2017). Continuous quality improvement is a management philosophy and function that builds on quality assurance, with emphases on systems, efficiency, and client and employee satisfaction (Samman & Quenniche, 2016). In contrast, ongoing appraisal is a less formal professional activity, initiated and undertaken by faculty members and stakeholders while in the midst of curriculum work. This unceasing process is based in:

- A commitment to the development, implementation, and evaluation of an evidence-informed, context-relevant, unified curriculum
- Ongoing dialogue
- Knowledge of:
 - Curriculum development, implementation, and evaluation processes
 - The context in which the curriculum will be offered and graduates will practice

- The philosophical and educational approaches of the curriculum
- The conceptual bases of the curriculum
- Students for whom the curriculum is being developed
- Decisions already made about the curriculum
- Educational policies
- Openness to critique and possible revision of completed work and/or processes

Criteria for Ongoing Appraisal of Curriculum Work

Curriculum developers, implementers, and evaluators determine the standards and criteria for their work, typically as the group is organizing for curriculum development. Some criteria against which curriculum work is appraised are:

- Relevance and feasibility for the context in which it will be implemented
- Consistency with current evidence about nursing practice, nursing education, and learning
- Congruence with the curricular philosophical and educational approaches
- Logical progression
- Unity
- Comprehensiveness
- Faculty confidence that graduating students can be successful on the National Council Licensure Examination (NCLEX[®]) and in professional practice

Additionally, schools may include externally imposed expectations, such as institution-wide educational requirements, program approval, and/or accreditation standards. Other criteria may be established in accordance with priorities and values of the school of nursing.

Ongoing Appraisal Processes in Curriculum Work

Ongoing appraisal has always been a part of curriculum work, although it may not have been labeled and its purposes not explicitly stated. It is part of a scholarly approach to all curriculum work, both while the work is in progress and after it is completed.

As the term *ongoing* implies, the appraisal process is continuous during all curriculum work and therefore, it is a core process. It begins with an understanding of the context in which the curriculum will be offered and the curriculum decisions that have been made. Then, as curriculum development

teams undertake their work, individual members judge ideas that are proposed. The team discusses the ideas, examining and informally appraising them. The ongoing appraisal results in revisions and improvements during the creation of ideas.

Once a development team feels its task is completed, members review and appraise the completed work to ensure that it is consistent with prior curriculum decisions and the curriculum context. This constant consideration and reconsideration of the work at hand is essential to achieve quality. However, appraisal only by those who created the ideas may not be sufficient to achieve a feasible and unified curriculum.

Also needed is planned review of completed work to ensure that it meets the desired criteria and standards. Although a development team may view its own work as appropriate, the work should be appraised in light of all other developing work to ensure that the concurrent work is logically and philosophically consistent, and that there are no gaps or redundancies in the total curriculum. Therefore, it is recommended that a mechanism for formal appraisal of the developing curriculum be in place. This appraisal could be conducted by members representing several teams, or by a critique or review committee. This “external” appraisal is a means to ensure that all aspects of the curriculum, singly and together, are unified and consistent with the curriculum intent.

Similarly, ongoing appraisal is necessary during curriculum implementation to ensure that the curriculum intent is reflected in the strategies to ignite learning and methods to evaluate student achievement. Also, student learning and responses to the curriculum are continuously appraised. Appraisal of curriculum implementation is undertaken by those implementing courses and then shared with a larger curriculum group because appraisal data may have implications for other courses.

During curriculum evaluation, it is necessary to continually appraise whether the evaluation procedures are consistent with the curricular philosophical approaches, and whether the procedures are providing necessary and important information upon which to judge the entire curriculum. As a result of the appraisal, procedures may be modified “mid-stream” and/or the ideas recorded for consideration in future curriculum evaluations.

The process of ongoing appraisal might result in a rethinking or reaffirmation of past decisions, and possibly adjustments to past or newly completed work, whichever is not fully congruent with the curriculum intent. Importantly, intentional ongoing appraisal should lead to the development, implementation, and evaluation of an evidence-informed, context-relevant curriculum whose elements are conspicuously unified. A depiction of the ongoing appraisal process is provided in **Figure 3-1**.

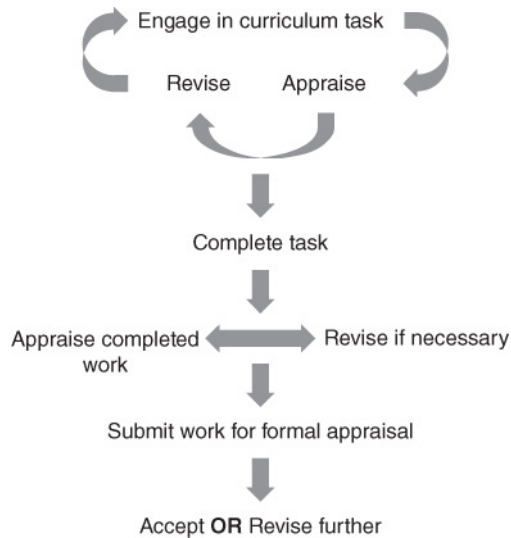


Figure 3-1. Ongoing appraisal.

Cognitive Processes Inherent in Ongoing Appraisal

The intellectual work of ongoing appraisal includes cognitive processes common in nursing education, research, and practice. A few of these interwoven and overlapping processes are briefly described, along with their application to curriculum work.

Critical Thinking

The consensus definition of the American Philosophical Association (APA) is that critical thinking is “purposeful, reflective judgment which manifests itself in reasoned consideration of evidence, context, methods, standards, and conceptualizations in deciding what to believe or what to do” (APA Delphi Report as cited in Facione, 2015, p. 23). It is composed of a constellation of core cognitive skills: interpretation, analysis, inference, explanation, evaluation, and self-regulation (Facione, 2015).

Curriculum developers constantly do the following:

- Interpret evidence, theories, and philosophical approaches.
- Consider and explain the evidence and theory underlying proposed ideas.
- Take into account the context in which the curriculum will be implemented, the philosophical bases of the curriculum, and the goals or outcomes they want students to achieve.
- Establish and review their methods and standards for the curriculum work itself.

In so doing, they interpret information and ideas, analyze the congruence with other curriculum decisions, predict the outcomes of their ideas, explain how new ideas fit into the developing curriculum and are consistent with its tenets, and evaluate the quality and merit of individual ideas and constellations of ideas. This all requires being alert to biases and assumptions, and being open to the ideas and reasoning of others.

Constant Comparison

Constant comparison is an iterative process most associated with the analysis phase of grounded theory research. The procedure includes the constant comparison of new data from interviews, observations, and documents to prior data and previously developed categories to assess whether the data fit or whether new data codes are necessary (Holloway & Galvin, 2015). In curriculum work, new ideas, decisions, products (i.e., written documents), and processes are constantly compared to earlier decisions and completed work to ensure there are no gaps or redundancies and that there is logical, conceptual, and philosophical unity.

Evaluation

Evaluation is a process of judging the quality or worth of something. It entails four steps. First, a standard and/or criteria is (are) established. Then, data about the phenomenon of interest are assembled or observed and compared to the established standard. Finally, a judgment is made about how well the data match the standard.

Throughout curriculum work, ongoing appraisal is a form of evaluation. Curriculum developers repeatedly ask whether their ideas meet the explicated and implicit standards and criteria that they hold as individuals and as a group. During curriculum implementation, faculty members, students, and external stakeholders constantly make judgments about the quality of the teaching and learning experiences and their relevance for the development of future nurses and nursing practice. Similarly, as formal evaluation of the curriculum is planned and undertaken, the evaluation planners continually judge their efforts against a standard: *Will the evaluation procedures tell us what we need to know about the curriculum?* Finally, when the evaluation data are available, the total curriculum is judged.

Reflection

Reflection-in-action is a “reflective conversation with the situation” (Schön, 1983, p. 76), a process in which every action becomes a local experiment and

the responses to the action become the impetus for further development, reframing of the situation, or deeper analysis. Reflection-in-action includes elements of intuitive knowing and artistry. Reflection-on-action, in contrast, is a retrospective examination of a situation (Schön, 1983). Mezirow (1991) furthered these ideas by identifying that it is possible to reflect on content (perceptions, thoughts, feelings, or actions), process (how we perceive, think, act, or feel), and premises (why we perceive, think, act, or feel as we do).

Curriculum development requires ongoing individual and collective reflection-in-action and reflection-on-action. As curriculum developers propose and accept ideas, they constantly appraise and revise them in response to group discussion and assessment of the ideas' congruence with the curriculum intent and their own standards. Similarly, during curriculum implementation, faculty monitor responses to the teaching-learning situation and modify their teaching as necessary. Their subsequent reflection-on-action results in course refinements. During curriculum evaluation, the procedures are monitored to ensure that pertinent information is being obtained. Throughout the curriculum development, implementation, and evaluation processes, decisions and actions are reviewed concurrently and retrospectively with a view to improving the ideas and processes. In this ongoing appraisal, the questions asked and the comments offered are representative of reflection on perceptions, content, processes, and premises.

Professional Judgement

Judgement is “the ability to make considered decisions or to arrive at reasonable conclusions or opinions on the basis of the available information” (“Judgement,” 2016). Professional judgement, therefore, is the ability to form reasonable conclusions or opinions within an area of specialized expertise. The conclusions and opinions are influenced by beliefs, values, experience, and evidence (Hazi, 2012), as well as inclinations to attend mostly to the time orientation, scope, or depth of the available information (Murphy, 2006).

The quality of curricular judgements is improved by team members who have a variety of perspectival emphases. For example, those with considerable experience or an historical perspective will know what has worked in the past. Members with a future orientation will see the possible consequences of ideas and what nursing practice and education could and should be. Members who view a broad scope of information might integrate knowledge of curriculum development, students' characteristics, and university policies. Participants who focus on depth of knowledge can add important details unknown to the others. Therefore, when completed work is judged, interactive critical reflection and team consensus are likely to be more useful than the professional judgment

of any one individual. Moreover, a curriculum team's professional judgment, based on a variety of perspectives, is more likely to be acceptable to a larger group than the views of one person alone.

Although much information is gathered in advance of creating and implementing a curriculum, there is no absolute formula for interpreting and prioritizing the data, and then transforming it into a nursing curriculum. The data and ideas that arise are concurrently:

- Interpreted
- Considered within the contextual realities of the school, educational institution, and community
- Combined with curriculum development teams' imagination and artistry
- Viewed in relation to curriculum tenets
- Examined in light of team members' experience, expertise, and preferences

Ultimately, each curriculum represents the best consensual professional judgement of those who developed it. Their reasonable conclusions become the nursing curriculum.

Questions for Ongoing Curriculum Appraisal

The sections that follow provide some questions for ongoing appraisal that reflect the criteria previously described. The questions are offered as a beginning guide for appraisals during curriculum development, implementation, and evaluation.

Curriculum Development

While engaging in deliberative ongoing appraisal during curriculum development, faculty and stakeholders repeatedly ask themselves questions such as:

- Is this work consistent with the philosophical approaches?
- Do these ideas fit the context?
- Is our language reflective of the curriculum's philosophical approaches and major concepts?
- What is the evidence, rationale, or theoretical base for deciding this?
- How well does this work align with previous decisions and completed work?
- Will these plans give opportunity for students to achieve the stated goals or outcomes?
- How can ideas or processes be improved to be more consistent with the curriculum intent?

- Will this curriculum support graduates' success on the NCLEX-RN® and in professional practice?
- Is this curriculum work of the quality expected in the school of nursing?
- Will this curriculum likely be acceptable to external reviewers?

Curriculum Implementation

During curriculum implementation, some questions faculty, students, and professional practice partners might ask are:

- What are the premises that underlie decisions about teaching-learning events?
- Are the strategies to ignite learning consistent with the agreed-upon philosophical and educational approaches?
- Are strategies to evaluate student learning consistent with the philosophical and educational approaches?
- Are the methods suitable for the context?
- Is the language reflective of the curriculum's philosophical approaches and major concepts?
- How well do students understand the main ideas of the curriculum?
- How are students responding to the courses?
- How well do course processes provide opportunities for students to achieve the stated goals or competencies/outcomes?
- How well is the design working?
- Are the expectations of students and faculty reasonable?
- How can ideas or processes be improved to be more consistent with the curriculum intent or be more feasible?

Curriculum Evaluation

During curriculum evaluation, appraisal questions about the evaluation process might include:

- Are the curriculum evaluation strategies consistent with the philosophical approaches?
- Is information being attained that is useful in making sound judgments about the curriculum?
- Are all relevant stakeholders involved?
- How can the curriculum evaluation strategies be improved?

In situations where faculty members have limited experience with curriculum work, the curriculum leader can pose these questions at appropriate times. In

this way, faculty members' awareness of the importance of ongoing appraisal and their ability to analyze their work will be strengthened.

Interpersonal Aspects of Ongoing Appraisal

Idea generation, appraisal, and refinement are constant features of curriculum work, and this process can be intellectually stimulating for team members, particularly in an environment of respect and support. Indeed, the group relationships themselves “can be a generative source of enrichment, vitality, and learning that helps individuals, groups, and organizations grow, thrive, and flourish” (Ragins & Dutton, 2006, p. 3).

However, not all curriculum teams are sources of mutual support and enrichment, and even in such groups, ideas that are proposed must be handled with care. Curriculum ideas do not present themselves in the middle of a table, fully formed, and unconnected to individuals. They originate with people who may have a large emotional investment in the ideas they offer. Therefore, appraisal, no matter how strongly it is grounded in the curriculum tenets, nor how gently it is presented, may not be perceived as objective or constructive. It may be viewed as personal criticism or an attack of a highly valued viewpoint.

Verbal appraisal of ideas requires attention to the sensitivities of the originator and to careful use of language. Also important is a collective desire for a quality curriculum. These ideas are reflected in questions such as:

- How can the idea be aligned more closely with the curriculum tenets?
- How can this idea be developed further?
- Might there be alterations that will ultimately enhance the outcomes for graduates?

As in all other academic work, there will be divergence of views, and groups must manage these to reach a consensus that will lead to the best curriculum possible, while preserving and possibly enhancing relationships within groups.

When a team has submitted its work for formal appraisal, team members' self-esteem is at stake. The formal appraisal can be perceived as a *pass* or *fail* situation. If the curriculum team is asked to revise its work substantially, members may believe they have failed in the eyes of their colleagues. If the work is deemed acceptable with minor changes or no changes, they may believe the team has passed. In all circumstances of informal and formal ongoing appraisal, it is vital that members treat each person and their suggestions with care and respect, so that everyone feels valued for their ideas and efforts and remains committed to the curriculum work.

CHAPTER SUMMARY

Ongoing appraisal is the deliberative, continuous, reiterative, and careful critique of curriculum ideas, products, and processes during and after their creation, implementation, and evaluation. It is a core process of all curriculum work whose purpose is to ensure a quality curriculum. Moreover, ongoing appraisal contributes to the scholarliness of curriculum work. Ongoing appraisal incorporates the processes of critical thinking, constant comparison, evaluation, reflection, and professional judgement. The appraisal requires careful attention to curriculum team members' self-esteem. In curriculum work, ongoing appraisal occurs continuously within curriculum teams and more formally when each portion of curriculum work is completed. Ultimately, the conclusions reached by the curriculum development teams become the curriculum.

SYNTHESIS ACTIVITIES

The River Heights University Faculty of Nursing case is presented to illustrate the main ideas about ongoing appraisal in curriculum work. It is followed by questions to guide a critical analysis of the case. Questions are then offered that might assist readers when considering how to incorporate ongoing appraisal into curriculum work.

■ River Heights University Faculty of Nursing

River Heights University Faculty of Nursing has been offering a 4-year integrated Bachelor of Science in Nursing (BScN) program for 20 years. Seven classes have graduated from the current curriculum, which was first introduced 11 years ago. Periodic revisions have occurred throughout the life of the curriculum.

Faculty members, students, and stakeholders of the River Heights Faculty of Nursing are beginning to organize for curriculum development. There has been agreement that the curriculum has been revised so much that its unity has been lost. It is time for a new curriculum, and early discussions and current literature have led members to believe that they would like to develop a concept-based curriculum.

Dr. Maria da Silva, the undergraduate chair, is leading the curriculum development initiative and has invited two faculty members and one student from each year of the current curriculum, along with two healthcare agency

representatives, to consider how to proceed. Dr. da Silva has developed a tentative plan for the curriculum development process. She explains that the plan is only a suggestion, a starting point for discussion, and that she recognizes that those present have valuable ideas that will contribute to the final plan.

The group discusses the plan, generally likes it, and modifies some of it. However, the “sticking point” for some faculty is the idea of a Critique Committee to review and determine consistency in the completed work of the curriculum teams that will be formed. Dr. Benoit, who is newly tenured, has a large research study, and is new to the development of a complete curriculum, states that this committee seems unnecessary. “Once we agree on the philosophy and outcomes, we should be free to do the work in our own time and with our own ideas, as long as the first-year courses are ready when they are due to begin.” Dr. Finley, a mid-career faculty member who has experience in curriculum development concurs, “Surely we don’t need to have a policing committee. We can monitor and evaluate our own work. We’ve done fine in the past, and no one needs more committee work.”

Although hesitant to speak, a senior student says, “Isn’t this like peer review that we learned about in our research course? You know, your work is read and if it’s not accepted, you get suggestions for improvement before you submit again.” A clinical agency representative says, “Yes, when we are introducing a change in practice, representatives from different units always meet to ensure that there is consistency and thoroughness in how things are done.”

After further discussion, most agree that a Critique Committee should be formed. Dr. da Silva proposes that the committee be called the Review Committee because that terminology could sound less negative, less harsh. She then wonders if some of the curriculum teams may need some guidance about ongoing appraisal, that is, the self-monitoring and evaluation that Dr. Finley had suggested. Dr. Finley responds that if guidance is necessary, the Review Committee can provide it.

■ Questions and Activities for Critical Analysis of the River Heights University College of Nursing Case

1. Is Dr. Finley correct that experienced curriculum developers do not require their work to be critiqued? Why or why not?
2. What response can be given to Dr. Benoit’s comment?
3. Are the comments of the student and clinical agency representative convincing? Why or why not?
4. What could be the value of a Review Committee?

5. Who should be members of the Review Committee and how can the committee contribute to the curriculum development process?
6. What are the guidelines the Review Committee might provide to the curriculum teams in relation to ongoing appraisal of their own work?
7. How could Dr. da Silva explain ongoing appraisal within curriculum teams, and by a Review Committee, to everyone involved in curriculum work?
8. How could Dr. Benoit's and Dr. Finley's statements affect their work and the work of the curriculum teams they join?
9. What insights can be gained from Dr. Benoit's and Dr. Finley's views of formal review of completed work?

■ Questions and Activities for Consideration When Planning Ongoing Appraisal in Readers' Settings

1. How can ongoing appraisal be explained as a core process of curriculum work?
2. What rationale can be offered about the value of ongoing appraisal?
3. In what ways can deliberative ongoing appraisal be built into curriculum work?
4. Propose processes to ensure that all members feel free to contribute to interactive, ongoing appraisal.
5. Suggest a feasible process to develop explicit standards against which to judge the curriculum work.
6. Develop guidelines for ongoing appraisal of curriculum work.
7. Who could or should be involved in ongoing appraisal of curriculum work?
8. At what points of the curriculum development processes should formal ongoing appraisal occur?
9. How can the curriculum leader ensure that ongoing appraisal is a core process of curriculum work?
10. How can quality ongoing appraisal be fostered in situations where time, faculty numbers, faculty knowledge about curriculum work, and/or curriculum leadership is limited?
11. Consider the terminology that would be suitable: *Critique Committee*, *Review Committee*, or another name?

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Scholarship in Curriculum Work

CHAPTER PREVIEW

Scholarliness, the careful appraisal and use of theory and data, is an expectation in schools of nursing and is a fundamental activity of academia and curriculum work. It forms the essential basis of an evidence-informed, context-relevant, unified curriculum and the foundation of all scholarship. Scholarship, generally understood to be the pursuit of knowledge, is fundamental to expanding the evidence base of, and advancing knowledge for, the practice of nursing education. Therefore, scholarliness, scholarship, and curriculum work are logically and intricately linked.

This chapter begins with definitions of the terms *scholar*, *scholarliness*, and *scholarship*, providing the context for how these terms are relevant in curriculum work. Examples of curriculum scholarship projects, based on Boyer's (1990) conceptualizations of scholarship, are offered. Then, ideas relevant to moving from curriculum work to scholarship including thinking and acting like a scholar, practical matters, and authorship, are presented. Synthesis activities conclude the chapter.

QUESTIONS ADDRESSED IN THIS CHAPTER

- What are the attributes of a scholar? What are the qualities that a scholar personifies?
- How are scholarliness and scholarship differentiated in curriculum development, implementation, and evaluation?

- What does it mean to say that scholarship is a core curriculum process?
- What are the practical issues involved in scholarship related to curriculum development, implementation, and evaluation?
- How can authorship of scholarship projects emerge from collaborative curriculum work?

Scholar, Scholarliness, and Scholarship in Curriculum Work

An enduring definition of *scholar* is one proposed by Meleis (as cited in Riley, Beal, Levi, & McCausland, 2002):

A scholar is a person who has high intellectual ability, is an independent thinker and an independent actor, has ideas that stand apart from others, is persistent in the quest for developing knowledge, is systematic, has unconditional integrity, has intellectual honesty, respects all divergent opinions and, of course, is a person who is deeply engaged in the development of knowledge in the field. (p. 384)

Nursing scholars must champion the intellectual development and testing of ideas in nursing in all its dimensions, including curriculum work, because all aspects of curriculum development require a scholarly approach.

Scholarliness is the act of being engaged in the formal, rigorous, academic pursuit of new knowledge or examination of existing knowledge. Scholarliness in curriculum work is achieved through careful immersion in the literature, appraisal and use of relevant theory and data, and knowledge about current trends, priorities, and evidence in the following:

- Curriculum development, implementation, and evaluation
- Higher education, generally
- Nursing education, specifically
- Nursing practice
- Health and health care
- Societal and political trends

The quality of the curriculum will depend on the rigor, depth and breadth of curriculum developers' knowledge and understanding about these matters broadly, as well as contextually according to the realities of the profession, and academic and practice demands (American Association of Colleges of Nursing [AACN], 1999). Thoughtful appraisal and professional judgment are applied as curriculum developers use their knowledge in a deliberative fashion to create, implement, and evaluate a curriculum. In other words, scholarliness in curriculum

work is careful, intentional, rigorous, intellectual work that welcomes critique through peer review, and openness to change. It involves:

- Assessing and applying the evidence base for nursing curriculum
- Contextualizing the evidence for a school of nursing within its social, political, economic, and cultural environments
- Ensuring that the curriculum is conceptually unified and has integrity (Conard & Pape, 2014)
- Addressing society's needs (Riley et al., 2002)

The result is an evidence-informed, context-relevant, unified curriculum.

Scholarship in Academia

Scholarship is the purposeful and methodical creation of knowledge, organization of the knowledge in a way that is meaningful to others, application of that knowledge, and distribution of the knowledge for peer review and critique (Hyman et al., 2001–2002; Iwasiw, 2013). Scholarliness is prerequisite to, and inherent in, scholarship. Glassick, Taylor Huber, and Maeroff (1997) have identified six standards of quality in scholarship: clear goals, adequate preparation, appropriate methods, significant results, effective presentation, and reflective critique.

Scholarship is a central activity of academia and has traditionally been understood as research or knowledge development. However, Ernest L. Boyer (1990) proposed an expanded view of scholarship as being composed of four interrelated components or functions:

- Scholarship of *discovery*: generating and advancing new knowledge, normally through rigorous research.
- Scholarship of *integration*: examining, interpreting, and making meaning of data within and outside the discipline to arrive at rich and deep understandings (American Occupational Therapy Association [AOTA], 2009; Boyer, 1990).
- Scholarship of *application*: using new or specialized knowledge to solve problems (Boyer, 1990), and “avoid irrelevance” (Boyer, 1995, p. 27). The scholarship of application includes reflexivity whereby theory is applied to practice and practice back to theory, strengthening the authenticity of theory (Boyer, 1995).
- Scholarship of *teaching and learning*: bridging understandings between and among teachers and learners with the intent of extending or transforming disciplinary knowledge (Boyer, 1990; Hutchings & Shulman, cited in Hutchings, Taylor Huber, & Ciccone, 2011).

As Boyer's (1990) scholarship framework evolved, so did his perspectives and those of other scholars. For example, the scholarship of application has

also been referred to as the scholarship of practice, emphasizing the application of “. . . theoretical knowledge to practice interventions or to teaching in the classroom” (AOTA, 2009, p. 791). In 1995, Boyer proposed that an important priority beyond *discovery* and *integration* is the scholarship of *sharing knowledge*. He viewed scholarship as a “communal act” (Boyer, 1995, p. 27) whereby academics create continuous communication between academic and civic communities to enrich the quality of life for all (Boyer, 1995). He also proposed the scholarship of *engagement* suggesting that academics must partner with others “in the search for answers to our most pressing social, civic, economic, and moral problems” (p. 18). Engagement through active dialogue “will enrich the civic and academic health of any culture” (Boyer, 1995, p. 25). Building on Boyer’s (1995) work, Barker (2004) argues that the scholarship of *engagement* “consists of (1) research, teaching, integration, and application scholarship that (2) incorporate reciprocal practices of civic engagement into the production of knowledge . . . cutting across disciplinary boundaries and teaching, research, and outreach functions” (p. 124).

Despite what can be perceived as overlapping margins of scholarship dimensions, at its core, the goal of scholarship is to advance knowledge through rigorous and systematic inquiry, replication of previous work, collaboration with others, critique, reflection, and creation of new ideas. Scholars study a topic or problem, and/or create new conceptualizations, explanations, theories, models, or processes. Then, the work is disseminated and its quality examined by knowledgeable peers who critique the scholarship products. For peer review and critique to occur, dissemination must be in a public forum, typically conference presentations and published articles. In essence, then, scholarship in academia is the creation of knowledge, organization and application of the knowledge, and sharing and distribution of the knowledge for others to review and extend. It is dissemination and peer critique that elevate local scholarly activities to public academic scholarship.

Scholarship in Curriculum Work in Nursing

Scholarship in nursing can be defined as those activities that systematically advance the teaching, research, and practice of nursing through rigorous inquiry that (1) is significant to the profession, (2) is creative, (3) can be documented, (4) can be replicated or elaborated, and (5) can be peer reviewed through various methods (AACN, 1999, p. 2).

Scholarship in curriculum work in nursing encompasses the five characteristics noted above. Specifically, it is the planned development and dissemination of knowledge about curriculum development, implementation, and evaluation. It is dependent on, but extends beyond, scholarliness. Because curriculum

development, implementation, and evaluation are essential and pervasive activities in academic nursing, it is logical to view scholarship as a core process of all curriculum endeavors.

Scholarship is the basis of evidence-based nursing education practice, which Emerson and Records (2008) identify to be “today’s challenge and tomorrow’s excellence” (p. 359). It is the rigorous means through which a knowledge base will be developed “that could guide nurse educators to develop high quality, relevant, and cost-effective models of education that produce graduates who can make a difference in the health system” (Broome, 2009). Scholarship is the foundation that will shape the direction for change (Chinn, 2011) in nursing education.

Further to these ideas, we posit that evidence-informed nursing education practice is built on scholarship and knowledgeable judgment about all aspects of curriculum development, implementation, and evaluation. This includes curriculum processes, participants, products, contexts, and outcomes. This scholarship is foundational to developing and extending the evidence base for the practice of nursing education (Iwasiw, Goldenberg, & Andrusyszyn, 2005).

Research about pedagogical practices and learning is a form of curriculum scholarship that may be seen as the only research necessary to achieve evidence-based nursing education. However, this is not so. Beyond pedagogy, Emerson and Records (2008) view teaching as including “curricular development, student advisement, creation of learning environments, and administrative activities that influence teaching and learning” (p. 361), and these require study. Oermann (2014) suggests “the development and evaluation of innovative teaching methods, systematic reviews of educational evidence, activities related to reflective teaching, and sharing what was learned for peer review” (p. 371) as additional ways to engage in the scholarship of teaching and learning. Tanner (2010) proposes a need for research into the effectiveness of the multiple pathways to nursing licensure and the curricular structures suitable for students in accelerated programs. Additionally, Tanner, Bellack, and Harker (2009) have identified a number of areas requiring attention through scholarship: faculty retention and development, evaluation of educational innovations and reform, effective approaches for today’s students, and education that aligns with healthcare reforms and social justice. These examples are illustrations of research possibilities that encompass all phases of curricular development, implementation, and evaluation, as well as the categories of Boyer’s (1990, 1995) typology of scholarship.

To achieve excellence in nursing education practice, nursing faculty must give attention to the scholarships of discovery, integration, application, sharing, teaching and learning, and to broad engagement as integral to all curriculum work. The overlapping nature of Boyer’s (1990) scholarship types means that

one project might fulfill the description of more than one scholarship category. For example, a study of students' experiences in curriculum development is easily identified as the scholarship of teaching and learning. It might also represent the scholarship of discovery.

“Multiparadigmatic, multimethod, multipedagogical research is necessary for building the science of nursing education” (Young, 2008, p. 94) and this is possible within the full spectrum of curriculum work. Each school should identify the paradigms and methods most aligned with the philosophical approaches of its curriculum, and its members can then plan scholarship projects accordingly. Further, the National League for Nursing (n.d.) has called for multisite studies, a missing feature of much nursing education research, but something that is feasible among schools using similar curriculum models, philosophical approaches, educational approaches, and/or evaluation methods.

A listing of the types of scholarship elucidated by Boyer (1990, 1995) is presented in **Table 4-1**, along with ideas about their application to curriculum work. The examples in the table represent different paradigms and methods. Some examples might fit the description of more than one type of scholarship because the categories are not mutually exclusive. One example only is given for each scholarship category. Included also are ways in which the quality of the scholarship can be evidenced, and the evidence may be applicable to more than one scholarship category.

A prime responsibility of a nursing curriculum is to prepare graduates who can protect patient safety, provide quality health care, and contribute to continuous improvement of patient care (Balakas & Smith, 2016). In addition to the development, implementation, and evaluation of a curriculum that fulfills this purpose, faculty members have a responsibility to advance and disseminate knowledge about curriculum processes, participants, products, contexts, and outcomes, including the degree to which graduates meet the needs of the discipline. “Being a nurse academic and scholar is a privileged position which brings with it special obligations to ensure the responsible development, dissemination and application of new knowledge in the field of nursing” (Johnstone, 2012, p. 113), and this obligation extends to all aspects of curriculum work in schools of nursing.

From Curriculum Work to Scholarship

Thinking and Acting Like a Scholar

To move beyond the scholarly work of curriculum development, implementation, and evaluation to scholarship requires nursing faculty individually and collectively to, first and foremost, think like scholars. Further to the more

Table 4-1: Scholarship Types and Their Application to Curriculum Work			
Scholarship Types	Application to Curriculum Work	Examples of Scholarship Projects	Evidence of Quality of Scholarship
Discovery	Inquiry into curriculum, development, implementation, and evaluation processes	Faculty and other stakeholders' responses to curriculum development processes	Peer-reviewed publications; presentations of curricular work; grants in support of curricular work; peer evaluations of curricular work (AACN, 1999)
Integration	Development of interprofessional courses with members of other disciplines	Outcomes and meaning of interprofessional practice placements for students in nursing, medicine, and physical therapy	Policy papers; reports of programs or service projects (AACN, 1999)
Application	Adoption and integration of theories or concepts into the curriculum to address particular issues related to student learning or educational issues within nursing practice	Analysis of factors facilitating students' learning in particular professional placements, the relationship of the factors to learning and organizational theories	Consultation reports and reports analyzing curricular outcomes
Teaching and learning	Development, implementation, and testing of teaching strategies consistent with the philosophical approaches and goals/outcomes of the curriculum	Discovering faculty members' knowledge of, and self-efficacy for, teaching practices consistent with the curriculum	Outcome evaluation of application of technological innovations to teaching and learning (AACN, 1999)
Sharing knowledge	Annual review and critique by all faculty of how curricular concepts and course goals scaffold within and between years to identify gaps and redundancies	Analyzing faculty members' understanding about the alignment and congruence of curricular concepts across courses and years of a program	Analytical reports outlining gaps and overlaps in a curriculum in relation to set standards by governing bodies
Engagement	Participation of professional and community partners, students, and consumers to create a curriculum that addresses the professional and health needs of society	Analysis of stakeholders' involvement in nursing curriculum development, implementation, and/or evaluation and the consequences of curricular changes for their interactions with students	Peer-reviewed publication describing the process and outcomes of stakeholder engagement in assessing the quality of the curriculum

general definition of a scholar proposed by Meleis (as cited in Riley et al., 2002) earlier in the chapter, a nursing scholar engaged in curriculum scholarship is someone who:

- Is dedicated to knowledge development and dissemination
- Views self as having a personal and ongoing obligation to advance knowledge
- Is steeped in the literature
- Questions constantly
- “Maintain(s) an interactive connection between theory and practice” (Robert & Pape, 2011, p. 41)
- Thinks strategically about scholarship when undertaking curriculum development, implementation, and evaluation
- Is committed to excellence and quality (Halstead, 2017)

Thinking like a nursing curriculum scholar requires extensive and critical reading of the literature, careful observation and analysis of nursing education practice, openness to new ideas, and constant questioning about what is known and not known. The questions that arise from this approach spark ideas for scholarship projects and are relevant to all aspects of curriculum work. Engaging in curriculum scholarship projects should not be an afterthought, but planned for and considered whenever there is curricular work to be undertaken.

What do we know? What don't we know that we should know? What are our assumptions, and what is the evidence for those assumptions? How can we best assess and evaluate the outcomes of our curricular work? How could we do things differently or better to elicit the desired results? What aspects of our curriculum development work could be relevant for a wider audience? Who is that audience? Answering these questions requires knowledge of nursing education practice and literature, as well as higher education literature. Identification of what is established knowledge and what requires further development, explication, or examination is essential so that efforts are directed at advancing professional and disciplinary knowledge.

Theory or concept-based scholarship is essential to advance knowledge in nursing education. Because scholarship could be about faculty members and stakeholders, learning by students and/or faculty, processes employed such as teaching approaches, outcomes, partnerships, as well as many other topics, familiarity with theories, models, and concepts from a broad range of disciplines is important for the curriculum development team. A theoretical base is necessary for the scholarliness of the project, and its absence may preclude the credibility or utility of the project outside the original school of nursing. Further, publication of work that lacks a theoretical foundation may not be possible.

In addition to thinking like a scholar, Glassick and colleagues (1997) assert that the actions of scholars must reflect the qualities of integrity, perseverance, and courage. Simply put, scholars must be honest in reporting their work and its results, be truthful in presenting dissenting views, persist in scholarly work in spite of competing pressures, and “risk disapproval in the name of candor” (p. 65). In curriculum work, scholars must be honest in reporting, for example, literature that does not support personal or theoretical preferences, learning outcomes that do support hypotheses, or aspects of the educational context that are not ideal. It is vital that they persist with their scholarship plans and efforts, even though the results may be undesired or unpopular with some colleagues. There is value in learning what was not successful, in sharing that knowledge, and subsequently in modifying the ideas.

Attending to Initial Practical Aspects of Scholarship

The importance of scholarship projects arising from curriculum development, implementation, and evaluation processes ought to be discussed and agreed to in advance by all participants. Some projects can be determined at the outset of curriculum development; others will arise as curriculum work progresses. It is recommended that dialogue about scholarship occur early and repeatedly, because many scholarship projects, conference presentations, and manuscripts can be generated as part of curriculum work. Scholarship should be seen as an integral part of curriculum work that will strengthen the curriculum and the school, expand team members’ skills and professional profiles, and contribute to career success.

One consideration is the timing of each project. Some projects should be undertaken concurrently with the curriculum development activities; some can be completed retrospectively. Although many projects could be proposed, it is necessary to think about the number that are reasonable while time and attention are being given to curriculum development itself. Retrospective projects, such as an analysis of the overall process, are important and will not adversely affect the momentum of the curriculum work.

Some scholarship projects could require the approval of an institutional ethics board, and informed consent by participants for formal data collection. If projects of this nature are being contemplated, the length of time required for formal approval and the timing of data collection have to be taken into account.

Because scholarship is rarely a solo event in nursing, decisions about scholarship projects and the people to be involved are important strategic decisions. Collaborative projects allow for skills and knowledge to be pooled and scholarship developed, in spite of competing demands and resource limitations (Thompson, Galbraith, & Pedro, 2010). The quality of relationships,

individuals' skills and commitment, degree of emotional intelligence, and the nature and amount of intellectual capacity, energy, and synergy will determine the success of the projects.

As project ideas and teams are created, there will be a myriad of matters of design, logistics, writing, motivation, dissemination, and authorship to be addressed early. Curriculum development teams are urged to recognize, acknowledge, tackle, and resolve these matters. If they are openly discussed, frustrations can be reduced and the rewards of scholarship experienced.

As the school is organizing for curriculum development, it is beneficial to have a discussion about scholarship in curriculum work to ensure that all members of the curriculum development team:

- Are aware that scholarship is an expected part of the process
- Understand definitions and descriptions of scholarship
- Identify possible scholarship projects
- Know which types of projects will require approval from an ethics board
- Consider their interest in participating in particular projects
- Accept the commitment, responsibilities, and expectations of being project participants
- Value the ethics of authorship, for example
 - Appreciate when individuals are entitled to authorship designation, acknowledgment as a contributor, or no recognition at all
 - Recognize that honorary authorship (Kovacs, 2012) and authorship order based on status (American Psychological Association [APA], 2010) are antithetical to academic integrity
- Consider scholarship projects as opportunities for being mentored
- Appreciate that mentoring others through scholarship projects can be seen as leadership opportunities for career development
- Comprehend the career implications of scholarship activities and authorship designation
- Feel comfortable to raise questions about scholarship and authorship, and to do so as necessary

Deciding on Authorship

Many faculty members and stakeholders contribute to curriculum development, implementation, and evaluation as part of the teaching mission of the school and not specifically as part of the scholarship mission. In curriculum work, there typically is not a small team comprised of a principal investigator

and co-investigators who conceptualize the overall design of the curriculum, apply for funding, and implement the curriculum in a manner analogous to the research process. Rather, groups work collaboratively, building on each other's ideas to design, implement, and evaluate a curriculum. This collaborative work has implications for matters such as authorship of peer-reviewed publications and presentations. How can authorship be managed when scholarship projects are being written up, reported, and disseminated?

Widely accepted for research publications are the conditions specified for authorship by the International Committee of Medical Journal Editors (ICMJE; n.d.): "Authorship should be based on: 1) substantial contributions to conception and design, acquisition of data, or analysis and interpretation of data for the work; and 2) drafting the article or revising it critically for important intellectual content; and 3) final approval of the version to be published; and 4) agreement to be accountable for all aspects of the work" (para. 2).

Each scholarship team should discuss authorship as soon as feasible and how the order of authorship is linked to the contributions made to the project (APA, 2010, pp. 18–19). When more than one publication or conference presentation can result from the project, discussions about the order of authorship may arise repeatedly, and it is helpful to have a process for reaching decisions. Questions about authorship that could be discussed are: *What types of contribution warrant first authorship and coauthorship? How many coauthors are reasonable? What level of contribution warrants an acknowledgment, but not authorship? What is the link between authorship of a conference presentation and authorship of its subsequent expanded manuscript?* Ideas about these and other questions may evolve as the curriculum work progresses and scholarship projects emerge.

It is reasonable that each scholarship project team determines its leader, the order of authorship, authorship responsibilities, deadlines, and accountabilities (Erlen, Siminoff, Sereika, & Sutton, 1997). Nonetheless, it is important to give thought to how extensively the work of the entire curriculum development team formed the basis for individual projects, whether others' efforts should be recognized, and, if so, how this can be accomplished.

When scholarship, such as a manuscript describing the finalized curriculum, is based on the collaborative efforts of many faculty and stakeholders, two fundamental questions may arise: *Who owns the curriculum that has resulted from the thought and collaborative efforts of many?* And, therefore, *who is entitled to prepare a manuscript and publish the completed work?* The curriculum products of faculty and stakeholders are not the same as data provided by study participants. Rather, the curriculum is the intellectual product of many and becomes the intellectual property of the school or schools of nursing

that created it. Accordingly, discussion about authorship of presentations and manuscripts related to work that was completed by individuals beyond the scholarship project team or by the total group should occur with as many members as possible. Ideas to consider are:

- People to be involved in the preparation of presentations and manuscripts.
- Authorship and authorship order.
- Recognition of those who contributed to the curriculum work, but not specifically to the scholarship project, either in an acknowledgment or within the text of a publication.
- The possibility of group authorship (e.g., The X School of Nursing Curriculum Development Team).
- If there is to be group authorship, the ICMJE (n.d.) requires that the corresponding author for the manuscript list the group name and all individual authors. Group authorship could conceivably include everyone who participated in curriculum development, and this might be 20 or more people. Ultimately, decisions about authorship of the completed curriculum should rest with those who created it.

CHAPTER SUMMARY

Scholarship is a core process of curriculum work. It is the purposeful and methodical creation of knowledge, organization of the knowledge in a way that is meaningful to others, and distribution of the knowledge for peer review and critique (Iwasiw, 2013). Based on a scholarly approach to all curriculum work, the goal of scholarship is to advance knowledge. Projects consistent with Boyer's (1990, 1995) categories of scholarship are possible throughout curriculum work, and all contribute to the evolving science of nursing education. Curriculum developers must think like scholars, both individually and collectively, to identify and complete scholarship projects. Identification of scholarship projects, logistics, and authorship should be addressed openly and early.

SYNTHESIS ACTIVITIES

The Maple Springs University School of Nursing case is an example of how faculty members responded to the idea of including scholarship as a core component of curriculum work. Questions for critical analysis of the case may provide ideas relevant to readers' contexts. Following the case questions are further ideas that might assist readers when consideration is given to the core curriculum process of scholarship.

■ Maple Springs University School of Nursing

Maple Springs University was granted university status 5 years ago. It offers a Bachelor of Science in Nursing (BScN) program and has a full complement of 500 students. The first BScN graduating class was this past June. There are 20 full-time faculty, of whom 4 are doctorally prepared (1 in nursing education) and 5 are enrolled in doctoral programs (2 in nursing education). The remaining 11 are master's-prepared, 6 of whom are more senior in their nursing careers and are anticipating retirement in the next 5 years.

The PhD-prepared faculty members are on new tenure-track appointments and are working hard to secure funding for their research programs. They have published manuscripts as part of their dissertations and collectively have seven peer-reviewed expository and research papers. The faculty members enrolled in doctoral programs are nearing completion of their dissertations and have been receiving mentorship from their colleagues. All faculty, particularly the master's-prepared faculty, have been creative in their teaching and have introduced new approaches to their classroom, simulation, and professional practice teaching. In particular, with the introduction of the BScN program, a new professional practice teaching model was launched whereby practicing registered nurses, after a robust orientation, are fully responsible for the progress of one or two students during practice-based courses. These nurses are called *clinical nurse scholars*. A faculty member acts as coach to the clinical nurse scholars, making sure that they are confident in their student guidance, assessment, and evaluation.

Maple Springs University school of Nursing is linked to a 600-bed community hospital. Members of the School have prepared approximately 250 BScN nurses as clinical nurse scholars and those nurses are actively involved in student education. It is an expectation that all nurses will complete the nurse scholar preparation over the next 3 years. There are 15 nurse clinicians at Maple Springs Hospital who have master's degrees and enjoy being called upon for guest lectures in the school. They too mentor the clinical nurse scholars and most serve as 1:1 preceptors for students in final practicum courses.

Dr. Joan Davie is the school director and has a joint appointment with Maple Springs Hospital. She has received a number of calls from practice-based colleagues who have relayed anecdotes about students' successful transitions to practice units upon graduation. The reports have been very impressive and the nursing staff appreciate that graduates "hit the ground running."

At the last meeting of the School of Nursing council, Dr. Davie shared the unsolicited positive feedback she received about the graduates and commended the school members on their collective success. She asked everyone to reflect on the strengths of the curriculum and come back to the next council meeting prepared to share ideas about how they might view curricular successes as scholarship, and how to evidence the scholarship in the form of publications and presentations. She also asked for ideas about how further curriculum work can be positioned as scholarship. Finally, Dr. Davie requested that the curriculum committee consider how they could integrate scholarship evidence into their work and bring these ideas forward to the council meeting.

■ **Questions and Activities for Critical Analysis of the Maple Springs University School of Nursing Case**

1. Propose ways the School of Nursing can capitalize on the graduates' successes and translate these into curriculum-related scholarship evidence.
2. How can Dr. Davie link the idea of scholarliness, scholarship, and curriculum work in a meaningful way to gain support for curriculum scholarship from faculty members and clinicians?
3. What reactions might arise to Dr. Davie's suggestion that scholarliness and scholarship become an integral part of curriculum planning and renewal?
4. Describe how Dr. Davie can present scholarship related to curriculum as a credible undertaking when funds for nursing education research are limited.
5. Is it reasonable to expect scholarship related to curriculum work in view of the faculty profile? Why or why not?
6. What could be the next steps in evolving scholarship in the Maple Springs University School of Nursing?

■ **Questions and Activities for Consideration When Planning Curriculum Scholarship Activities in Readers' Settings**

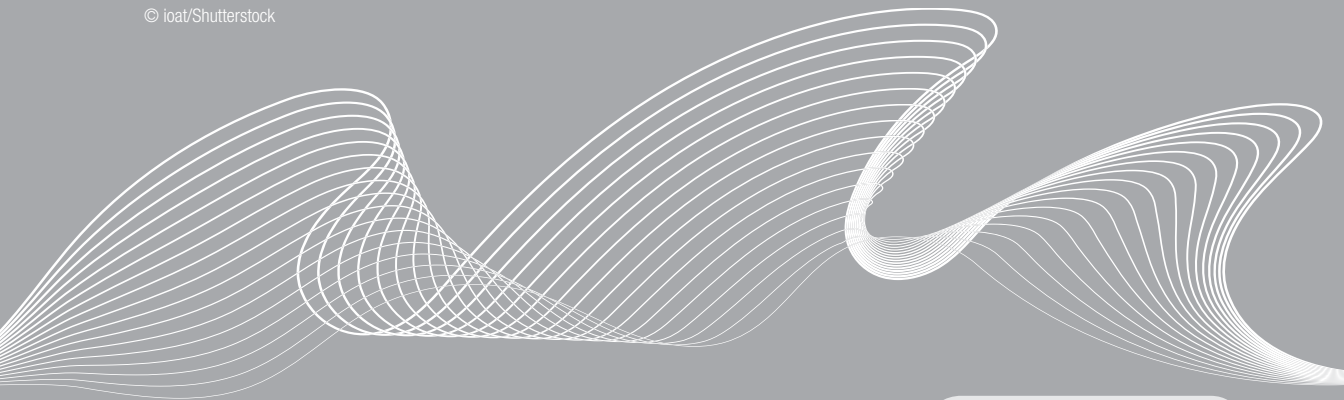
1. How can scholarship be explained as a core process in curriculum development in a way that will be meaningful to colleagues?
2. Consider the best approach for identifying possible scholarship projects.

3. Propose suggestions to generate interest in scholarship projects among colleagues and stakeholders.
4. Suggest how a discussion of authorship issues and ethics could be initiated and facilitated among curriculum participants.
5. Who should lead scholarship projects related to curriculum? How should this decision be achieved?
6. What might be gained by engaging in scholarship projects during curriculum development, implementation, and evaluation? Evaluate whether there might be disadvantages to engaging in scholarship related to curriculum work.
7. Develop a feasible plan to incorporate scholarship into curriculum development, implementation, and evaluation.

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PART



Preparation for Curriculum Development

Determining the Need and Gaining Support for Curriculum Development

CHAPTER PREVIEW

This chapter provides insight into considerations that precede a decision to undertake curriculum redesign and that can lead to faculty and stakeholder support for curriculum development. Although creation of a completely reconceptualized curriculum or revision of an existing one may seem the obvious answer to rectify identified curriculum shortcomings or to incorporate changes into nursing education practice, it is advisable to give thought to the support that can be obtained from those who would be involved. Because faculty members have the main responsibility for curriculum development, their endorsement is essential.

The rationale for curriculum redesign, extent of the curriculum development to be undertaken, the timeframe for completion, and strategies to gain support, are addressed. The core processes of curriculum work, as related to the chapter topics, are described, followed by a chapter summary. Synthesis activities include a case exemplifying reasons for curriculum development and ideas for analysis of the case. The chapter concludes with questions designed to help readers decide if circumstances are suitable to begin the formal process of curriculum development in individual settings.

QUESTIONS ADDRESSED IN THIS CHAPTER

- What are some factors and influences that prompt curriculum development or revision?
- What can influence the extent of curriculum development deemed to be necessary?
- Who are the key stakeholders in curriculum development?

- What are some strategies to gain faculty and stakeholder support for curriculum development?
- How can faculty and stakeholder readiness to engage in and support curriculum development or revision be assessed?
- How are the core processes of curriculum work (faculty development, ongoing appraisal, and scholarship) integrated into determination of the need and support for curriculum development?

Determining the Need for Curriculum Development

The idea of engaging in curriculum development generally arises among a small group of faculty members and possibly other stakeholders (e.g., practitioners, administrators, educational and community partners, students, graduates) who have a vested interest in the school of nursing, its curriculum, and graduates. Thoughts of curriculum development are proposed when this group believes that the current curriculum is no longer adequate to prepare students to practice competently in the healthcare and societal contexts they will encounter when they graduate. Identifying reasons why curriculum development is necessary, the extent of the curriculum development that might be required, participants, and possible timelines are important ideas to present to the school leader and colleagues when seeking their support for curriculum development.

Reasons for Curriculum Development

The purpose of nursing programs is to educate students, who as nurses, will provide quality nursing care in a changing healthcare environment, thereby contributing to the health and quality of life of individuals, families, groups, and/or communities. Situations within and outside a school of nursing that adversely affect its ability to achieve this purpose and that, consequently, might threaten its stability, success, or reputation, lead to thoughts of modifying the curriculum or creating a new one.

Ongoing changes within a school of nursing context can influence faculty to consider the possibility of curriculum development. Some changes might include:

- Resource availability
- Faculty numbers and/or expertise
- Student profiles
- Introduction of new ideas by stakeholders and/or faculty
- Dissatisfaction with the status quo
- Internal curriculum evaluation results
- External program evaluation or school review results

Changing circumstances within the context of the parent educational institution might also lead to a belief that curriculum development is timely. Some examples might be changes in:

- Academic policy directions or priorities
- Institutional budget
- Educational technologies
- Library resources and services
- Faculty and staff contracts

Similarly, altered situations outside the educational institution can be important signals to faculty and other stakeholders that curriculum development is required to ensure that the curriculum is context relevant. Changes might occur in:

- Nursing and educational paradigms
- Organization of nursing education throughout a state or province
- Graduates' success rates on the NCLEX-RN®
- Competition from other schools
- Enrollment demand
- New graduates' ability to meet employer expectations
- Accreditation or approval standards
- Profile of the nursing workforce
- The healthcare environment and provision of health care
- Health profile of the population
- Professional and/or governmental standards, regulations, and priorities
- Priorities of health and community agencies

A compelling single situation, or a combination of circumstances, can result in the view that the existing curriculum is no longer working as effectively as desired, is outmoded in some way, or is not as responsive to the context as it should be. The consideration of curriculum development or revision can arise gradually when the following occur:

- New educational philosophies and/or methods emerge.
- It becomes apparent that a series of planned alterations in the curriculum or unplanned curriculum drift (Woods, 2015) has resulted in a loss of curriculum unity.
- Anticipated changes (such as planned retirements or budget cuts) will adversely affect curriculum implementation.

Alternatively, curriculum development can be unavoidable and even urgent because of profound contextual changes within the school of nursing, parent institution, or the environment outside the educational agency.

Continual changes in health and healthcare systems, technologies, population profiles, expectations, demands, and predictions about the future of health care have led to the realization that the education of nurses, and therefore, nursing curricula, must be subjected to evaluation, revision, and maybe even dramatic change (Benner, Sutphen, Leonard, & Day, 2010; Institute of Medicine, 2010). Nursing faculty are challenged and required to develop relevant, evidence-informed curricula to prepare nurses for new and future roles and responsibilities consistent with rapid changes in population health, global perspectives, and healthcare systems. The desire to create and maintain an evidence-informed, context-relevant, unified curriculum arises from faculty members' professional imperative to ensure that graduates will be able to provide quality nursing care and contribute meaningfully to the health and well-being of clients and society in local and global contexts.

Extent of Curriculum Development

Those initiating the idea of curriculum development should give thought to the extent of development they believe necessary to achieve an evidence-informed, context-relevant, unified curriculum that will build students' professional knowledge, skills, attitudes, and judgment. The scope of curriculum development can encompass:

- Limited revision to correct identified gaps or overlaps in the existing curriculum
- Major revision of an existing curriculum, so that many curriculum elements are substantially modified and curriculum unity is preserved or achieved
- Creation of a completely new and reconceptualized curriculum that is not based upon an existing curriculum

A revision extends well beyond the ongoing curriculum refinement (i.e., fine-tuning activities such as annual updating of course readings) in which faculty members routinely engage. Both extensive curriculum revision and the development of a new curriculum entail dedicated effort by the total faculty group and committed stakeholders. Therefore, it is wise to give careful thought to which aspects of the current curriculum are working well, which are outmoded, and/or which are redundant. This analysis is important when trying to gain support for curriculum development.

Should the existing curriculum be revised, or should a new curriculum be created? There is no formulaic answer to this question. The response results from a comprehensive and holistic assessment and interpretation of many factors and faculty members' and stakeholders' subsequent judgment about the situation. These factors include, but are not limited to:

- The time period since the curriculum was originally created or significantly revised

- The nature and extent of altered circumstances in the school, such as new people in key positions (Alvesson & Sveningsson, 2016)
- The nature and extent of altered circumstances beyond the school
- Faculty members' and stakeholders' emotional and intellectual investment in the existing curriculum
- Energy for change
- Areas of the existing curriculum that are unsatisfactory to faculty, students, graduates, or stakeholders
- Results of ongoing internal curriculum evaluations
- Results of external curriculum evaluation, such as approval or accreditation reviews

In general, a desire for extensive change in a major element of the curriculum, such as its philosophical approaches (and the resultant curriculum goals or curriculum outcome statements, educational approaches, and evaluation methods), leads to the creation of a new curriculum. Similarly, significant changes in the nature and availability of professional practice placements could bring forth ideas of starting anew with curriculum development.

In contrast, a conviction that, for example, altered course sequencing could yield better results for students, would likely result in curriculum revision. In the same vein, the recognition that students are not achieving a particular curriculum goal or learning outcome would probably lead to revision within the existing curriculum, but not necessarily to the development of a new curriculum. However, an important aspect of this revision is that the changes must be appraised within the context of the total curriculum to ensure that they are logical, conceptually unified, and consistent with the basic curriculum tenets. See **Table 5-1** for a summary of the purposes of each type of curriculum development.

Timeframe for Curriculum Development

The timeframe for completion of the work is another consideration when proposing curriculum revision or the development of an entirely new curriculum. How quickly is the redesigned curriculum needed? When might the new or revised curriculum be implemented? These and other factors require examination when thinking about the start and completion dates for the curriculum development project. Each must be assessed within the context of all the other ideas presented in this chapter.

First is the urgency of the curriculum redesign. This is influenced by the factors that prompted consideration of curriculum development initially. If, for example, two successive groups of graduates have had an unacceptable failure rate on licensing examinations, then there may be pressure to improve the curriculum quickly. Similarly, a change in services in local healthcare agencies

Table 5-1: Extent and Purposes of Curriculum Development	
Extent of Curriculum Development	Purposes
<p>Limited Curriculum Revision Within one or two course(s): changes to one or more major course elements (e.g., goals or competencies, concepts, content, evaluation of student achievement)</p>	<ul style="list-style-type: none"> • Correct gaps or redundancies • Align or sequence learning experiences more logically
<p>Major Curriculum Revision Changes to one or more curriculum foundation(s) (concepts, professional abilities, philosophical approaches, educational approaches) with resultant modifications to all courses</p>	<ul style="list-style-type: none"> • Incorporate current and anticipated contextual realities • Include current perspectives • “Modernize” a successful curriculum • Achieve curriculum integrity and unity
<p>Creation of a New Curriculum Reconceptualized curriculum not based on current curriculum</p>	<ul style="list-style-type: none"> • Build an evidence-informed, unified curriculum relevant for current and future contexts

may necessitate an immediate refocusing of professional practice courses. Conversely, the immediacy of altering an undergraduate curriculum to reflect a slowly changing trend in local demographics may not be as great.

Faculty and stakeholder understanding of the nature of an evidence-informed, context-relevant, unified curriculum and their knowledge of curriculum development processes also have an effect on a probable timeframe. If extensive faculty development will be necessary, time must be allotted for this.

The annual work cycle of the school of nursing and the number of full-time faculty members will influence the schedule for beginning and completing the curriculum development process. Is there a semester when full-time faculty members are less busy with teaching and able to devote concentrated time to curriculum development? If so, consideration should be given to the amount of work that could be achieved in those time periods. If not, the amount of curriculum development time that can be integrated into the ongoing work of the school requires careful assessment.

A critical factor to review when contemplating a timeframe is the collective readiness for change among faculty members and their belief in their ability to develop and enact the change (Kelly, Hegarty, Barry, Dyer, & Horgan, 2017). Because “readiness for change is culturally embedded” (Latta, 2009, p. 25), it is worthwhile to contemplate the culture of the school and the parent institution, in particular, whether innovation is common and frequent, or whether change occurs at a measured pace. The shared meaning that faculty members give to change and to the current curriculum, and the shared meaning within the institution about the value and meaning of change, innovation, and stability (Latta, 2009) will affect views about curriculum change, and thus, the time required to develop and implement a redesigned curriculum.

The nature and rapidity of institutional decision-making processes give an indication of the time to completion. Do curriculum decisions need to be approved by several committees within and beyond the school of nursing, or are decisions made relatively quickly and locally, with the expectation that implementation will soon follow? The usual time period from initial decisions to enactment of the decisions will affect the interval allotted for curriculum development and implementation.

Finally, when thought is given to a timeframe for curriculum development, a mindful review should be conducted of the people who might be involved in order to identify those likely to be supporters and resisters. How much time can the supporters realistically be expected to give to curriculum development? How much time will be taken up with overcoming resistance and winning support? The motivation and time commitments of those who will be involved will affect the expected completion date. Preparation of a tentative schedule for curriculum development will give participants some idea of the amount of time and work being asked of them, and this can affect their support.

Gaining Support for Curriculum Development

Curriculum development cannot proceed on the conviction of only a few faculty members. In general, all those who will be affected by a change should be involved in the planning (Marquis & Huston, 2012). Because curriculum development, and the subsequent implementation, represents a significant change in the work activities and interactions of faculty and stakeholders, it cannot be undertaken without their endorsement and involvement. It is necessary for those initiating the idea of curriculum development to mobilize support and minimize likely opposition (Glatthorn, Boschee, Whitehead, & Boschee, 2016).

Advocates of curriculum development seek support from the school leader, faculty colleagues, community and healthcare stakeholders, and students. The endorsement of representatives from each group strengthens the case for proceeding with curriculum development, because all are participants in the school of nursing and its curriculum (Adams et al., 2015; Keogh, Fourie, Watson, & Gay, 2010; Sidebotham, Walters, Chipperfield, & Gamble, 2017).

Gaining Support from the School Leader

First and foremost is support from the formal leader of the school for curriculum development. Discussing the possibility of curriculum development with the school leader before introducing the idea to colleagues is a strategic move to determine if there is likely to be administrative support for such an endeavor.

If the school leader endorses the idea of curriculum development, then it is likely that resources will be allocated to the work (Sportsman & Pleasant, 2017). Without tangible institutional resources, curriculum work cannot proceed (Oliver & Hyun, 2011). Moreover, the school leader's influence can be crucial in convincing those who are hesitant about curriculum development to engage in the process.

When the idea of curriculum development is raised with the school leader, there are several matters that could be brought forth, such as those listed in **Box 5-1**. At the initial meeting, these ideas can be introduced to elicit the leader's reactions.

Precise information about each point in Box 5-1 will not be available at the outset. Yet, thoughtful identification of the academic and administrative aspects of curriculum development will increase the credibility of those proposing this possibility to the school leader. The goals of a meeting with the school's formal leader are to gain support for the idea of initiating curriculum development

BOX 5-1 MATTERS TO DISCUSS WITH THE SCHOOL LEADER

1. Need for curriculum development
2. Extent of faculty support
3. Leadership of curriculum development
4. Estimated time for development and implementation of a redesigned curriculum
5. Effect on other work:
 - Teaching (classroom, online, professional practice, laboratory)
 - Student advisement
 - Scholarship
 - Engagement in school and institutional service activities
6. Faculty, student, and stakeholder involvement
7. Resources needed:
 - Support personnel
 - Materials
 - Technological equipment
 - Physical space
 - Faculty release time
 - Funding
8. Positive consequences of curriculum development for the school

and a commitment to examine ways to provide resources for the undertaking. Endorsement from the school leader is essential for curriculum work to begin.

Gaining Support from Faculty Colleagues

The support of faculty colleagues, particularly full-time faculty, is essential. They will assume the largest responsibility for curriculum development and implementation, and without their endorsement and commitment to be involved, curriculum development cannot proceed.

Although a small group of faculty and stakeholders may initiate the idea of curriculum development, it is ultimately the decision of the total group of faculty, administrators, and possibly other stakeholders about whether to undertake curriculum development, and, if so, the extent of development and the timelines for completion.

Gaining faculty colleagues' support for curriculum development involves an appeal to logic and values. Neither alone is sufficient. The precise approach will, of course, be dependent on the organization and the people involved.

Those proposing curriculum development must be able to articulate clearly why they believe curriculum development is necessary. It is important to present factual data about the deficiencies in the current curriculum (Wilkin & Dyer, cited in Latta, 2009), how they are evident, the consequences of those deficiencies, and the thinking that led to the conclusion that curriculum modification is required.

The perceived need for curriculum development can be linked to values held by faculty, students, and graduates of the school of nursing, and/or the educational institution itself. For example, if the institution takes pride in being innovative and a leader in education, and in providing quality student experiences, then curriculum development can be presented as a means to support those values. Innovations (such as a changed curriculum) are most likely to be accepted if the new idea is consistent with the values and culture of the organization and its members, and with the ideal cultural commitments (Greenhalgh, Robert, Bate, Macfarlane, & Kyriadidou, 2005; Latta, 2009). Finally, presenting general ideas about possible alternate curricula can extend colleagues' thinking and increase their acceptance of the idea of redesigning the curriculum. In **Table 5-2**, ideas are offered that could be helpful in convincing colleagues that curriculum development is needed.

It is important to consider the best way to seek support. Should colleagues be approached individually or collectively? Clearly, there are advantages and drawbacks to both (see **Table 5-3** for an analysis of approaching colleagues individually or collectively). A combination may be appropriate, first talking with colleagues individually to gain the acceptance of informal leaders, and then

Table 5-2: Examples to Convince Colleagues of Need for Curriculum Development	
Appeal to Logic	Appeal to Values
<p>Need for curriculum change or development, as evidenced by:</p> <ul style="list-style-type: none"> • Deficiencies in current curriculum • Unsatisfactory external and/or internal evaluations • Trends requiring new approaches • Current literature <p>Requirement to provide a curriculum responsive to healthcare and societal needs</p> <p>Suggestions about possible alternative curricula</p> <p>Possible positive consequences of curriculum development such as:</p> <ol style="list-style-type: none"> 1. Strengthened congruence with: <ul style="list-style-type: none"> • Organizational mission and values • Personal and professional values 2. Favorable external and internal evaluations 3. Student satisfaction, leading to enhanced work environment for faculty 4. Increased employability of graduates <p>Enhanced appeal of the school to potential faculty members and applicants</p> <p>Possibility of obtaining funding for curriculum development</p>	<p>Opportunity to shape the curriculum</p> <p>Desire for:</p> <ul style="list-style-type: none"> • Professional and personal growth of students and curriculum developers • Competent graduates • Enhancement of the school's prestige and profile • Status as innovators, leaders, and providers of quality student experiences <p>Opportunity for:</p> <ul style="list-style-type: none"> • Personal distinction and prestige • Innovation and transformation • Organizational preeminence • Enhanced reputation of individuals and school <p>Possible negative consequences of avoiding curriculum development, for example:</p> <ul style="list-style-type: none"> • Decreased appeal and marketability of the school to potential faculty and student applicants, and to current students, and faculty • Decreased marketability of graduates to employers • Unrealized funding opportunities • Unfavorable internal and/or external reviews • Diminished prestige

presenting ideas to a larger group. Involvement of informal leaders is a means to share the leadership for introducing the idea of curriculum development, a strategy consistent with producing “leadership through interactions” (Denis, Langley, & Sergi, 2012, p. 214). The decision about how to introduce the idea of curriculum development to colleagues will be influenced by knowledge of individual faculty members, interpersonal dynamics in the school, and the credibility of those seeking support for curriculum change.

The importance of listening to colleagues when seeking support cannot be overemphasized. Their perspectives are important and worthy of attention, because they are being asked to take on a large endeavor. Colleagues need to feel that their concerns have been accurately heard and taken into account in subsequent decision making. Careful listening is a means to gain information from colleagues whose support is needed, and the act of listening, in itself, positively affects the influence of the listener (Ames, Maissen, & Brockner, 2012).

Gaining Support from Community and Healthcare Stakeholders

There is no set sequence for gaining stakeholder support after preliminary agreement from the school leader and faculty colleagues. However, stakeholder

Table 5-3: Advantages and Disadvantages of Approaching Colleagues Individually or Collectively to Gain Support for Curriculum Development		
Approach	Advantages	Disadvantages
Individual	Freer expression and exploration of ideas Less threatening Quick response or possible decision Greater willingness to share experiences In-depth, thoughtful response possible Personal consultation valued	One viewpoint; no collective sharing of ideas Time required to collect and compile ideas from several individuals Discomfort resulting from disagreement Pressure to conform
Collective	Group response more broad Sharing of many ideas Opportunity to use democratic or consensual processes, which strengthen a decision to proceed Increased awareness of others' strengths Opportunity to learn from others' feedback Improved faculty bonding by uniting to reach common goal Shared thinking for responses, resulting in a stronger position Less time-consuming Opportunity for group to make more informed assessments of need for curriculum development	Delayed response or decision (many ideas to be considered before achieving consensus) Time required to share all experiences relative to decision Potential group veto of curriculum change Undue influence by strong group members Groupthink

involvement in early and subsequent stages of curriculum development strengthens bonds between schools of nursing and those involved (Cambers, 2010) and can result in a curriculum with widespread support.

When schools of nursing are contemplating curriculum development, they are usually experiencing challenges that are known to community and health-care partners. Some are shared by the partners, such as overcrowded student placements. Simultaneously, those partners are experiencing their own challenges and may welcome curricular changes that will enhance the situation in their agencies. It can be productive to arrange individual appointments with the nursing leaders of the school's largest partners to inform them that curriculum development is being considered and to determine preliminary support for the idea of curriculum modification.

Topics that might be addressed during the meeting include:

- Shared challenges
- The school's recognition of limitations and challenges within the current curriculum, particularly those most relevant to the nursing leader's organization
- Factors that will affect a decision to proceed with curriculum development, including stakeholder support

- The nursing leader's general ideas about the knowledge, skills, and abilities required for nursing practice in the future
- The desired involvement of members of partner organizations if curriculum development is undertaken

The meeting can end with a request for the nursing leader's endorsement for curriculum development. Furthermore, this is an opportunity to alert the leader that more detailed information gathering will be undertaken about the knowledge, skills, and abilities required of future graduates, if a decision to undertake curriculum development is reached.

Gaining Support from Students

Students have many ideas about how the curriculum they are experiencing can be improved, and often they expect changes to be made as soon as they voice those ideas. Therefore, their support for curriculum development is usually readily given, with the implicit expectation that their concerns about gaps or overlaps are corrected and their ideas about new areas to include are realized.

Student support for curriculum development can be sought through the nursing student council or in brief meetings during class time. It is important to emphasize that if curriculum development proceeds, time will be necessary to gather data (including data from them) and for the development work, and that changes will not be instantaneous. Therefore, they are being asked to support the idea of curriculum redesign for future students. When the possibility of curriculum development is explained to students, they are usually eager to “pay it forward” with the view of making positive curricular changes for their future colleagues.

Some may argue that requesting student support early is unnecessary and raises expectations of immediate change. Our view is that students are the ones most affected by curriculum decisions and they are required to function within the boundaries of those decisions. Therefore, just as clients are entitled to participate in decisions about all aspects of their care (including the possibility of changes in care), so too are students entitled to be informed and involved in educational planning and decision making.

Responding to Initial Objections

Although some faculty members may be enthusiastic about the idea of curriculum development, others may have a different view. It can be expected that some will feel hesitant and others may resist the possibility of curriculum development, and thus, change. Overcoming initial objections is foundational to winning faculty and stakeholders' support. To ignore opposition will likely

result in a failure to proceed and/or in slow and resentful involvement. Therefore, it is wise to anticipate, recognize, and respond to objections promptly.

First, challenges about the accuracy of information that illustrates the need for curriculum development, or the conclusions drawn, can be anticipated. This may reflect an honest, intellectual disagreement, a deeply held belief in the value of the current curriculum, a general response to change, or opposition to those proposing curriculum development.

When reasons for curriculum development are questioned, it is tempting to invite challengers to explain their position. This is a strategy to be used with caution, because a protracted dispute about who is right or which facts are correct is not productive. Such disagreements can annoy or even alienate others, who might then view curriculum development as a potentially endless series of conflicts. In the face of criticism about the reasons for curriculum development, it is more constructive to respond that the reasons to proceed are compelling and to acknowledge that not all might share that view.

Yet, it is important not to dismiss the opposition to curriculum development. Those objecting may have valuable insights that merit consideration and they are entitled to voice their views. Thus, as in many other matters, faculty leading the discussion need to listen respectfully to the objections, respond constructively, and ensure that the general discussion moves forward.

It may be necessary to enumerate the potential risks of avoiding curriculum development. These can include the possibility of unfavorable external reviews by approval or accrediting bodies, decreased ability to attract students and faculty, difficulty retaining faculty, and unrealized funding opportunities.

Some faculty may feel so stretched with their current workloads that even the idea of curriculum development and the work it will entail is overwhelming. The time required for this endeavor can seem daunting and could be a real barrier. It is important, therefore, to recognize and acknowledge that curriculum development is a large undertaking, and that the reality of workloads and available time needs to be explored thoroughly with the school leader and faculty members. It may be that competing demands make curriculum development impossible. If so, the school leader may need to be open to having some members delay or give up some responsibilities, at least for a short period, to allow the process to unfold.

To win the support of particular individuals, it is wise to identify the criticisms they have voiced about the current curriculum and acknowledge the aspects they value. Through individual or small-group meetings, participants can be reminded that curriculum development is an opportunity to alter or eliminate the weaker aspects of the current curriculum. Additionally, it is essential to emphasize that their active involvement in the curriculum development process could also lead to maintaining or updating cherished parts of the

existing curriculum. Affirming that strengths of the present curriculum could be retained might induce cooperation.

Financial constraints will be a concern for the school leader and may also be raised by other faculty members. Curriculum development takes time, and faculty and staff time is costly. Therefore, an acknowledgment that resources are needed for curriculum development and an assurance that this matter will be discussed with the school leader, and subsequently with faculty and stakeholders, will go a long way in gaining support. It is also helpful to identify possible funding sources for curriculum development, such as internal university funds or foundations known to support innovations in nursing education. Certainly, adequate system resources are needed for change to occur and be sustained (Greenhalgh et al., 2005; Oliver & Hyun, 2011).

Another reason for opposing the idea of curriculum development is that those proposing it are not sufficiently respected by colleagues, either generally or more specifically in relation to curriculum work. It is essential that those advocating curriculum development have good relationships with colleagues and are seen as having credible views about curriculum. If not, the proposal for curriculum change may be rejected. Identifying whether personalities or perceived lack of curriculum knowledge might be the basis for resistance is a painful process. Those who are recommending curriculum development might consider if their ideas are usually sought and supported by colleagues, and if others generally choose to work with them. If not, it would be wise to leave the initiation of the idea to others who are respected within the faculty and stakeholder group. If this is not possible, some interpersonal work must be done before support will be gained. Objections that may be raised to the idea of curriculum development and possible responses are summarized in **Table 5-4**.

Deciding to Proceed with Curriculum Development

It is unlikely that all objections to curriculum development will be overcome or that all faculty members will enthusiastically endorse proceeding with curriculum development. Nonetheless, once the school leader supports the idea, potential curriculum team members have individually and collectively considered the reasons for and against curriculum development, and a majority concur that curriculum development is necessary, the process should be ready to proceed.

Because faculty members will assume the greatest responsibility for the work of curriculum development, their support is the foundation upon which the quality of the curriculum development process will rest. Therefore, faculty members' endorsement of the decision to proceed is essential. The decision may be reached by consensus, or it may be formalized by a motion that specifies a timeline for implementation of a redesigned curriculum, depending on the typical decision-making procedures in the school of nursing.

Table 5-4: Responses to Initial Objections to the Idea of Curriculum Change	
Nature of Objections	Responses
Challenge to evidence for curriculum development	Respond that reasons are compelling.
Satisfaction with current curriculum	Emphasize the: <ul style="list-style-type: none"> • Importance of offering a curriculum that will maximize student learning and graduates' success • Opportunity to be on the cutting edge of change and transformation in nursing education • Potential for personal and professional growth during curriculum development
Fear that treasured part of the curriculum will be lost	Affirm that as curriculum work proceeds, aspects of the current curriculum may be retained. Highlight that active involvement is the only means to ensure a satisfactory curriculum.
Time commitment required for curriculum development	Present possible funding opportunities for curriculum development. Assure that there will be discussion with the school leader about possible altered work assignments. State that individuals' involvement will influence the curriculum development process, and thus the time required.
Fear that curriculum development will negatively affect scholarship activities	Comment that there will be discussion with the school leader about possible altered work assignments. State that curriculum development is a responsibility of the academic role. Underscore that scholarship is an inherent part of curriculum work, and that scholarship projects can be developed about, and during, curriculum work.
Apparent lack of resources to support curriculum development	Respond that resources will be discussed with the school leader and faculty members.
Lack of support for faculty proposing change	Encourage faculty who are viewed as being highly credible to initiate the idea of curriculum development.

Once a decision about moving forward has been reached, it is usual to advise students and stakeholders, some of whom may subsequently become involved in the curriculum development process. Informing others beyond the school of nursing makes public the intention to proceed with curriculum development and creates an expectation of change.

Core Processes of Curriculum Work

Faculty Development

Faculty development during individual and group discussion about the need for curriculum development is most likely to be informal. Some members will

want to know what the process of curriculum development entails. Similarly, stakeholders may require information about what curriculum redesign might mean for them. Provision of this information will expand their understanding of what they are being asked to endorse.

Ongoing Appraisal

During the phase of determining the need and gaining support for curriculum development, the initiators constantly appraise others' reactions to their ideas and approaches, both simultaneously and retrospectively. They then revise their approach as necessary until a firm decision is reached about whether or not to proceed with curriculum development.

Scholarship

It is unlikely that a scholarship project will be planned about gaining support for curriculum development. However, a retrospective report and analysis of the processes that led to the proposal for curriculum redesign, and subsequent endorsement, could be prepared for submission to a journal. An article such as this could be helpful to faculty members elsewhere who wish to initiate the idea of curriculum redesign. In addition, a retrospective qualitative study could be undertaken to determine how the process was experienced by those whose support was being sought and whether there were particular features that were salient in their decision to support curriculum redesign.

CHAPTER SUMMARY

Faculty and stakeholder support for curriculum development is essential for the process to begin and for the achievement of a successful outcome. Endorsement of curriculum development is accomplished through open and thoughtful consideration of the reasons for curriculum development and the factors that might be limiting a willingness to proceed. Attention to the values of individual and collective faculty, the scope of curriculum development that might be necessary, and the timeframe envisioned for the undertaking will influence whether approval is gained. The impetus and decision to proceed must be thoughtfully reviewed, because curriculum development is intensive and requires ongoing faculty and stakeholder dedication and involvement. Informal faculty development and ongoing appraisal continue throughout the processes of determining the need and gaining support for curriculum development. Scholarship related to this phase of curriculum development can be undertaken, likely retrospectively.

SYNTHESIS ACTIVITIES

The Grand Banks University College of Nursing case illustrates some ideas about the need for curriculum development and support for undertaking curriculum work. The questions following the case can guide a critical analysis of the situation. Questions are then provided that might assist readers as they consider the need and support for curriculum development in their settings.

■ Grand Banks University College of Nursing

Grand Banks University College of Nursing offers a 4-year, upper division, accredited nursing program, with professional practice beginning in the first semester of the third year. The current curriculum was introduced 7 years previously and limited revisions have occurred periodically throughout the years. The last accreditation review was 3 years ago.

Several faculty members feel there is a need for changes to the undergraduate nursing curriculum. Dr. Susan Sullivan and Dr. Michaela Tanovich believe that there is insufficient professional practice in acute care adult medical and surgical settings, the locations where most graduates are first employed. Dr. Juan De Silva thinks there is insufficient emphasis on outpatient ambulatory care and health promotion. All three faculty members have examples of comments from nursing staff that suggest that students are inadequately prepared in these professional practice areas. They believe that the curriculum should be changed to have only 1 prenursing year and 3 years of nursing courses. In this way, more professional practice time could be scheduled, particularly in the areas of concern to them.

Along with these concerns, there is a general sense among faculty teaching in the first nursing courses that many students have difficulty transferring and applying knowledge from their 2 years of social science and science courses. Some students have described their first 2 years as a “proving ground” for the nursing courses, and although they need good marks to continue in the program, they don’t value the theory they have learned in the pre-nursing courses. They view their entry into the third year as the real start of the nursing curriculum.

Dr. De Silva agreed to present the group’s ideas at the monthly meeting of the Undergraduate Curriculum Committee, which has representatives from each of the four nursing semesters (i.e., the final 2 years) of the curriculum. The committee members listened attentively, but in general, were not convinced of Dr. De Silva’s position. Although Dr. De Silva emphasized the idea that the curriculum might be approaching its natural expiry date, the committee members were unwilling to accept this idea without some substantive data.

One curriculum committee member wondered aloud if Dr. De Silva's ideas about adult medical–surgical nursing and ambulatory care were reflective of personal interests more than curricular needs. However, another agreed that some students' application of science and social science was weak as they started the nursing courses. A third committee member stated that even if the need for curriculum change became convincing, she did not believe that the ideas proposed by Dr. De Silva were necessarily what the curricular emphases should be. She stated there was a growing need for home health care in the community, and opined that perhaps this would be a curriculum direction to consider. Finally, a long-time faculty member who had participated in the development of three undergraduate curricula asked Dr. De Silva, “Do you have any idea of what it would take to change from 2 years to 3 years of nursing?”

The Committee Chair drew the discussion to a close and stated that, at present, there seemed to be no compelling reason for curriculum change. She told Dr. De Silva that he was welcome to return to another meeting of the Curriculum Committee when he had substantive data to support his contention that curriculum change was necessary.

■ Questions and Activities for Critical Analysis of the Grand Banks University College of Nursing Case

1. What factors or influences might propel Grand Banks nursing faculty toward a review of the present curriculum and consideration of change?
2. Assess the approach that Dr. De Silva used with the Curriculum Committee.
3. Propose other methods Drs. De Silva, Sullivan, and Tanovich might have used to raise their concerns and analyze the possible effectiveness of these methods.
4. Describe the data Drs. De Silva, Sullivan, and Tanovich would need in order to convince others of the need for curriculum change. How could these data be obtained? How could the data be presented in a compelling manner?
5. Suggest how support for curriculum change could be obtained. What could be the sources of support for curriculum development? Sources of resistance?
6. Hypothesize about how faculty who developed the current curriculum might respond to criticisms of it. What are some possible replies to their responses?

7. Recommend a diplomatic means to caution nursing faculty to consider whether allegiance to their nursing practice specialties might overshadow the broader perspectives of nursing required in contemporary undergraduate nursing education.
8. Is it reasonable to think that 7 years is the natural expiry date of a curriculum? Why or why not?

■ Questions and Activities for Consideration of the Need and Support for Curriculum Development in Readers' Settings

1. Explain why curriculum development is necessary now. What is the evidence for proposing that curriculum work proceed? How compelling are the ideas?
2. From whom is support needed for the idea of curriculum development? How can formal and informal faculty leaders be involved? Who are the stakeholders, and how can their support be gained?
3. Propose ideas to gain faculty support. Determine the advantages and disadvantages of approaching colleagues individually or collectively. If both approaches would be suitable, what would the sequence be?
4. How can evidence be presented about the need for curriculum development so it is convincing to faculty colleagues?
5. Consider how extensive curriculum development should be. Might the development be a revision of the current curriculum or a completely new curriculum? Develop rationale for the proposal about the extent of curriculum development.
6. What could be the impact of participation in curriculum development and faculty development on faculty members' other commitments?
7. Hypothesize about possible objections to curriculum development and develop responses to the objections. List the potential risks if curriculum development is not undertaken now.
8. If faculty numbers and resources to support curriculum development are limited, yet the reasons for curriculum development are compelling, how could curriculum work be initiated?
9. In addition to the need for curriculum development, what else should be discussed with the school leader in a preliminary way?
10. Describe the resources required for successful curriculum development. What funding sources are available outside the school of nursing?

11. Are there sufficient resources (people, time, physical, material) to proceed with curriculum development now?
12. Is informal agreement to proceed sufficient, or would a formal motion be preferable? Why?
13. If agreement to proceed is obtained, which stakeholders should be informed of the decision? Which stakeholders should be invited to become members of the curriculum development team?
14. What other considerations require thoughtful attention?
15. Propose scholarship activities that might be considered.

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Deciding on the Curriculum Leader and Leading Curriculum Development

CHAPTER PREVIEW

The chapter begins with a brief overview of leadership in academic nursing. Four theoretical and philosophical perspectives on leadership and their application to curriculum work and change are then presented. Criteria for selection of a curriculum leader are proposed. The responsibilities of the curriculum leader and leadership within curriculum teams are described. Development of curriculum leaders and ideas about the core processes of curriculum work in relation to curriculum leadership conclude the chapter. Following the chapter summary, the synthesis activities include a case study and questions to illustrate the foremost points of the chapter. Finally, questions are posed to assist readers with determination of a curriculum leader in individual settings.

QUESTIONS ADDRESSED IN THIS CHAPTER

- What is leadership in academic nursing?
- What are some theoretical and philosophical perspectives on leadership and how do they apply to curriculum work and change?
- What are the criteria for choosing a curriculum leader?
- What are a curriculum leader's responsibilities?
- How can leadership be enacted within curriculum teams?
- What are the processes for curriculum leadership development?
- How are the core curriculum processes of faculty development, ongoing appraisal, and scholarship integrated into curriculum leadership?

Leadership in Academic Nursing

Leadership has been defined as “the action or influence necessary for the direction or organization of effort in a group undertaking” (“Leadership,” 2016). The action, influence, and group undertaking all require communication between and among the leader and group members. Therefore, leadership is a social, relational process.

In academic settings, faculty members are not compliant followers who conform to the directives of a leader. Rather, they are active participants in reciprocal decision-making processes in which they collectively determine the work and/or the actions to be completed. The decision making generally involves shared and/or shifting leadership within a context of dynamic interaction. All parties influence interactions and leadership within groups, thus co-constructing communication and leadership patterns (Ruben & Gigliotti, 2016).

A position of leadership can arise from a formal arrangement in which the leader has an identified and sanctioned role within an organization, such as a Dean of Nursing or a committee chair. Additionally, informal leadership can emerge within groups (Çoğaltay, 2015) whereby the informal leader has no official role, yet influences others in a significant fashion, perhaps even in the presence of the formal leader. With both formal and informal leadership, the aim is to accomplish goals through and/or with others.

Academic leadership is multi-level in shared governance organizational structures. Myriad opportunities exist for formal leadership of committees and for informal leadership in planned meetings and daily interactions. Moreover, faculty members have a designated leadership role in their teaching; have considerable autonomy in the work they undertake; hire and coordinate research team members; supervise graduate students; and so forth. Therefore, they are skilled in individual and collaborative decision making and in nuanced leadership, with individuals taking formal and informal leadership roles in different situations, all within the overarching organizational structure of the educational institution.

In knowledge-intensive organizations, such as schools of nursing, formal leaders require both expert knowledge of the discipline and managerial skill to be credible. Knowledge-based, strategic decision making and the creation of suitable work environments through goal setting, mentoring, support, encouragement, and fair appraisal are components of effective leadership in such organizations (Goodall & Bäker, 2015). Consistent with these ideas, analytical competence, interpersonal competence, and emotional intelligence are characteristic of deans of nursing (Broome, 2013), and these qualities are reflected in their leadership.

Components of effective leadership during a period of change, such as exists with curriculum development and implementation, include having a vision and moral purpose, being flexible, building relationships, creating and sharing knowledge, understanding change, expanding others' capacity for change, and ensuring that processes exist for coping with change (Cartwright, 2013; Patterson, McAuley, & Fleet, 2013; Stefanczyk, Hancock, & Meadows, 2013). For sustainable change to occur, the leader must energize the group to give ongoing attention and commitment to the collective purpose (Williams, 2008), group relationships, and the maintenance of a changed culture. Simultaneously, artistry, tact, and acumen are required to shepherd the change in a timely fashion and within the practical realities of a school of nursing.

In a study of deans of nursing, 344 deans responded to a survey about their leadership behaviors. The highest self-reported mean scores for 77% of participants were on the transformational (vision-based, emphasis on capacity-building), 21% on the transactional (task-focused, power-based), and 2% on the passive-avoidant (*laissez-fair*, evading difficulties) scales. However, most reported using behaviors indicative of all styles (Broome, 2013). The results indicate a strong preference for future-oriented, capacity-building, and empowering behaviors, all consistent with the leadership needed during periods of change, such as curriculum design and implementation.

There are benefits to transformational leadership and open relationships in schools of nursing, notably faculty members' professional satisfaction and intent to stay. In five Midwestern universities, "the greater the [nursing] faculty member perceived the department head to be a transformational leader, the greater their professional satisfaction and organizational commitment" (Bryne & Martin, 2014). Similarly, in a qualitative study, nursing faculty members reported that the quality of their relationship with the formal leader contributed to their job satisfaction and intent to stay in their position. They viewed the leader's openness, transparency, and approachability to be essential for a positive relationship (Turrin, 2016).

Nursing academic leaders and faculty members function within environments of ongoing, complex, and often competing demands from university administrators, students, colleagues, granting agencies, stakeholders, healthcare agencies, and the nursing profession. Additionally, in congruence with values of the nursing profession, the quality of interpersonal relationships is deemed important in schools of nursing, and this perspective is a significant part of the context of curriculum work. Therefore, curriculum leaders, operating within complex realities, need to be mindful of research about leadership in schools of nursing and ought to draw on leadership theories consistent with philosophies of the school and the nursing profession. In this way, they are likely to foster and sustain productive, supportive relationships so that curriculum change can be accomplished.

Theoretical and Philosophical Perspectives on Leadership: Application to Curriculum Work and Change

Authentic Leadership

Authentic leadership theory is based in positive psychology and emphasizes positive and developmental interactions between leaders and followers. The ultimate outcome is genuineness in relationships through self-awareness and self-regulated behavior, both of which foster positive self-development. Authentic leaders put the concerns of others ahead of their self-interest. The four components of authentic leadership behavior are:

- **Balanced processing:** objectively analyzing relevant data before making a decision
- **Internalized moral perspective:** being guided by moral standards that regulate behavior
- **Relational transparency:** presenting one's true self by sharing information and revealing feelings as appropriate
- **Self-awareness:** understanding own strengths, weaknesses, effect on others, and meaning-making (Avolio, Walumbwa, & Weber, 2009)

Authentic leaders “have a clear moral purpose, a well-developed set of core values and a passionate commitment to a collective ethic of responsibility for the well-being of their school community, the quality of its leadership, the authenticity of what happens within the learning environment, and the quality of learning outcomes” (Duignan, 2012, pp. 141–142). These leaders contribute to a positive organizational climate of trust and integrity, and to followers' psychological capital, that is, a positive state of development based on self-efficacy, optimism, hope, and resilience.

In an extensive review of authentic leadership research, Gardner, Cogliser, Davis, and Dickens (2011) identified the outcomes of authentic leadership. These include the outcomes reported for transformational leadership as well as followers' trust in the leader, psychological well-being, reduced burnout, increased psychological capital, and personal identification with the leader. Creativity (Rego, Sousa, Marques, & Pina e Cunha, 2012) and work engagement (Giallonardo, Wong, & Iwasiw, 2010) have also been noted as outcomes of authentic leadership.

In curriculum work, authentic leaders are genuinely interested in the development of their colleagues and the quality of work achieved. They model productive, open relationships and behaviors consistent with the curriculum tenets. Authentic leaders stimulate their colleagues intellectually through interactions that encourage questions, debate, and the formulation of creative

solutions (Nichols & Erakovich, 2013). Because they are confident and self-aware, authentic leaders are consistent in their approach to individuals and groups, recognize and share their curriculum knowledge, acknowledge their limitations, give recognition to others' curriculum and relational strengths, and share leadership. Moreover, they analyze curricular and interpersonal matters in an objective manner, using relevant data and knowledge about curriculum, change, and interpersonal relationships. Therefore, authentic curriculum leaders are able to view situations of disagreement in a dispassionate way, make a decision when necessary, or guide the group to a balanced decision. Similarly, these leaders can assess colleagues' progress in the change process and respond appropriately.

Bridge Leadership

Building bridges is a philosophy and practice of educational leadership, planning, practice, and curriculum. Historically, the term *building bridges* has been used by many in the diversity community to reflect inclusion and a deeper understanding of different groups (Baillie & Gedro, 2009). The meaning of the term has expanded in education to include the idea that institutions have a responsibility to reach out to, and include, minority and underrepresented groups in their programming to better serve their communities.

The basic premises of building bridges are that:

- Educational programs should not be conducted in isolation from the communities they serve and wherein graduates may be employed.
- Socially significant education occurs only with meaningful involvement of those within and beyond the educational institution who are affected by a school's curriculum.
- Social justice and equity are advanced when mutually beneficial connections (bridges) are built and sustained between educational institutions and communities.

Leadership based on a philosophy of building bridges is aimed at creating a culture that promotes the success of all participants (Dembo, 2015) in the educational process. Relationships are at the core of this type of leadership. The leader reaches out to individuals and groups who have a stake in the educational program and its outcomes, creating and nurturing authentic relationships wherein all are included, respected, and valued. The concerns, ideas, experiences, and aspirations of students, faculty, support staff, and communities of interest are given voice and the participation of interested parties in school activities is welcomed and facilitated. Bridge building becomes multi-dimensional, with all parties having responsibility for the maintenance of relationships (Boske, 2012b).

Building bridges requires ongoing examination of one's biases and constant attention to relationships (Boske, 2012a). A bridge leader is an active listener who acts as an agent, advocate, and partner in change. Bridge leadership requires all involved "to think systematically about the impact of their work and the possibilities of change, not just for the individual involved in the work, but for the community in which the individual works" (Boske, 2012a, pp. xxvii–xxviii).

Bridge building has been described in relation to public schools and their communities (Boske, 2012a), university-school-community engagement (Christman, 2012; McMillon, 2017), community colleges and local industry (Harvey-Smith, 2016), university faculty and students (Barrineau, Schnaas, Engström, & Härlin, 2016), and between a nursing program and clinicians (Yang et al., 2013). In all situations, the results have been greater investment in and support for educational initiatives by all participants and stronger programs within the educational institution.

Bridge leadership in curriculum work involves intentionally reaching out to communities of interest and inviting them to share their experiences, concerns, and hopes for the curriculum and its graduates, as well as welcoming them into curriculum work. This includes:

- Learning about the wishes particular to different client groups, employers, and student groups, and inviting representatives to join faculty on curriculum development task groups and committees
- Connecting with other academic units and student service departments that have a stake in the success of nursing students, and seeking their input and involvement

Bridge leaders give importance to others' perspectives and plan collaboratively with partners, while employing expert knowledge and retaining accountability for the development of a sound curriculum. They also build bridges with colleagues, supporting others during the change process and facilitating the involvement of those who have resisted change or the need for curriculum work.

Shared Leadership

Shared leadership is a group-level phenomenon, "an emergent team property that results from the distribution of leadership influence across multiple team members" (Carson, Tesluk, & Marrone, 2007, p. 1218). Mutual and distributed influence results from exchanges in which individuals initiate ideas and activities related to motivation, group direction, and support. The result is a leadership network (Carson et al., 2007) wherein individuals claim their own leadership and grant leadership to others (DeRue, as cited in Chiu, Owens, & Tesluk, 2016), thereby reciprocally and simultaneously influencing one another.

Transformational and empowering formal leadership can allow shared leadership to emerge and can accelerate its development (Barnett & Weidenfeller, 2016). The formal leader must relinquish authority, and humility is required to do this. Humility is “willingness to see oneself accurately, acknowledgement of the strengths and contributions of others, and openness to new ideas and feedback” (Chiu et al., 2016, p. 1708). These characteristics serve as models for team members’ interactions and allow for collective humility, motivation, and effectiveness to develop (Chiu et al., 2016; Owens & Hekman, 2016).

In a meta-analysis of studies of shared leadership and team performance, a significant positive relationship between these two variables was found (D’Innocenzo, Mathieu, & Kuenberger, 2016). Shared leadership is facilitated by a team environment that includes a common understanding of the team’s purpose, members’ social support of one another, and voice (the extent to which members have input into decisions). If teams lack a strong internal environment, team coaching can enhance shared leadership (Carson et al., 2007; Hawkins, 2014). Additionally, leadership by someone external to the team can be helpful when teams face difficult or disruptive challenges (Morgenson, as cited in Barnett & Weidenfeller, 2016).

Shared leadership is highly relevant for curriculum development, because it is logistically impossible for the formal curriculum leader to lead all aspects of the work. Nor is it necessary: faculty members are experienced in shared decision making and action, and can be counted on to complete their work without ongoing direction, supervision, or active leadership. However, for teams to be effective, they must be knowledgeable about their work, and therefore, the formal curriculum leader may need to provide guidance and information to some teams about the nature of their tasks. Explicit acknowledgement of shared leadership as a strategy to achieve curriculum work gives recognition to the effort expended by task groups and may, in itself, empower some members to feel more confident about their ability to contribute meaningfully to curriculum work.

Transformational Leadership

Transformational leaders motivate others to perform to their full potential by influencing a change in perceptions, providing a challenging vision that is linked to core values and a sense of direction, and involving group members in participatory decision making about how to achieve the vision (Robbins & Davidhizar, 2007). Four factors have been associated with transformational leadership:

- Idealized influence: enacting behaviors and ideals that others respect and wish to emulate

- **Inspirational motivation:** communicating a motivating vision, high expectations, and enthusiasm
- **Intellectual stimulation:** organizing intellectual resources and encouraging creative problem solving
- **Individualized consideration:** providing personal support, coaching, and mentoring (Bass, as cited in Anderson & Sun 2017; Northouse, 2016)

Transformative leaders focus on collective purposes and mutual growth and development, articulate a vision, behave as change agents, and empower others to expend extra effort beyond performance expectations. They mentor others and are visible and accessible to those they lead (Clavelle & Drenkard, 2012), foster intellectual satisfaction in the group, and engage with others so that they and the group members raise each other to higher levels of motivation and ethical decision making.

Transformational leadership has been found to be strongly related to team members' performance, job satisfaction, enthusiasm, team spirit, organizational commitment, efficacy, commitment to change, and creativity (Avolio et al., 2009; Clavelle & Drenkard, 2012; Cummings et al., 2010; Wang, Kim, & Lee, 2016). This leadership style has even stronger motivational effects on performance when team members have direct contact with the beneficiaries of their work (Grant, 2012). This latter statement is directly applicable to curriculum work because curriculum development participants have regular interaction with colleagues and students who experience the benefits of their efforts.

Working with faculty, students, and stakeholders, transformational leaders develop a vision of the curriculum, create a strategy to achieve the vision, and identify specific actions to progress to the vision. The leader's goal clarity has a significant positive impact on member's self-efficacy, performance, and commitment (Callier, 2016). Therefore, transformational leaders keep the vision in the forefront, are optimistic about people's ability to create and implement a changed curriculum, and ensure that the vision is realized through small, planned successes. They model behaviors that are consistent with the curriculum tenets, provide assistance to groups as necessary, identify faculty development needs, and plan for faculty to expand their capacity and self-efficacy for curriculum work.

Transformational leaders are responsive to members. This means that they recognize when individuals and groups are ready to move ahead with change, feel overburdened by the curriculum work, or are resistant to particular ideas. They adapt their strategies to ensure that motivation is maintained or reignited to facilitate the success of the curriculum work. For example, if a curriculum group becomes discouraged, the transformational leader offers ideas to help the group reframe or reinterpret the situation and encourages group determination of processes for moving forward (Boga & Ensari, 2009; Grant, 2012).

Deciding on the Curriculum Leader

Development, implementation, and evaluation of a curriculum are large undertakings that require knowledge, leadership, organization, and collaboration for successful completion. Because of the importance of the work for a school's success, a curriculum leader is usually named to guide the process. The criteria for selecting a curriculum leader, consideration of internal or external appointees, and the announcement of the appointment all need careful attention because it is the curriculum leader who must create a situation in which faculty and stakeholders feel connected to the curriculum and to each other.

Criteria for Selection of the Curriculum Leader

Curriculum Expertise

A key criterion when deciding on the curriculum leader is curriculum expertise. This expertise is reflected in knowledge about the:

- Curriculum development, implementation, and evaluation
- Nursing education literature, practice, research, and governance
- Type of program for which the curriculum is being developed, such as associate, baccalaureate, or graduate degree and the concomitant expectations of graduates
- Approval and accreditation requirements

Relational Skills

Relational skills are central to leadership, as described in the leadership theories and perspectives presented in this chapter. Therefore, interpersonal skills are another criterion for selection of a curriculum leader. Some indications of relational skills important in curriculum work are:

- Respect for and by colleagues
- History of:
 - Effective group leadership (formal, informal, and shared)
 - Productive team work
 - Negotiation of satisfactory outcomes in difficult situations
 - Coaching, mentoring of students and/or novice faculty members
 - Successful bridge building with individuals and groups inside and beyond the school of nursing

Organizational/Managerial Skills

Organizational/managerial skills are another criterion for selection of a curriculum leader because planning and organizational structure are necessary for

curriculum development to be accomplished. Evidence of these skills includes a history of:

- Creating feasible plans
- Achieving goals within deadlines
- Forming work groups
- Delegating appropriately
- Writing reports

Knowledge of Change Processes

Leading curriculum work means leading a change process. Accordingly, the curriculum leader ought to have knowledge of change theories and processes. This knowledge is evident in the:

- Articulation of current ideas about change processes
- Analysis of previous change processes according to theoretical perspectives
- Provision of support to others during previous changes within the school
- “Emotional aperture, that is, the ability to perceive various shared emotions that exist within a collective” (Sanchez-Burks & Huy, 2009, p. 22)

Institutional and Community Knowledge

Knowledge about the context in which the curriculum will be developed and implemented is essential. This includes knowledge of:

- The educational institution, and its academic policies and approval processes
- Support departments, such as student services, and other academic units
- Healthcare agencies and community groups with an interest in the school of nursing and its graduates

Appointment of the Curriculum Leader

Appointment from Within the School of Nursing

Typically, the curriculum leader comes from within the school of nursing and is selected in accordance with the usual practices of the school. Frequently, the school leader consults with faculty members; uses judgment about individuals' curriculum expertise, interpersonal relationships, and leadership capacity; and then comes to a decision about an appropriate choice. Alternately, the curriculum

leader can be chosen through consensus in recognition of that individual's knowledge and credibility, or formally elected. If curriculum development leadership is already a part of the role description of the undergraduate chair or curriculum committee chair, the decision may be implicit.

In situations where competing academic commitments cause potential curriculum leaders to decline the position, consideration can be given to a shared position. This might be two or even three individuals who share the responsibilities of the role. In this case, there will need to be discussion about the division of activities and accountabilities.

Whatever the means of deciding on a curriculum leader, formal appointment ultimately rests with the school leader. Because of the time required to fulfill the responsibilities of the position, there are implications for work assignments within the school and only the school leader can manage these.

Appointment from Outside the School of Nursing

It is possible to advertise for and appoint a curriculum leader who has not been part of the school of nursing. In this case, the appointment is typically for 2 or 3 years to allow time for the curriculum to be developed, implementation to begin, and evaluation to be planned. An external appointment can be a suitable choice when there is no one within the school able to take on the position. However, it is an approach to be considered carefully.

A new appointee will not know the school's history, culture, values, and internal politics. This can be advantageous or problematic, depending on the situation within the school and the reasons there was no internal appointment. The new curriculum leader will require time to develop relationships inside and beyond the school and to become acquainted with the institutional culture, policies, and services. It can be expected that this leader will need to establish credibility with the group before unity can be established and mutual goals endorsed.

An alternative is to seek direction from a curriculum consultant, who might be appointed for a short term. Consultants should be chosen carefully according to their area of curriculum expertise and the needs of faculty. Typically, external consultants are short-term adjuncts to curriculum development, rather than an integral part of the daily activities. They can be appointed to assist with any aspect of curriculum development, implementation, or evaluation for which expertise is required.

Announcement of the Appointment of a Curriculum Leader

The school leader should make a formal announcement of the appointment of a curriculum leader to members of the school, to appropriate members of the academy, and to healthcare and community partners. This announcement gives

legitimacy to the position and to the curriculum leader's activities. It is essential for all who will be involved in curriculum work to understand the curriculum leader's responsibilities, authority (if any), and accountabilities.

Responsibilities of the Curriculum Leader

The curriculum leader has three categories of responsibility and accountability: relational, curricular, and organizational/managerial. These operate synergistically and must be fulfilled simultaneously. The quality of the leader's relationships with curriculum team members and stakeholders, in combination with curriculum skills, is essential to the accomplishment of curriculum work. However, the curriculum work can proceed only when the leader has developed sound logistical and organizational scaffolding to support it. Interpersonal, conceptual, and behavioral complexity underpin successful curriculum leadership.

Relational Leadership

The curriculum leader is both the figurehead and champion of curriculum development, and consequently the quality of the leader's relationships is foundational to the quality of the curriculum produced. At all times, the enactment of strong interpersonal skills is essential to work effectively with individual faculty members, curriculum teams, and external stakeholders. Curriculum work is collaborative with the human dimension as a constant that requires ongoing attention, even when the tasks and deadlines of curriculum development are imminent. Collaboration requires the leader to possess the motivation and capacity to build bridges to relevant individuals and groups, ensuring they are full participants in curriculum work.

Specific leadership activities consistent with authentic, bridge, shared, and transformational leadership theories and with change theories would be to:

- Project a sense of agency, self-confidence, and optimism
- Model exemplary interpersonal skills
- Model humility in group discussions
- Demonstrate confidence in others' ability and respect for their ideas
- Facilitate discussion to shape a vision of the curriculum
- Initiate and lead respectful discussions about curriculum and the underlying assumptions and values
- Liaise with the school leader, curriculum advisory committee, nursing community, and other academics
- Reach out to new groups who may be interested in the school and its curriculum

- Welcome and engage stakeholders in curriculum work
- Foster creativity and support task completion
- Build capacity through formal and informal teaching, and through mentoring
- Offer a positive outlook on progress
- Take all relevant data into account while facilitating participative decision making and before reaching decisions
- Maintain focus on agreed-upon vision and goals
- Provide opportunities for group reflection about change
- Be alert and responsive to interpersonal dynamics and to individual and group emotions
- Recognize individuals' and groups' stage of change and offer support when appropriate
- Lead discussion about changes in the school culture
- Be visible and accessible in the curriculum process
- Acknowledge own knowledge gaps and act to correct them
- Mediate conflict in a manner that leads to a balanced resolution
- Plan for recognition of groups' efforts and milestone achievements
- Behave in a consistent, reliable, and authentic manner

Curricular Leadership

The curriculum leader's expertise in curriculum processes is essential to the success of curriculum work. However, the leader must tread a careful line between conveying information that will move the work forward and directing the curriculum outcome. The curriculum design is not the leader's decision. Although the leader is knowledgeable about the curriculum development process and the substance and relevance of the work to be done, the authority for curriculum decisions rests with the faculty and school leader.

Curricular leadership takes several forms that range from listening to ideas, to offering possible ideas, to providing clear information about curriculum matters and processes. At all times, the enactment of strong interpersonal skills is essential. Specific examples of curricular leadership are to:

- Listen to ideas about curriculum and pose questions to stimulate further thinking about values, assumptions, consequences, and the relationships between and among ideas
- Consult with curriculum groups and offer ideas for their consideration
- Review the completed work of curriculum groups and provide feedback

- Provide or arrange for formal and informal faculty development sessions related to curriculum development, implementation, and evaluation
- Identify matters requiring discussion, such as the need to review academic policies to ensure they remain relevant for a changed curriculum
- Alert curriculum developers to potential problems, for example, plans that might conflict with institutional policies or realities within health-care agencies
- Provide technical information or resources related to specific aspects of curriculum development, for instance, formulating curriculum goals or outcomes
- Model behavior consistent with the philosophical approaches of the developing curriculum and values of the school of nursing
- Participate in planning for curriculum implementation and evaluation
- Purposefully mentor faculty in curriculum leadership activities

Organizational and Managerial Leadership

Curriculum work requires organizational and managerial leadership and fulfillment of the attendant responsibilities. The curriculum leader must ensure that a suitable plan for the work is in place, the work proceeds in a timely manner, and redundancies of effort are minimized. The responsibilities involve organizing and managing the processes of curriculum work, but not the curriculum team members. Typically, there is no supervisory role in curriculum leadership. The curriculum leader is responsible to:

- Serve as an ex officio member of the curriculum committee (if not already a member)
- Initiate organization of the curriculum development work
- Propose committees to be formed
- Develop a communication strategy
- Ensure that curriculum development activities proceed in a timely fashion to meet agreed-upon deadlines
- Negotiate with the school leader for adequate resources for curriculum development
- Initiate discussion (and perhaps negotiate) with other departments about required non-nursing support courses
- Discuss ideas about possible student placements with relevant stakeholders during curriculum development
- Prepare reports and finalize documents for curriculum approval
- Initiate planning to inform stakeholders of curriculum redesign
- Assist in publicizing the redesigned curriculum

Leadership Within Curriculum Teams

Although there is a formal curriculum leader for the overall curriculum work, that individual is not the designated leader of each task group or team that is formed during curriculum development. Usually, an individual from within each group assumes a leadership role as the group begins its work. Additionally, shared and informal leadership develop as the curriculum work progresses. Consequently, leadership for curriculum work evolves and is distributed among faculty members and stakeholders. The contribution that leaders and leadership within teams makes to curriculum work ought to be recognized and acknowledged.

Within curriculum teams there may be an identified leader (or chair) or coleaders. These individuals are accountable for completion of their task and should use relational, curriculum, and organizational/managerial skills to do so. Their responsibilities mirror those of the curriculum leader, although on a smaller scale. Typically, they consult with the curriculum leader as their work progresses.

Curriculum team membership is optimal for the development and exercise of shared leadership because members of each group share a common goal. As well, collaborative relationships in small groups allow individuals to feel comfortable about offering ideas that influence the task (Barnett & Weidenfeller, 2016). Consequently, different individuals can emerge as leaders for different aspects of the work (Denis, Langley, & Sergi, 2012). This shared leadership can contribute to a collective ethic of responsibility and ownership for the curriculum work.

The value and effects of informal leadership in task completion and change cannot be underestimated. Informal social networks among faculty members and stakeholders, whether or not they are working on the same curriculum task, affect attitudes toward the curriculum endeavor. The influence of informal leaders on perspectives that develop outside of formal meetings can have a profound effect on the success of curriculum work.

Curriculum development, implementation, and evaluation require an investment of time, effort, and leadership by many individuals. Some will demonstrate leadership for a short period of time or in relation to a specific task. Others will demonstrate leadership in a continuous fashion and may have potential to be designated as curriculum leaders in the future.

Development of Curriculum Leaders

Nursing faculty leaders generally gain their formal leadership positions (including curriculum leadership) by being thrust into the position because they possess

the particular expertise needed in a school, or because of longevity and having earned the respect of colleagues. Others become leaders because of a history of risk-taking in educational practices or speaking forthrightly about needed change in a school of nursing or educational institution. In each situation, leaders reported feeling unprepared for their new roles, yet were perceived as leaders by colleagues (Young, Pearsall, Stiles, Nelson, & Horton-Deutch, 2011).

Being perceived as a leader and then assuming a curriculum leadership role without specific preparation for this role is, unfortunately, common in nursing education. There is no identified career path for nursing curriculum leaders and it is uncommon for faculty to be mentored in the role. Yet, purposeful preparation for curriculum leadership is essential as educational and healthcare systems become more complex, with concomitant expanded expectations of nursing graduates. The future of nursing education, and thus, the practice of nursing, should be in the hands of those with preparation in nursing education processes, leadership, and research. The ideas listed below are proposed to advance curriculum leadership in nursing.

- As a condition of hiring or contract renewal, all nursing faculty have preparation in nursing education theory and practice, including learning theories and philosophies, teaching and evaluation methods, and course design. This level of education could be accomplished through graduate and certificate programs in nursing education. If all faculty members had at least this level of preparation, there would be immediate improvements in informed participation in curriculum work.
- Specific courses about curriculum development, implementation, and evaluation processes, as well as curriculum leadership (including theory, purposeful observation, guided practice with feedback, and research) are part of doctoral programs in nursing education.
- Once a faculty position is secured, the required education in nursing curriculum leadership can be followed by the assumption of progressively more demanding curriculum responsibilities, preferably with ongoing mentoring. This would build an individual's self-concept as a curriculum leader and contribute to the goal of having curriculum leaders who are prepared educationally, experientially, and personally for their roles, not merely thrust into their positions.
- Knowledgeable nursing curricularists are named as curriculum mentors and coaches in schools of nursing. Mentorship about all aspects of curriculum work is essential to expand faculty members' knowledge and skill in curriculum work. It is important, however, that curriculum experts do not merely clone themselves. Innovation and change will be limited if protégés do not have freedom to introduce and test new ideas and methods (Burke, 2008).

- Opportunities for discussion and reflection about curriculum processes and leadership are created in schools of nursing.
- Aspects of curriculum leadership (e.g., course redesign or program policy development) are recognized as part of nursing faculty members' career development.
- Faculty members are supported to attend conferences and workshops related to nursing curriculum and curriculum leadership.
- Planning for curriculum leadership development and curriculum leadership succession is instituted in schools of nursing.
- Opportunities for curriculum work should be available, valued, and rewarded in schools of nursing, in the same way as research opportunities. It is not proposed that the development of curriculum leaders within schools of nursing supplant the development of researchers, but rather that more manifest importance and visibility be accorded to the ongoing preparation of those who will lead the education of future nurses and who will engage in nursing education scholarship.

Core Processes of Curriculum Work

Faculty Development

Preparing leaders for the curriculum development process is essential to the success of this undertaking and for the future of nursing education. If only a few among the faculty have sufficient preparation to be curriculum leaders, development activities would be appropriate for the faculty group.

Faculty development activities could initially focus on what leadership is, leadership development and approaches, acceptance of leadership responsibilities, and specific information about what would be involved in leading aspects of curriculum development. Attention could be given to the responsibilities associated with leading a curriculum group and to the processes of shared leadership. Practicing leadership behaviors through role-playing might facilitate learning in these sessions.

Faculty development can also include a self-directed learning program about curriculum development and curriculum leadership. This may be accomplished through reading, enrollment in specific courses, consultation with members of the institutional educational development office, consultation with curriculum leaders at other nursing programs, and so forth. As well, specific workshops related to curriculum leadership (Albashiry, Voogt, & Pieters, 2016; Glatthorn, Boschee, Whitehead, & Boschee, 2016) and to academic leadership (Berman, 2015) would be helpful.

If members with leadership and curriculum development expertise are available, these persons could be called upon to offer faculty development opportunities and mentor those without experience. Mature leaders (both formal and informal) feel obligated to embrace the role of mentor and pass on their wisdom (Bennis, 2004) about curriculum work to novice colleagues. By doing so, experienced faculty members fulfill their responsibility to nurture the next generation of curriculum leaders.

Ongoing Appraisal

Ongoing appraisal of curriculum leadership is multipronged. The authentic curriculum leader engages in continuous self-appraisal. Additionally, everyone involved in curriculum work appraises the curriculum leader and their own leadership activities within groups.

Some questions that curriculum leaders might ask themselves are:

- Am I consistently acting in a way that is true to my values?
- Am I providing the necessary emotional and technical support to facilitate curriculum work? What is my evidence?
- Is the organization of the curriculum work sufficient or is something different needed?
- How are faculty and stakeholders responding to me and to my leadership?
- How successful have my bridging efforts been? Am I reaching out to all relevant groups?
- What else should I be doing to reach stakeholders and ensure their inclusion?
- Are we accomplishing quality curriculum work?
- How are colleagues responding to my style?
- What might I be missing when I think about my leadership?

Wise curriculum leaders will periodically ask faculty and stakeholders how well they are doing and what they could be doing differently or additionally to facilitate the work. In their appraisal of the curriculum leader, curriculum team members will consider:

- How respectful of my ideas is the leader? How respectful of others' ideas is the leader?
- How satisfied am I with the way the leader functions?
- How well does the leader know how to make the curriculum work happen?
- Does it seem that the leader is helping us to get our work accomplished?

- How credible is the leader? How extensive is the leader's curriculum knowledge?
- How well is the leader attending to the group's need for information and development?
- How responsive is the leader to the group's need for support and recognition of our efforts?

Periodic appraisal of the curriculum leader by curriculum groups and the school leader can be important to ensure the ongoing success of curriculum work. The curriculum leader needs to know how curriculum participants are responding to the leadership strategies so that necessary adjustments can be made. The school leader should assess the success of the appointment and offer feedback and guidance as necessary.

Curriculum team members who appraise their own leadership activities within groups might consider:

- Am I expressing ideas in a way that captures the group's attention and stimulates further thinking?
- Do I demonstrate informal leadership frequently enough to believe that I am contributing meaningfully to the group's productivity and collegial relationships?
- Am I supportive of shared leadership? Do I interact reciprocally, demonstrating leadership as well as responding constructively to others' leadership?
- Am I satisfied with group interactions and progress?
- Am I ready to take on a more formal role in the curriculum development process?

Scholarship

Many scholarship projects related to curriculum leadership are possible. Some examples are:

- A study of the lived experiences of formal curriculum leaders (Ylimaki, 2011)
- An enquiry into the meaning of curriculum leadership by leaders and curriculum participants (Ylimaki, 2011)
- An examination of effective and ineffective curriculum leadership strategies from the perspectives of curriculum leaders and participants
- An investigation of mentorship provided by curriculum leaders, including the processes and outcomes
- An analysis of the processes, challenges, and results experienced by curriculum leaders
- A study of the career paths of designated curriculum leaders

CHAPTER SUMMARY

Effective leadership is essential in curriculum work. Determining who the curriculum leader will be and the responsibilities inherent in the position is foremost in providing the groundwork for success. Leadership in curriculum work requires expert knowledge of the curriculum process, organizational and managerial skills, and the ability to work productively with others.

In this chapter, leadership in academic nursing is briefly described. Theoretical and philosophical perspectives on leadership (i.e., authentic, bridging, shared, and transformational) are presented and applied to curriculum work and change, followed by criteria for selecting the curriculum leader and procedures for appointing the leader. Curriculum leadership and leadership within curriculum groups are overviewed. Development of curriculum leaders and attention to the core processes of curriculum work as they relate to curriculum leadership conclude the chapter.

SYNTHESIS ACTIVITIES

The Northern Prairie College of Nursing case contains some ideas relevant to curriculum leadership, and the questions that follow provide a basis for consideration of the situation. Then, questions are offered that might assist readers when contemplating curriculum leadership in their own settings.

■ Northern Prairie College of Nursing

Members of Northern Prairie College of Nursing have agreed that it is time to undertake the development of a new undergraduate nursing curriculum. Dean Priya Singh intends to appoint a formal curriculum leader and to reduce that individual's teaching load so that the appointee can focus on the responsibilities of the position.

When thinking about potential candidates for the position, Dr. Singh considered three tenured individuals:

- Dr. Sarah Lewen was appointed to the College of Nursing 3 years previously as an Associate Professor. She was recruited to strengthen the Family Nursing component of the college's programs. In her former position, Dr. Lewen led undergraduate curriculum development in a neighboring university. That innovative curriculum integrated aspects of family nursing into all theory and practice courses with the intent that students and graduates

would view clients in all healthcare situations as part of a family constellation and not as isolated individuals. Since arriving at Northern Prairie, Dr. Lewen has devoted her time to forging relationships critical to her research, developing her graduate and undergraduate courses, and writing up her completed research. Her committee work has been within the College of Nursing only. Although most faculty do not know her well, she is liked and respected for her gentle interpersonal manner and reputation as a leading researcher in Family Nursing.

- Dr. Rinaldo Suarez is a Full Professor who has been with Northern Prairie for 14 years. He has been active on university-level committees, including the University Senate, which sets educational policy for the institution and approves all education programs. Within the college, and the university as a whole, he is respected for his teaching, research grant success, and prolific publications. Yet, despite his visibility across campus, many nursing faculty members feel they do not know him well because of his immersion in his pain management research and his frequent absences to attend research conferences. Although he sometimes seems distant and uninterested in the daily life of the College of Nursing, Dr. Suarez is generous with ideas and supportive of others' efforts in one-to-one situations.
- Dr. Muriel McKay is a Full Professor and the elected chair of the undergraduate curriculum committee. The responsibilities of this position do not explicitly include leading curriculum development. Dr. McKay is open about looking forward to retirement in 3 years' time. She teaches an introductory theory course in nursing and nursing education courses in the graduate programs. Her research is devoted to nursing education methods and outcomes. She serves as an informal mentor about nursing education to several less-experienced faculty. Dr. McKay has had no direct involvement with healthcare agencies for several years, but maintains cordial relationships with staff developers and senior nursing officers, many of whom are her former students. During her career, Dr. McKay has served on almost every committee within the College of Nursing, a range of university committees, and the University Senate. She is a 'no-nonsense' sort of person who gets work completed quickly and effectively.

Dr. Singh decides to meet with each of the three candidates to assess their interest in leading curriculum development, leadership style and abilities, and curriculum ideas. She reviews the pros and cons of each candidate in preparation for the meetings.

■ Questions and Activities for Critical Analysis of the Northern Prairie College of Nursing Case

1. Analyze the pros and cons of appointing each of the three candidates to the position of curriculum leader.
2. What are the questions Dr. Singh might ask of each candidate when she meets with them? What are the responses that could lead Dr. Singh to view the candidates favorably?
3. Should Dr. Singh consult with others before making her decision? If so, with whom? Why? Why might she decide not to consult with others?
4. Which candidate would be the best choice? Justify the decision. Why might some faculty members criticize the decision?
5. How could Dr. Singh contribute to overcoming criticisms of her choice of curriculum leader? How could the appointee overcome the criticisms and gain support?
6. Would it be reasonable for curriculum leadership to be shared by two of the candidates or among all three? If so, how could responsibilities be allocated? What might the consequences be?
7. Propose strategies for the appointee(s) to demonstrate competence in leading curriculum development.
8. How could Dr. Singh announce the appointment of the curriculum leader(s) to institutional administrators, nursing faculty, and community leaders?
9. Suggest how the appointee(s) can contribute to the development of colleagues' curriculum leadership skills while leading curriculum development.

■ Questions and Activities for Consideration of Curriculum Leadership in Readers' Settings

1. Are there important criteria for selection of a curriculum leader in addition to those described in the chapter? If so, what are they?

2. Suggest contingencies that might affect the selection and/or choice of a curriculum leader.
3. Which aspects of the curriculum leader's responsibilities are most relevant? Why? Who might best fulfill the expectations and responsibilities?
4. Could the role of curriculum leader be shared if there is not a candidate able to fulfill all of them? Explain your response.
5. How have curriculum leaders been selected in the past? Suggest the best approach for deciding on a curriculum leader now.
6. Describe the discussion and negotiation a candidate for curriculum leadership might want to undertake with the school leader.
7. Assess the effects of support or nonsupport for the curriculum leader on curriculum development.
8. If objections are raised about a possible curriculum leader, what can be done and by whom to overcome the resistance?
9. Who could contribute to faculty development for curriculum leadership? Describe the faculty development that may be needed.
10. Create a plan to appraise the leadership effectiveness of a formal curriculum leader, committee chairs, and team members.
11. Outline scholarship projects that could be undertaken in relation to curriculum leadership.

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Organizing for Curriculum Development

CHAPTER PREVIEW

This chapter provides practical guidelines about organizing for curriculum development. Once a decision has been made to proceed with curriculum development, both the curriculum leader and faculty members have specific responsibilities in preparing for this undertaking. The leader is responsible for guiding faculty to consensus about values and a curriculum vision, proposing an overall plan for curriculum and faculty development, clarifying the relationship of curriculum development and implementation to academic freedom, introducing the possibility of scholarship projects, and negotiating for resources. Faculty members have responsibility for joining task groups to complete curriculum development activities, welcoming stakeholders, seeking input, and considering scholarship projects. A discussion of activities associated with organizing for curriculum development is followed by ideas about faculty development, ongoing appraisal, and scholarship related to the initial organization. The synthesis activities that conclude the chapter comprise a case study, questions to guide case analysis, and questions to assist readers to organize for curriculum development.

QUESTIONS ADDRESSED IN THIS CHAPTER

- What are the curriculum leader's and faculty members' responsibilities when organizing for curriculum development?
- What are the matters to be considered when organizing for curriculum development?
- How do the core processes of faculty development, ongoing appraisal, and scholarship relate to organizing for curriculum development?

Curriculum Leader's Responsibilities When Organizing for Curriculum Development

The curriculum leader has the responsibility for leading the faculty group in the decision making necessary to prepare for the intensive work of curriculum development. The leader's curriculum, relational, and organizational skills are foremost as the faculty group is guided to prepare for curriculum development.

Lead Values Clarification and Creation of a Vision

Individual and collective values are important influences on all curriculum work. Initially, the perceived need for curriculum development is linked to values held by faculty members. Then, as members prepare for curriculum development, it is important that a base of shared values and beliefs be established. From these values, the group can form a vision of what they want the curriculum to be like, in general terms, and the types of interactions they wish to occur in the changed curriculum. Therefore, the wise curriculum leader will guide faculty and participating stakeholders to consider and reach consensus about:

- The purpose of the curriculum
- What nursing practice could and should be
- What constitutes excellence in a nursing curriculum
- The nature and extent of relationships between the school and stakeholders
- What the school will be like when a new curriculum is implemented:
 - How faculty members, students, and stakeholders will interact
 - The types of activities in which people will be engaged
 - The learning environment and tone of the curriculum
- The role of the nursing curriculum in supporting the institutional mission and priorities.

Consensus about these matters will provide a solid vision on which to base curriculum development. The discussion about values and vision provides the groundwork for future decisions about curriculum goals or outcomes and educational and philosophical approaches. An early discussion about excellence is the basis for subsequently determining acceptable quality as the developing curriculum undergoes ongoing appraisal. A vision of what the school will be like when a new curriculum is in place provides guidelines for current interactions among all curriculum participants and for role modelling by the curriculum leader. Explicit attention to the link between the curriculum and the institutional mission places the curriculum within a larger context and could strengthen future requests for budgetary and other administrative support.

Finally, agreements about values, beliefs, and vision become a touchstone during future curriculum discussion when divergent views might sometimes seem irreconcilable.

Once a vision has been articulated, the curriculum leader can commit this to paper in understandable terms, disseminate the vision to all involved in curriculum development, and act in accordance with the vision. A compelling message, referred to frequently, and actions aligned with the vision, can prompt others to internalize the vision (Reese, 2014).

Propose an Overall Organizational Plan

It is incumbent on the curriculum leader to present an overall plan for the accomplishment of the curriculum work. The plan should take into account the proposed date for curriculum implementation, the realities of faculty workloads, and the time that faculty members can regularly give to curriculum work. Importantly, the plan ought to incorporate the activities necessary to create or revise a curriculum, along with a time allotment for each. This time allotment is based in part on an estimate of the abilities of those who may be involved (Chatzoglou & Macaulay, 1996). The presentation of a tentative plan with timelines makes real the work that is ahead and to which faculty members are committed. The organizational plan brings order to curriculum development activities, expedites the subsequent work, and helps to make the process seem possible to novices.

Lead Discussion About Organizing for Curriculum Work

The curriculum leader has the responsibility of ensuring that matters pertinent to organizing for curriculum work are raised, discussed, and agreed upon. Depending on the culture of the school, the leader might provide information, suggest ideas, ask for endorsement of proposals, and/or lead discussion about matters pertinent to organizing for curriculum development. Typically, the matters are discussed in a relatively seamless fashion as the overall plan is presented.

Selection of a Change Theory

Selection of a change theory to guide the overall processes of curriculum development and implementation, and the attendant culture change, will allow curriculum developers to have a framework for the progress of their work and for the reactions that individuals might experience. Group attention to choosing a change theory will give a common frame of reference for the curriculum work and the processes that faculty experience individually and collectively. Additionally, the framework provides a means to highlight progress.

Participants in Curriculum Development

In addition to faculty members and students, participants in curriculum development can range from representatives of local healthcare and community agencies and the educational institution, to representatives from national and international organizations and several educational institutions (Gorski, Farmer, Sroczyński, Close, & Wortock, 2015). The scope of involvement can depend on the ultimate aim and vision of the planned curriculum, the desired time span from curriculum conception to implementation, the availability of funding for regional or national representatives to attend meetings and/or to support electronic communication, and so forth.

Faculty Members

The faculty members to be involved in curriculum development, and the nature and extent of their involvement, are crucial matters to raise and discuss initially. Creating the curriculum is mainly the province of the nursing faculty because of their work roles, knowledge, experience, and decision-making authority. Experienced faculty members offer institutional memory, knowledge of curriculum development, policies and resources, and health care in the community. Their insights can provide structure and guidance to the process. Novices can bring new ideas that are not bound by tradition and thereby help to move the group's thinking forward.

However, accountability for revising or creating a curriculum does not belong solely to faculty members who will be teaching in the redesigned curriculum. Faculty members from other programs in the school have important contributions to make and should be involved because they can bring different perspectives about nursing and nursing education, and ideas about alignment and possible scaffolding with other programs in the school, thereby broadening curriculum discussions. Additionally, colleagues from other disciplines relevant to nursing can be invited to participate, not necessarily for the direct contributions they can make, but to appreciate the curriculum intent, build support for the curriculum through their ongoing interaction with nursing faculty, and participate in any discussion about desired changes in the required non-nursing support courses.

In programs that partner with other educational institutions to offer nursing courses, it is understood that the partner faculty members are involved in accordance with the agreements between the institutions. The more fully partners participate in curriculum development, the more strongly they will be invested in implementing it in the manner envisioned.

Students

Participation in curriculum development is a means for students to expand their educational experience, gain valuable information about nursing education,

experience collegiality with curriculum developers, and offer ideas about the curriculum. Their experiences, perspectives, needs, and aspirations are important influences on the curriculum. Active involvement by students helps them understand the complexity of curriculum development and builds support for the curriculum, although it must be accepted that their participation can be intermittent in accordance with their schedules and priorities. Student groups can be asked for ideas in relation to specific aspects of the curriculum (Haraldseid, Friberg, & Aase, 2016; Heyman, Webster, & Tee, 2015) or for their reaction to developed material. Such actions convey the message that students' participation in shaping the curriculum is valued and that they have a professional responsibility to contribute to the improvement of nursing education for current and future colleagues.

Professional Practice Partners

Professional practice partners are essential members of curriculum development teams, and the value of collaborative interface with colleagues from practice settings should be raised during discussion. Curriculum dialogue among clinicians, faculty, students, and administrators has been described as mutually enriching, not only to those involved, but to the curriculum and profession (Black, Morris, Harbert, & Mathias, 2008; Cambers, 2010; Wilson, Wood, Embry, & Wright, 2016). Service agencies are affected by the curriculum and potential faculty role changes; therefore, they are entitled to be part of the planning that will affect them. Professional practice experts and leaders can provide useful, practical input and validate suggested changes. Additionally, the involvement of colleagues from practice settings can lead to the development of collaborative projects to enhance professional practice learning environments (Palmer, Harmer Cox, Clark Callister, Johnsen, & Matsumara, 2005).

Collaboration with external constituencies throughout curriculum development and revision is an essential aspect of nurse educators' practice (National League for Nursing Certification Commission Certification Test Development Committee, 2012). Although representatives of healthcare and community agencies may not have continuous involvement, they could be included on a consultative basis and/or for particular aspects of the process. Involvement of agency personnel with responsibility for student placements is indispensable when professional practice experiences are being planned.

Academic Administrators

Academic administrators, in particular the school leader, participate in curriculum development through delegation of responsibilities to the curriculum leader, allocation of resources to support curriculum development, and/or by

active involvement in the process. This involvement, however, will depend on other responsibilities and priorities in the school and institution, but such participation would signify the importance of curriculum development to the school and parent institution.

Although active participation by institutional administrators may be unlikely, the possibility of inviting them to events celebrating milestones in curriculum development can be proposed. If invited, greater interest and support may be generated.

Other Stakeholders

All who have an interest in the school of nursing and its graduates could potentially be involved: program graduates, professors emeriti, healthcare leaders, educators from the school system, community leaders, clients, consumers, and members of professional bodies. Their knowledge, experience, and vested interests could contribute significantly to the creation of a curriculum that will build students' professional knowledge, skills, values, and identity, so that graduates will practice nursing professionally and competently in changing social and healthcare environments. Their participation can extend curriculum developers' understanding of clients' experiences and can influence curriculum goals, content, and processes, as occurred when mental health service users in Ireland (Higgins et al., 2011) and Australia (Happell et al., 2015) were involved as stakeholders in health practitioner education. Provided in **Box 7-1** is a summary of those who could be involved in curriculum development if deemed appropriate by the faculty group.

BOX 7-1 PERSONS INVOLVED IN CURRICULUM DEVELOPMENT

Graduate and undergraduate nursing faculty members
Faculty members from other disciplines
Professors emeriti
Educational institution administrators
Nursing students
Program graduates
Healthcare leaders and clinicians
Members of professional nursing associations
Community leaders
Clients or consumers
Educators from the secondary school system

Committee Structure, Functions, and Membership

It is possible that one committee is given the responsibility of completing all the work of designing a curriculum. More often, a constellation of committees or task groups is formed. For the groups to complete the necessary work, all faculty members and other stakeholders must share the responsibility and participate in the discussions that lead to agreement and acceptance of ideas. Therefore, it is necessary for the curriculum leader, in particular, to propose which committees or task groups should be formed, their structure, and functions.

Deciding on committee structure first requires the identification of strategies to achieve the task of curriculum development expeditiously. Activities to accomplish the tasks, and the best way to use available human and material resources, should be assessed, proposed, and agreed upon. Committees, groups, and individuals, tied together horizontally and vertically through a common vision of the overall goal, possibly overlapping membership, facilitative relationships, shared communication, and information systems, will most likely be necessary to complete the activities.

A possible committee structure could be one that allows all members to function as a total faculty group, which develops and approves all curriculum proposals. This type of structure can be effective in a small school of nursing. However, in most schools, such a structure could slow curriculum development; therefore, it is more common for the total faculty group to come together to discuss and approve major aspects of the curriculum, such as the goals or outcome statements. Inclusion of the total faculty group at critical points in curriculum development can promote faculty buy-in.

A workable structure includes a Curriculum Committee of dedicated, knowledgeable participants who will be responsible for the overall development of the proposed curriculum. Members of the Curriculum Committee will become members and possibly chairs of subcommittees or task groups. Often, the formal curriculum leader chairs the Curriculum Committee. The use of subcommittees or task groups (ad hoc committees) is typical. Discrete tasks such as collecting contextual data or formulating the philosophical approaches are given to the subcommittees. These small groups enable each participant to contribute and appraise the work accomplished. They are transitory, task-oriented, and their dissolution is natural when the work is done. Usually, task groups do small short-term tasks, within a specified timeline (Glatthorn, Boschee, Whitehead, & Boschee, 2016), whereas subcommittees have the total ongoing responsibility of developing their portion of the curriculum and reporting back to the Curriculum Committee and the total faculty group.

In addition to subcommittees with responsibility for particular aspects of curriculum development, it is possible to have a Critique or Review Committee

to provide an “external” appraisal of groups’ work. Members of this committee can ask questions, recommend clarification or expansion of some points, examine incongruities, suggest revision, and provide feedback, thereby adding validity to the work. Alternately, the Curriculum Committee might take on the responsibility of this appraisal and ensure that all parts of the curriculum are consistent and unified.

The school might also enlist the help of a Curriculum Advisory Committee, comprised of members from the academic community, nursing leaders, and consumers. This Committee’s purpose is to review ideas about the developing curriculum (but not the details) and offer comments about its fit with the healthcare and community situations. Committee members also serve as advocates or ambassadors for the curriculum and the school within the groups they represent (Lott, 2012).

Finally, a Curriculum Steering Committee could be formed. This occurs most frequently when a curriculum is being planned and implemented by more than one educational institution. Committee membership can be composed of senior administrators of the institutions, formal leaders of the nursing program(s), and the curriculum committee chair(s). The number and organizational position of members from the involved institutions are usually equal. The steering committee might assume responsibilities such as:

- Offering direction to the curriculum initiative
- Ensuring that plans are in accordance with institutional policies
- Identifying needed changes in policies
- Establishing policies related to the collaboration, such as faculty credentials necessary to teach in the program
- Planning for acquisition and/or sharing of resources
- Monitoring the feasibility and implementation of institutional agreements for collaboration
- Liaising with institutional governing bodies and external organizations (e.g., nursing regulatory or government) as necessary

The key to successful curriculum development is a committee structure conducive to the task, yet amenable to modification if necessary. Activities of all committees and groups ought to proceed in an organized fashion, be based on realistic expectations, and be supported by adequate resources. When committees are structured, important considerations are their purposes (or formal terms of reference if necessary), membership, tasks to be accomplished, methods of achieving the work, and deadlines for completion.

Membership on particular curriculum work groups is usually based on interest and expertise. Individuals can become committee members by volunteering, peer selection, appointment by the school leader (Glatthorn et al.,

2016), or invitation by the curriculum leader or committee chair. Although all members may not fully meet the following membership criteria, the collective membership of each group should generally have:

- A broad understanding of nursing education, the school of nursing, and the educational institution
- Knowledge of curriculum development, learning, teaching, evaluation of learning, educational and nursing philosophies, student characteristics and needs, available resources, graduation requirements, approval and/or accreditation standards, and licensing requirements
- Familiarity with health and healthcare issues and the community to be served

Recordkeeping System

Keeping a record of meetings and decisions is essential. The records need not always be formal minutes; however, they should be up to date and complete, starting with the consensus agreement about values and vision. Copies of working papers, documents, and materials used or developed and decisions by committees and task groups should be dated and retained. These materials are an indispensable resource when there is uncertainty about what has been proposed or decided. Moreover, they are a history of the development and unfolding of the curriculum, and how abstract ideas become operational.

Attached to the meeting notes or minutes should be any substantive discussion or decisions that have occurred via email between meetings. These emails can easily be retained as part of the paper trail of the group's thinking and decisions. To a large extent, the emails form the notes.

Meeting notes or minutes, a record of decisions, and other documents can be kept on an electronic learning platform site. In this way, they can be accessible, as appropriate, to everyone involved.

Communication System

The work of each task group and committee has an influence on the work of others, and decisions that have been reached will affect all subsequent work. Therefore, the curriculum leader should propose a system that will allow all curriculum developers to be informed of the work that is underway or has been approved. Information sharing can occur through regular updates from the curriculum leader via email or newsletter, and/or posting on a learning platform. It is wise to have a central location (either virtual or real) for all approved decisions and documents. This will help to ensure that there will be no doubt about what is official and what is still being developed.

An effective communication system is more than a repository for decisions and notes. It allows opportunities for all curriculum development participants to be kept informed and provide input into subcommittees' work on an ongoing basis.

Decision-Making and Approval Processes

Decision-making and approval processes to accomplish the work as expeditiously and smoothly as possible should be suggested and agreed upon early. These processes will likely be the ones usually employed in the school of nursing; however, explicit agreement about decision making is essential as a basis for ongoing curriculum development.

The curriculum leader can provide suggestions about which decisions will require formal approval by the total faculty and information about those that will require institutional approval. Ideas about which aspects of curriculum development need endorsement by the total faculty will naturally lead to consideration of whether such approval will be gained by consensus or by vote, in formal meetings or through less formal discussions or email.

Create a Critical Path

Once the proposed plan and relevant matters have been discussed, possibly modified, and agreed to, the leader has the responsibility of creating a formal critical path, which will bring definition and direction to the work ahead. The critical path is a blueprint for action specifying the milestones in the project, interdependence of the milestones (Pešić, 2004), completion dates, and the individuals or committees responsible for achievement of each milestone. It provides a concrete means to assess whether the curriculum is being developed at a pace that will ensure implementation by the target date.

The critical path can be very detailed, specifying, for example, the dates for the formation of subcommittees or deadlines for preparation of materials for approval by the total faculty group. However, too much detail can be overwhelming.

More typically, the curriculum leader begins by placing the implementation date of the first courses on the critical path, thereby giving it prominence. The next step is to calculate back to the date the educational institution must approve the curriculum design. Then, the total time available to finalize the curriculum will be evident. Major milestones that must occur before curriculum implementation are identified. It is helpful to note which individual or group will have responsibility for each aspect of the process, as well as the approval procedures necessary throughout curriculum development.

The overall success of a project is positively affected by the quality of the initial planning and negatively affected by constraints in the number and

skills of people working on the project (Dvir & Lechler, 2004). The latter idea provides rationale for the inclusion of faculty development activities on the critical path and rationale for the leader to negotiate for adequate resources for curriculum work.

Table 7-1 provides an example of a critical path, beginning with the implementation date of the curriculum and working backward in time to when the curriculum development process actually begins. A 2-year period for the development of a typical 4-year undergraduate program is presented in consideration of the time needed for the change process among faculty (Mawn & Reece, 2000), various levels of approval that may exist in some institutions, and realities of faculty members' other responsibilities. Once this reverse ordering is completed, the chart can be rotated so that it starts with the most immediate activities and ends with curriculum implementation.

Milestones		Dependent on Completion of Prior Milestones	Completion Date	Group/Individual Responsible
19	Implement first courses	15, 18	September 2021	Course faculty
18	Finalize planning for first courses	15	June 2021	Course faculty
17	Interpret curriculum to health care and community partners	16	May 2021	Curriculum leader, Curriculum committee
16	Achieve institutional approval	15	December 2020	Institutional senior academic body
15	Forward curriculum documents to institutional governing body for approval	14	October 2020	School leader, Curriculum leader
14	Approve curriculum and policies	12	October 2020	Total faculty group
13	Present curriculum to steering and/or advisory committee	12	September 2020	Curriculum leader
12	Complete all aspects of curriculum design and policy development	10, 11	September 2020	Curriculum committee, designated subcommittees
11	Complete course descriptions	8, 9	September 2020	Course teams
10	Approve curriculum design and matrix	9	June 2020	Total faculty group
9	Complete curriculum design and matrix	7, 8	May 2020	Design subcommittee

(continued)

Table 7-1: Example of a Critical Path for Curriculum Development (continued)

Milestones		Dependent on Completion of Prior Milestones	Completion Date	Group/Individual Responsible
8	Complete negotiations for required non-nursing support courses		April 2020	School leader, Curriculum leader
7	Approve philosophical and educational approaches, and goals or outcomes	4, 5, 6	April 2020	Total faculty group
6	Finalize goals or outcomes	5	March 2020	Designated subgroup
5	Finalize philosophical and educational approaches	4	February 2020	Designated subgroup
4	Agree on curriculum core concepts and definitions	3	December 2019	Total faculty group
3	Collect and analyze contextual data	2	November 2019	Contextual data subgroup
2	Organize for curriculum development: form committees, begin faculty development		September 2019	Curriculum leader, total faculty group
1	Form steering and/or advisory committee		September 2019	School leader, Institutional leaders if curriculum is offered with (an)other institution(s)

Task groups or committees may also wish to prepare a critical path for their work. This explication of each group’s responsibility can help novices to understand what needs to be done and can help members to ensure that they will achieve the milestone for which they have responsibility.

Alternately, a Gantt chart could be devised. The advantages of the Gantt chart are that it illustrates the duration of activities to achieve each milestone and makes evident that some activities occur simultaneously. A Gantt chart to match Table 7-1 is presented in **Table 7-2**, with the shaded areas representing the time period to work toward the milestones. It is possible to delineate the activities necessary to attain each milestone, but this would make the chart excessively large. “Drilling down” is best left to the groups responsible for the work.

Suggest a Faculty Development Plan

The curriculum leader could suggest a tentative plan for faculty development activities based on the overall progression of curriculum development tasks. If the leader plans and schedules some initial sessions, novices will gain confidence

Table 7-2: Gantt Chart for Curriculum Development

Deadlines ↑ Milestones ↓	Sept. 2019	Oct. 2019	Nov. 2019	Dec. 2019	Jan. 2020	Feb. 2020	Mar. 2020	Apr. 2020	May 2020	June 2020	July 2020	Aug. 2020	Sept. 2020	Oct. 2020	Nov. 2020	Dec. 2020	Jan. 2021	Feb. 2021	Mar. 2021	Apr. 2021	May 2021	June 2021	July 2021	Aug. 2021	Sept. 2021		
Form steering and/or advisory committee(s)																											
Form committees																											
Faculty development																											
Collect, analyze, and present contextual data																											
Agree on curriculum concepts and definitions																											
Finalize philosophical and educational approaches																											
Finalize goals or outcome statements																											
Approve philosophical and educational approaches, and goals or statements																											
Complete negotiations about required non-nursing support courses																											
Complete curriculum design and matrix																											
Approve curriculum design and matrix																											

(continued)

Table 7-2: Gantt Chart for Curriculum Development (continued)

	Sept. 2019	Oct. 2019	Nov. 2019	Dec. 2019	Jan. 2020	Feb. 2020	Mar. 2020	Apr. 2020	May 2020	June 2020	July 2020	Aug. 2020	Sept. 2020	Oct. 2020	Nov. 2020	Dec. 2020	Jan. 2021	Feb. 2021	Mar. 2021	Apr. 2021	May 2021	June 2021	July 2021	Aug. 2021	Sept. 2021	
Deadlines ↑ Milestones ↓																										
Complete course descriptions																										
Complete curriculum design and policy development																										
Present curriculum to steering and/or advisory committee(s)																										
Approve curriculum and policies																										
Forward curriculum documents for institutional approval																										
Achieve institutional approval																										
Interpret curriculum to professional practice partners																										
Finalize planning for first courses																										
Implement first courses																										

Note: Shaded areas indicate the time span of the activity.

in their ability to participate meaningfully in curriculum development. However, the plan must be open to change in response to emerging needs.

Introduce the Possibility of Scholarship Projects Linked to Curriculum Work

The curriculum leader should introduce the possibility of scholarship projects arising from curriculum work and lead discussion about this. A number of the chapters in this text provide many ideas that the leader could present so that faculty members and stakeholders can consider some scholarship possibilities and their involvement in the projects. If there is agreement about engaging in scholarship, authorship matters should also be addressed.

Clarify the Relationship of Curriculum Work to Academic Freedom

The curriculum leader might clarify the relationship of curriculum work to academic freedom so that all understand that they are:

- Free to propose unconventional ideas during curriculum development
- Ultimately bound by the decisions of the total group about the final curriculum

Novice faculty members might not initially realize that they need not be constrained in their curriculum suggestions by notions of what might be acceptable. Faculty members committed to particular ideas may need to be reminded that the total faculty group is the final authority in curriculum matters and not any individual alone.

Academic freedom is “the free search for truth and its free exposition” (American Association of University Professors, n.d.). This includes freedom to research and devise curricula without coercive pressure from outside the institution (Gibbs, 2016). Writing about academic freedom and scientific inquiry in nursing, Kneipp, Canales, Fahrenwald, and Taylor (2007) state:

With academic freedom comes academic duty . . . the duty to argue persuasively and logically for theoretical perspectives, areas of research and new methodological approaches, that you as a member of the scientific community, believe hold merit for advancing science in your field. (p. 8)

The same duty applies to nursing curriculum development. Each faculty member has the obligation to argue logically for preferred curricular perspectives, advance a position about the nature and content of the curriculum, and propose how the suggested perspective will advance the curriculum. These ideas are then subject to peer review.

In addition to a duty to argue cogently, academic freedom encompasses concomitant obligations to the institution and its rules and standards, including

the standards of the academic program (Bellack, 2003). The standards for the nursing curriculum are established by the nursing faculty, and each member is required to plan and implement courses in accordance with them.

Academic freedom is a means of self-regulation of the academic profession by professors (Orzeck, 2012) through peer review. In relation to curriculum, this means that it is the collective nursing faculty that regulates the curriculum and its implementation. Therefore, although some faculty members may perceive academic freedom as giving each nursing faculty member the right to plan courses independently, without attention to how these conform to the entire curriculum, this is not a supportable position (Larson, 1997).

Academic freedom includes professors' freedom in the classroom in discussing their subject (American Association of University Professors, n.d.; Canadian Association of University Teachers, 2011). Yet, teaching must be undertaken "with due respect to what is thought by qualified colleagues" (Shils, 1993, p. 190). It is for this reason that curricula are created collaboratively: the curriculum represents the peer review, consensus, and self-regulation of colleagues.

Curriculum implementation, however, should not be so constrained that creativity, pedagogical preferences, and expertise of faculty are stifled. Accordingly, there ought to be a balance between faculty autonomy and curriculum intent. A frank discussion among the curriculum leader, faculty members, and the school leader would ensure resolution of the latitude possible when individual courses are planned and implemented.

Negotiate for Resources

As the overall plan for curriculum development is shaped, the necessary resources will become apparent. It is advisable for the curriculum leader to follow up preliminary discussions with the school leader and negotiate for resources to support curriculum development. The requests could include release time from teaching for key curriculum developers; a specific budget for data-collection activities, faculty development, or curriculum consultation; and secretarial support. Although alterations in work assignments may be subject to collective agreements, they are worthy of exploration, because it is primarily the faculty who must develop, accept, and implement the curriculum.

Faculty Members' Responsibilities When Organizing for Curriculum Development

Faculty members have specific responsibilities when organizing for curriculum development. Fulfilling these may require further guidance by the curriculum leader.

Join Subcommittees or Task Groups to Complete Curriculum Development Tasks

Faculty members are obligated to join curriculum subcommittees or task groups and to commit to achieving the group's purpose. Within each group, initial discussions may mirror the ideas described earlier, such as deciding on decision-making processes, recordkeeping, a communication system, and which stakeholders to invite to join them. In addition, it is necessary to clarify the task, schedule meetings, determine how to share the work, and complete the work assigned within the specified timeline. If inadequate time or too much time is dedicated to curriculum development, participants can become discouraged, disinterested, and disenchanted with the process and progress.

Clarification of the task to be completed is usually the first matter for discussion when the group convenes. Although the task would have been defined in the overall plan for committee structure and/or in the critical path, each group needs to ensure that members have a shared understanding of the task, and that this understanding is consistent with the intent originally conceived for the group.

A written, realistic timetable and regular meetings will help to maintain participant interest, place the work in the context of its priority within the entire curriculum development process, and support the expectation that a revised or reconceptualized curriculum will be realized. When enough committed and qualified members meet on a regular basis to create and assess new ideas, the goal of a developed curriculum will be achieved in a timely manner.

Decisions about sharing the work must be made by each group. Inherent in all group work is the need to determine how activities will be completed. Who will do what, and to what standard? The matter of how to share the work will arise, and the approach is unlikely to be identical among groups. In some, all members may prefer to work together as much as possible, to explore ideas and achieve consensus before much writing is done. For others, there may be a desire to divide tasks among individuals or dyads, who would then bring back draft versions to the group for discussion, revision, and consensus. Likely, some combination of these approaches will be agreed upon, depending on the nature of the task and the imminence of deadlines.

Although it is beyond the scope of this text to describe all aspects of successful group functioning, some elements are worthy of review when considering how curriculum development can be achieved:

- Agree on the goals to be fulfilled, including the task to be accomplished, the deadline for completion, and the standard of the work.
- Obtain commitment from each member to meet the goals.
- Identify how much time each member can give to the task.

- Discuss how the group will work together.
- Consider the value of preparing a critical path for the group's work.
- Share leadership.
- Seek assistance when needed.

Welcome Stakeholders

Curriculum development is accomplished through group work, and it is necessary to welcome students, clinicians, and consumers to the task groups. Committee members may suggest particular individuals as possible members, or they may receive notice that some have volunteered. In either case, the stakeholders may not be familiar with the culture of nursing education and the nature of curriculum work. Therefore, it is recommended that attention be given to helping them understand the curriculum development process and making them feel they are respected members with valuable contributions to make.

Seek Input

Faculty members working on task groups need to seek the input of colleagues and stakeholders not represented on the committee. This can be done by inviting them to become members or to attend selected meetings, through interviews or email surveys for reactions to issues and ideas, or through informal discussions. Feedback can be obtained in total faculty group meetings, with materials sent out beforehand for review. Perspectives of the total student body (in addition to the views of students on task groups) can similarly be obtained.

Consider Scholarship Projects

Finally, each group should consider the potential for a scholarship project in the work it is completing. Although this may seem daunting when the curriculum work is beginning, it is a worthwhile topic for the agenda of each meeting. Ideas will emerge, and possibly with the help of the curriculum leader, projects can be developed.

Core Processes of Curriculum Work

Faculty Development

Once a decision has been made to proceed with curriculum development, it would be helpful to have a faculty development session about the curriculum development process itself, and about change processes. Specifically, a summary

of the entire progression will help novices appreciate that curriculum development is iterative, replete with concurrent and recurrent phases. However, to ensure that faculty members do not feel overwhelmed, it is wise to identify the concrete tasks that ensure timely completion of the work. The goal is for faculty to comprehend the process and believe that the work required will be manageable and achievable. An overview of the logistics of getting organized is essential so faculty members will understand how the process will start. Similarly, an overview of change processes will provide a touchstone for future discussions.

Ongoing Appraisal

Ongoing appraisal of the organizing activities occurs spontaneously as matters are being discussed. Faculty members offer ideas in response to those proposed by the curriculum leader and colleagues. These responses are a form of appraisal and will shape the final decisions about how to proceed.

To ensure that appraisal is built into the discussion, the curriculum leader might ask such questions as:

- How does that seem to you?
- Are there other possibilities that might be workable?
- Does this seem feasible?
- Can we commit to this plan?

Similarly, faculty members and stakeholders should appraise the ideas about how to proceed within individual curriculum task groups.

Scholarship

The idea of scholarship about organizing for curriculum development may seem odd, but projects, presentations, and publications about the process could be instructive for future curriculum development within the school of nursing and for colleagues elsewhere. Possible scholarship projects could be:

- Faculty, student, stakeholder, and curriculum leader appraisal and satisfaction with the processes undertaken to organize for curriculum development
- An analysis of the effectiveness of the organizational features of curriculum development, such as the committee structure and communication system as curriculum work proceeds
- An analysis of meeting notes to identify idea development and resolution during curriculum development
- A reflective analysis of participants' evolving views about curriculum development engagement

A study might be undertaken to assess the influence of faculty development on knowledge, attitudes, and confidence of novice faculty members and stakeholders about the curriculum development process. Pre–post data will provide insight into the effectiveness of the initial faculty development efforts and into the areas where the curriculum leader might offer assistance through consultation with task groups or further faculty development.

CHAPTER SUMMARY

Practical guidelines about organizing for curriculum development are the focus of this chapter. The curriculum leader is responsible for guiding faculty to consensus about values and a curriculum vision, discussing an overall plan with faculty, creating a critical path, suggesting faculty development, introducing ideas about scholarship potential in curriculum development, and negotiating for resources. Faculty members have responsibility for joining committees to complete curriculum development tasks, welcoming stakeholders, seeking input, and considering scholarship projects. Included are ideas about faculty development, ongoing appraisal, and scholarship related to the initial organization.

SYNTHESIS ACTIVITIES

The McMillan Mountain University School of Nursing case includes some ideas about organizing for curriculum development. The questions that follow provide a basis for analysis and discussion of the situation. Subsequently, questions are posed that might assist readers when organizing for curriculum development in their own settings.

■ McMillan Mountain University School of Nursing

The current 4-year generic BSN nursing curriculum at McMillan Mountain University was developed over a 2-year period and has been offered in its present form for almost 8 years. Approximately one-half of current faculty members participated in the original curriculum development.

Although there have been periodic curriculum updates, most full-time faculty believe the curriculum is now beyond resuscitation and in need of replacement. This view has been reinforced by a decline in graduates' NCLEX® results. Some faculty members would like to see a stronger emphasis on community nursing, some are interested in a concept-based curriculum, and some think that such decisions are premature.

However, there is consensus that a new curriculum is needed. It is agreed that the time span to implementation should be 2 years.

Simultaneously with discussion about the need for a new curriculum, the School of Nursing was asked by a neighboring community college to consider offering a joint RN-BSN or a fast-track RN-MSN program. So far, there have been preliminary conversations, and an agreement by senior administrators that it is an idea worth considering. However, concrete discussions have not begun.

The school director, Dr. Louisa Williams, has appointed Dr. Amal Haddad to lead curriculum development. Dr. Williams believes that Dr. Haddad has the curriculum expertise, relational skills, organizational ability, and knowledge of the university to spearhead the curriculum endeavor. Although she is not currently a member of the Curriculum Committee, Dr. Haddad has chaired this group in the past. Dr. Williams informs faculty members and stakeholders of Dr. Haddad's appointment "to lead curriculum development." Dr. Haddad's first action is to meet with the Curriculum Committee, whose mandate is to ensure that the curriculum is designed, delivered, evaluated, and revised in a coherent and coordinated fashion, consistent with current educational and accreditation standards. Dr. Haddad proposes that it would be prudent to clarify her relationship with the committee. She also suggests that it would be wise to discuss organizing for curriculum development so that she can prepare a tentative plan for faculty discussion.

One committee member suggests that the most expedient course of action is for Dr. Haddad to form a small group to design the curriculum, report to the Curriculum Committee as necessary, and leave the details of course development to individual faculty. Other members respond that Dr. Haddad's request to discuss her relationship with the committee and organizing for curriculum work warrant consideration.

■ Questions and Activities for Critical Analysis of the McMillan Mountain University School of Nursing Case

1. How can Dr. Haddad and the Curriculum Committee work together productively so that the goal of a new curriculum is achieved? What could be the responsibilities of each?
2. Compare the merits and drawbacks of (1) the creation of all aspects of a new curriculum by a small group and (2) involvement in curriculum development by all faculty members.

3. If all faculty members are to be involved in curriculum development, propose committees or task groups that could be created. What purposes would they serve? Who should the members be? What modifications could be suitable if faculty numbers are limited?
4. In view of the potential for collaboration with the community college, should members of the college nursing faculty be invited to join curriculum task groups? Why or why not?
5. What ideas must Dr. Haddad introduce when she meets with faculty to discuss organizing for curriculum development?
6. Describe decision-making approaches that could be effective for the curriculum developers.
7. Should key stakeholders be invited to the organizing meeting? Why or why not?
8. Reflect on the fact that there is consensus about the need for curriculum development, but not agreement about an emphasis on community nursing. In what ways might a discussion about values assist the faculty to work productively?
9. Explain how Dr. Haddad can help faculty members to view scholarship as an integral part of curriculum work.
10. Suggest faculty development activities that could be helpful as curriculum development begins.

■ Questions and Activities for Consideration When Organizing for Curriculum Development in Readers' Settings

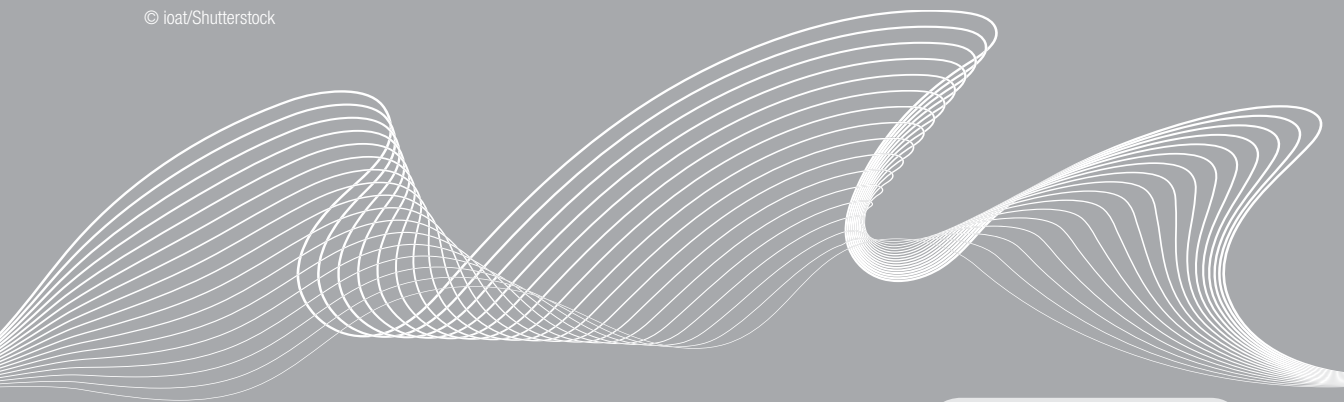
1. What approaches to decision making are most commonly used in the School of Nursing? How effective are they in achieving goals? Should alternate decision-making approaches be considered when organizing for curriculum development?
2. When is the new curriculum to be implemented? Outline the activities necessary to develop the curriculum. What are the processes and timelines for approval within the School of Nursing and at the institutional level?
3. Determine the best way to develop a critical path. Who will assume responsibility for developing it?
4. Consider how curriculum development might affect the current work of faculty members.

5. What committee structure(s) for curriculum development might be most efficient and successful? Who should participate on the committees and why? How will membership on committees be determined?
6. Assess the suitability of a steering committee comprised of senior administrators. Would a critique or review committee be advantageous? Why or why not? How could members of these committees be helpful to the curriculum development process?
7. List the agreements that should be reached within committees so members are organized to accomplish their work.
8. What would be effective recordkeeping and communication systems for curriculum development?
9. How do faculty members generally respond to faculty development activities? How are they likely to respond as they organize for curriculum development? What strategies have been most effective in moving the group forward in the past? How can faculty development necessary to initiate curriculum development be planned?
10. What resources are needed to support curriculum development? How can this be discussed with the school leader?
11. How can curriculum development be achieved if resources do not exist for the appointment of a curriculum leader with teaching release time, and/or periodic release time for some faculty members?
12. What are the ongoing appraisal questions that should be asked when organizing for curriculum development?
13. Propose scholarship ideas related to organizing for curriculum development.

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PART

IV

Development of an Evidence-Informed, Context-Relevant, Unified Curriculum

Data Gathering for an Evidence-Informed, Context-Relevant, Unified Curriculum

CHAPTER PREVIEW

An evidence-informed, context-relevant, unified curriculum is responsive to the educational and societal environment in which it is offered and to the environment that is expected to exist in the future. To create such a curriculum, contextual factors within and beyond the school of nursing must be investigated. The contextual factors are the forces, situations, and circumstances that influence a curriculum and those curriculum developers take into account. The typology of contextual factors presented in this chapter is a reasonable way to conceptualize them, although other categorizations are possible. Approaches to data gathering are outlined, including considerations to determine essential data and data sources to pursue. The term *data gathering* is used to differentiate the activity of obtaining information for curriculum development from the more prescribed procedures of data collection for research projects. The relationship of data gathering to an evidence-informed, context-relevant, unified curriculum is explained. Additionally, the core processes of curriculum work pertinent to gathering data about contextual factors are described. Synthesis activities include a case study for analysis, and questions and activities for readers to consider when gathering contextual data.

QUESTIONS ADDRESSED IN THIS CHAPTER

- What are the internal and external contextual factors that influence curriculum?
- How are essential contextual data determined?

- How can relevant data sources be identified, and contextual data gathered?
- What is the relationship between data gathering about contextual factors and an evidence-informed, context-relevant, unified curriculum?
- How are the core curriculum processes of faculty development, ongoing appraisal, and scholarship integrated into data gathering for curriculum development?

Overview of Contextual Factors, and Gathering and Interpreting Contextual Data

The curricular environment can be conceptualized as being composed of inter-related *contextual factors* (i.e., forces, situations, and circumstances that exist both within and outside the school of nursing and have the potential to influence the school and its programs). Although the factors are complex and constantly changing, form and boundaries must be given to them so that the concept of contextual factors is understandable and useful for curriculum development.

For the purposes of curriculum development, *internal contextual factors are those forces, situations, and circumstances that originate within the school and educational institution, that is, within the internal environment of the educational institution. External contextual factors are those forces, situations, and circumstances that originate outside the educational institution in the community, region, country, and world.* A typology of internal and external contextual factors is described in subsequent sections of this chapter.

Although differentiated for the purpose of descriptive clarity, some contextual factors blend and overlap. Additionally, some factors exist in both internal and external contexts. For example, culture can be seen as an internal contextual factor when described in relation to a school of nursing, and as an external contextual factor when viewed in relation to a community.

Because some contextual factors (e.g., social, political, and economic) can be large and nebulous, an examination of the context in its totality can be complicated and overwhelming (McKeown, 2012). Therefore, curriculum developers must precisely define which data are essential to obtain about each factor. The essential data are the specific facts and information about the contextual factors deemed most likely to influence the curriculum. These data might be as subtle as nurses' attitudes toward students in one healthcare agency or as concrete as attrition rates in the nursing program. Clearly, the more definitive the data that are obtained, the stronger the basis will be for designing the curriculum.

Purposefully gathering data about the contextual factors and the subsequent analysis of the data will yield the “big picture” of the current and

future environment in which the curriculum will be offered, and result in identification of curriculum concepts that will remain relevant into the future. Thorough data gathering and analysis are foundational to the development of an evidence-informed, context-relevant, unified nursing curriculum. The examination of the context ensures that curriculum developers attach the appropriate level of importance to particular events within the totality of the context. Events and changes in the internal and external environments have “echo effects” (Cornbleth, 2008) within the curriculum, but a good understanding of all the relevant contextual data will lead to a curriculum echo of appropriate volume.

The emphasis on gathering and interpreting data about the contextual factors is most aligned with ideas of environmental scanning and strategic thinking, planning, and management. This approach leads to programs that are developed for current and anticipated opportunities in the external context, with careful consideration of the realities and possibilities of the internal environment (Bryson, 2011; Henry, 2011; Katsioloudes & Abouhanian, 2017). From a curriculum perspective, the question to be answered through data gathering and analysis is: *What are the concepts, abilities, and attitudes that graduates will require to provide safe and high-quality nursing care in the current and projected environments?*

Data gathering and interpretation are not synonymous with a needs assessment, which connotes a gap between the present state and a predetermined desired state, and which could result in a curriculum with a relatively short lifespan. The approach described in this text does not start with precise ideas of what the curriculum should be. Rather, the approach will result in a description of the desired concepts, abilities, and attitudes of graduates that is deduced from contextual data. As such, the new or revised curriculum will be relevant for the present and the future.

Internal Contextual Factors

As stated previously, the internal contextual factors are those forces, situations, and circumstances that originate within the school of nursing and educational institution. These include the institution’s and school’s mission, vision, philosophy, and goals; culture and climate; history; financial resources; programs and policies; and infrastructure.

Mission, Vision, Philosophy, and Goals

Every organization has a mission, which is a succinct statement that captures the institution’s distinctive character. It is a “broadly defined and enduring

statement of purpose that distinguishes an organization . . . from other organizations of its type” (Swayne, Duncan, & Ginter, 2008, p. 162). The uniqueness of the institution, its scope of activities, and its culture are evident in the mission statement. As such, the mission informs those within and outside the organization of its ultimate *raison d’être*, namely its purpose and way of being. The educational institution’s mission shapes the nature, scope, and boundaries of the mission, activities, and curricula of the school of nursing.

The educational institution and the school of nursing also have a vision, a mental image of what the organization will achieve when it is fully accomplishing its mission, and this is part of the mission statement (Kosmützky & Rücken, 2015). This vision is expressed in a broad and forward-looking statement that is the organization’s “hope for the future” (Swayne et al., 2008, p. 161), the goals it will strive to achieve (Harrison, 2016). As such, the vision provides direction to curriculum developers.

Institutions of higher education also have clearly articulated guiding principles (or beliefs and values) about the fundamental activities that take place within them, services offered, and the community served. Statements about education, learning, knowledge development, scholarship, and so forth, form the philosophy. In addition to understanding the institution’s philosophy, curriculum developers need to identify the espoused and enacted values and beliefs within the school of nursing.

Consistency and clear links among the mission, vision, purpose, and values are the basis of strategic planning in organizations (Harrison, 2016). Accordingly, the mission, vision, purpose, and values of the educational institution and school of nursing are evident most directly in their strategic goals and strategic plans. It is advisable for curriculum developers to give considerable attention to these goals and plans, because the institutional priorities that give direction to curriculum recommendations and the nursing curriculum must be congruent with them.

Organizational Culture and Climate

Each organization has a culture or “way of being” that is unlikely to be explicitly stated, but that affects all people within the organization and those who interact with it. The culture is an embedded pattern of shared values, assumptions, attitudes, expectations, and behaviors that are tacitly conveyed to new members. It is brought to awareness when its premises are breached, and this recognition is often expressed in statements such as, “That’s not the way we do things here” or “That won’t work here.”

Organizational climate is the surface manifestation of the culture (West & Lyubovnikova, 2015). It is the shared perceptions of, and meanings attached to:

- Policies and procedures experienced by employees, clients, and others who interact with the organization
- Observations of behaviors that are rewarded, supported, and expected (Schneider, Ehrhart, & Macey, 2013)

The concepts of organizational culture and organizational climate are closely related. Therefore, adjectives or metaphors used to encapsulate prominent aspects of the organizational environment may reflect one or both concepts (e.g., progressive or traditional, friendly or hostile, bureaucratic or participatory, like a family or toxic).

Organizational culture and climate evolve over time and can be slow to change. They are formed by determinants such as policies and procedures, the people in the organization, interactions and decision-making styles, projects and decisions pursued or avoided, the consequences of these actions, and people's interpretations of all that they experience and observe.

Two significant aspects of organizational culture are openness to change and resource allocation (Harrison, 2016). If change is typically minimized or avoided, a new curriculum may not be welcome. As well, if a new curriculum is premised on a changed culture in the school or will require a reallocation of resources that will alter the culture and climate, curriculum developers must strategize carefully, because a change in organizational culture and climate is difficult to accomplish.

History

Examining the institution's history will reveal past values, successes, and challenges, as well as the school's processes for curriculum development. Much can be learned from how past challenges have been met and successes achieved. This information may still be pertinent for decisions about the curriculum. For example, if another department has transformed its programs with resultant increases in enrollment and educational resources, nursing curriculum developers could examine how this was accomplished, and consider if the processes are relevant for the school of nursing. Answers to the following questions may provide some insight into the history of the institution and the school of nursing:

- When were the educational institution and the school of nursing founded, and why?
- Have the institution's and school's mission, vision, and purposes changed over time? If so, why, and how?
- How does the school's history influence current programs and operations?

- What programs are offered? How have these evolved? Over what timeframe?
- Were programs developed for a niche market? Has the market changed?
- What are the unique features that have developed within the institution, the school, and the programs?

When preparing a new curriculum, faculty members are shaping the future and creating the school's ongoing history. Accordingly, the processes followed and decisions taken should be recorded. In this way, future curriculum developers will not be dependent on a few faculty members who are the custodians of the institutional memory, and whose recollections are lost when they leave the school.

Financial Resources

Financial resources, possibly more than any other internal contextual factor, influence the curriculum design. Knowledge of the operating costs of a school, budget planning, and budget allocation is essential. In addition, attention can be given to possible funding sources for curriculum development and innovation.

Careful analysis should be directed to the cost that would be created by a redesigned curriculum. Funding limits can constrain the curriculum design, and adequate financial resources are essential for successful implementation. For example, if there are tentative thoughts about changing from an upper division baccalaureate program to a 4-year generic program, or adding nursing theory or practice courses, then it is essential to ascertain what this could mean for the school's budget. Such knowledge would signal whether the idea is worthy of development or whether it should be abandoned. The school leader's ability to allocate or reallocate resources within the school, and to obtain additional resources, will influence the curriculum design (Chin & Chuang, 2015).

Programs and Policies

The programs and policies of the educational institution and the school of nursing form an important aspect of the internal environment. Within the school, the type and number of programs, physical and human resources dedicated to those programs, and the relationship of the developing curriculum to other programs will influence curriculum design. For example, if a BSN completion program and a generic undergraduate program have shared one or more courses, then attention will need to be given to the fact that making a change in one program will affect the other.

The programs and courses offered by other departments could be an asset to the curriculum designers or limit the scope of what they can propose. Knowledge from the physical, biological, and psychosocial sciences, as well as from the arts and humanities, contributes significantly to nursing knowledge and well-rounded graduates. Hence, courses from these disciplines are essential in a nursing curriculum. Although they are typically called *support courses*, these required non-nursing courses really do more than support the nursing curriculum: they are an integral part of it. Therefore, the availability of courses, prerequisites, and scheduling should be ascertained, as well as the possibility of negotiating new non-nursing required support courses.

Additionally, programs in other health science disciplines should be surveyed. Previously untapped interdisciplinary or interprofessional learning opportunities may exist or may be negotiated if the curriculum developers consider them important.

Existing institutional and school of nursing policies and guidelines are important reference points during curriculum development. They should be available and understood by the curriculum development team. It can be time-consuming and complicated to gain the necessary approval for revision or addition of school policies as part of curriculum development. Any changes must be accomplished within the context of existing institutional regulations. Requests for broader policy changes that might affect the educational institution are more complex and can be expected to take longer to achieve.

Infrastructure

The term *infrastructure* refers to the human, physical, and organizational elements that underlie the functions and systems of the educational institution and school of nursing. An inventory of available resources, knowledge of future plans for resources and services, and the possibility of negotiating new ones are influential when shaping and bringing vitality to a curriculum. Curriculum developers must understand the infrastructure in which the redesigned nursing curriculum will operate so they can plan a feasible curriculum, secure in the knowledge that the necessary resources will be available to bring their plans to fruition.

Human Resources

Human resources form the core of the curriculum and are the most important resources of the institution. It is largely through interactions between and among students and faculty that the curriculum is experienced; therefore, people are the center of the curriculum. External stakeholders and staff members also contribute to curriculum development and implementation, and therefore, they are important resources.

Information about human resources includes details about contracts that govern the working life of faculty members and staff. A review of faculty and staff collective agreements provides insights into matters such as job expectations, holiday entitlement, hours of work, and so forth. These all influence the curriculum. For example, if faculty contracts allow for weekend teaching, then Saturday professional practice experiences could be a possibility. The amount and nature of information that can be obtained about current and potential students and faculty members are governed by institutional policies and human rights and privacy legislation. As an example, in some jurisdictions it is possible to ask about race; in others, it is not.

Faculty Members

Faculty members are the prime contributors to curriculum development and implementation, and represent a vital part of the internal infrastructure. They are critical sources of insight and information about what to include in the curriculum, because they know what works, what doesn't, and why. They bring the curriculum to life, execute all its dimensions, and have a vested interest in student and curriculum success.

Information about current faculty and the pool of potential faculty is an important determinant of curriculum development decisions. Data about areas of specialty, educational preparation, possible retirement dates, and teaching preferences and capacities, among others, will be valuable.

Students

Students are also an essential human resource, as important as faculty members. Schools of nursing would not exist were it not for students; without them, there is no need for curriculum. Student data form the basis of much internal contextual information critical to curriculum development because the curriculum is designed for them. **Box 8-1** lists student data that could be obtained to enhance understanding of the internal contextual environment. Moreover, students are vital members of curriculum development teams.

Stakeholders

Stakeholders, such as adjunct faculty, guest lecturers, clinical experts, preceptors, and healthcare leaders form part of faculty resources. They need to be considered when shaping the curriculum, not only for the contributions they might make to the future curriculum, but also for the involvement and perspectives they can offer to curriculum development.

Support Staff

Members of the support staff are another important human resource. Programs could not function without people such as administrative assistants, admissions

BOX 8-1 STUDENT DATA

Number of applicants

Numbers meeting and exceeding admission requirements

Number of admissions

Demographics of current students and applicants:

- Previous education
- Age
- Marital status
- Number of dependents
- Employment status
- Ethnicity
- Catchment area
- Proportion of full- and part-time students
- Grade point average
- Grades in nursing and required non-nursing support courses
- Attrition rates and rationale
- Success rates on registration or licensure examinations

Follow-up data about graduates:

- Employment positions
- Time to secure full-time positions after program completion
- Employer evaluations
- Numbers admitted to graduate programs

officers, caretakers, information technology specialists, and others. They make possible the smooth day-to-day operations of the school. Data gathering about this group, such as numbers and skill sets, is mandatory to understand how the future curriculum can be operationalized.

Physical Resources

Availability and quality of equipment, materials and space for classrooms, offices, and laboratories require attention because they affect what is possible in the curriculum. Knowledge of these resources can also be a basis for negotiating for new or additional facilities to match developing ideas about curriculum design and student learning needs. Moreover, physical resources are important in conveying a message to all members of the school of nursing about how much they and their activities are valued by the institution (Dutton & Sellheim, 2014) and this understanding can influence curriculum developers' planning.

Technologies that assist faculty to fulfill their roles efficiently are necessary for effective teaching and facilitation of student learning. Therefore, the adequacy of such things as office computers, student computer labs, audiovisual and clinical equipment, smart classrooms, distributed learning technology, and high-fidelity manikins should be determined.

Resources to Support Teaching and Learning

Resources that support teaching and learning should also be examined. Knowing what is available will assist in making curriculum decisions, planning, and negotiating for additional resources.

Library Resources

Library resources are essential for teaching and learning. Facilities and collections should be reviewed with respect to the strengths and gaps in the library's collection. Online databases extend the library's holdings, and their availability and ease of access have implications for curriculum and course designs, student assignments, and faculty research. Knowledge about any shortcomings in library holdings or services provides a basis for negotiating altered or expanded materials and services.

Faculty Development and Teaching Support Services

Faculty development services are another element of the internal infrastructure. School and institution-wide programs related to teaching and research development can be sources of ideas and support for a new curriculum. For example, robust institution-wide programs for developing and enhancing online courses allow curriculum developers to consider the inclusion of hybrid courses or a completely online curriculum. However, if there are no institution-wide programs relevant specifically to teaching-learning or evaluation in the envisioned curriculum, curriculum developers could:

- Create and offer faculty development sessions related specifically to teaching and evaluation in the curriculum being planned.
- Hire a consultant to share expertise about the planned teaching-learning strategies.
- Negotiate for an institution-wide program that will not be specific to nursing.
- Avoid particular teaching-learning and evaluation approaches in the new curriculum.

Teaching support, such as graduate teaching assistants or other university-employed or university-sponsored students, can extend faculty teaching. Typically, graduate

students contribute to curriculum implementation through teaching, grading assignments, and leading tutorial sessions.

Student Services

Student services related to assessment and development of academic skills, personal support, health, recreation, and financial assistance are integral aspects of the institutional infrastructure. These services can mean the difference between success and failure for many students and can be an incentive to applicants.

Summary of Internal Contextual Factors

In summary, internal contextual factors are those forces, situations, and circumstances that originate within the school and educational institution, and have potential to influence the curriculum. These should be examined in two ways: a macro view to capture the contextual data relevant to the institution and a micro view to focus more specifically on the school of nursing.

External Contextual Factors

As described previously, external contextual factors are those forces, situations, and circumstances that originate outside the educational institution and have the potential to influence curriculum. They originate in the community, region, country, and world, that is, the environment beyond the educational institution. An examination of external contextual factors is crucial to understanding the characteristics, goals, and needs of society and the nursing profession, and their application to contemporary nursing curricula. A brief survey of the most influential external contextual factors follows.

Demographics

Demography can be defined as:

The study of human populations in terms of size, density, location, age, sex, race, occupation, and other statistics. It is also the description of the vital statistics or objective and quantifiable characteristics of an audience or population. Demographic designators include age, marital status, income, family size, occupation, and personal or household characteristics such as age, sex, income, or educational level. (Doyle, 2011)

The quantifiable characteristics are typically referred to as *demographics* and they have a significant influence on healthcare delivery and thus, on nursing education. Information pertaining to population characteristics assists curriculum developers to know about the people who are and will be clients

of the healthcare system. The nursing curriculum can then be designed to align with attributes of the recipients of nursing care. Local, regional, and national data can be obtained. Pertinent data include the following:

- Distribution according to age, sex, location, and combinations of these
- Birth, death, and fertility rates
- Population diversity
- Employment rates and income levels by age and sex
- Ethnicity
- Residence patterns (e.g., living alone, homeless, in nursing homes)
- Morbidity rates and patterns
- Family structures
- Population mobility
- Immigration and emigration patterns

Culture, Ethnicity, Language, and History

Further to assessing the demographics of the human populations nurses serve, curriculum developers direct attention to the culture(s) within the external environment. The *culture* of a group refers to:

The way of life of a people, including their attitudes, values, beliefs, arts, sciences, modes of perception, and habits of thought and activity. Cultural features of forms of life are learned but are often too pervasive to be readily noticed from within. (“Culture,” 2014)

Culture is intimately tied to ethnicity, national and group history, and language (Soto, 2015), all of which influence a group’s value system, spiritual or religious beliefs, traditions, rituals, norms, and behavior. A culture is dynamic and experienced differently by the individuals within it (Gregory, Harrowing, Lee, Doolittle, & O’Sullivan, 2010), meaning that individuals may not fit the stereotypical view of a particular group. This multifaceted depiction of culture allows for the cultural subtleties and variations in emphases inherent in the individuals, groups, and communities that comprise the external environment in which the nursing program is situated.

Race and ethnicity are often equated with a particular culture that has its own practices, rituals, and beliefs, but this is not always the case. People of the same ethnic or racial origin may represent a unified or a diverse culture, or they may have been assimilated into the dominant culture and no longer identify with the norms of their perceived cultural group. Moreover, people can be members of more than one culture: the dominant culture and the culture of origin.

Each community has a number of subcultures that may not be immediately obvious, but that contribute to its nature and therefore are relevant for curriculum planning. The cultures of youth, poverty, family violence, homelessness, gender, aging, work environments, and the healthcare system are some examples.

The culture of the healthcare system is particularly worthy of note: who is entitled to health care; how, where, and when clients receive health services; the languages in which services are provided; the quality and nature of provider–client and provider–provider interactions; behavioral norms; and so forth. These influence nursing care and work life, clients' responses to healthcare providers, and consequently, the nursing curriculum and students' learning experiences.

Respect for the traditions, shared beliefs, values, attitudes, and norms of a community's distinctive cultures is prerequisite when designing a curriculum. This is particularly important because migration and communication technologies can bring nurses into contact with people from around the world.

Health and Health Care

The health of people clearly influences nursing care, and thus curriculum. As well, the healthcare system is a critical aspect of the learning context for students' professional practice. Consequently, a review of the health status of the population and the nature of services may provide previously unexamined opportunities for professional practice experiences. Pertinent information related to health and the healthcare system might include the following:

- Most prevalent local and national health problems
- Profile of clients receiving care
- Nature of healthcare agencies and their services
- Nature and availability of public health and other community-based healthcare services
- Healthcare funding
- Availability of healthcare insurance
- Costs of care to clients and families
- Gaps in service

Information about health care relevant to learning opportunities for nursing students might include:

- Potential placement sites and learning experiences
- Receptiveness of healthcare agencies to students
- Willingness of healthcare providers to participate in student education
- Opportunities for professional practice education with students from other health professional programs

Curriculum developers ought to gather data pertaining to settings and opportunities for student learning experiences, as well as data about changes in prominent health problems, care services, and facilities. They should be current about healthcare delivery patterns and mindful of the needs and demands of healthcare consumers.

Professional Standards and Trends

Health care, nursing practice, and nursing education standards all affect professional practice and the education of nurses. Accordingly, trends and requirements related to these are strong influences on curriculum. Data to obtain include:

- Entry-to-practice, nursing practice, legal, and ethical standards
- NCLEX[®] test plan
- Approval and accreditation requirements
- Self-assessment and quality assurance guidelines or requirements for nurses
- Evidence-informed nursing and nursing education practices and best practice guidelines
- Research on student learning, nursing education, and nursing practice
- Contemporary nursing education models, frameworks, philosophies, and educational approaches
- Current, anticipated, and enhanced roles, and scopes of nursing practice
- Position statements from professional organizations and nursing leaders
- Reports from foundations, governmental agencies or commissions, and other groups known for making recommendations about health care, nursing practice, nursing education, and/or higher education

Educational and Healthcare Technology and Informatics

Advances in technology influence the content, teaching-learning strategies, course delivery, and course management of nursing curricula. Therefore, it is advisable to gather data about technology and informatics for education and health care, and about expected developments.

Educational technology is constantly changing the nature of nursing education, and will continue to do so. For example, incorporation of mobile technology in professional practice experiences is becoming common (O'Connor & Andrews 2015). Use of virtual reality software (Kilmon, Brown, Ghosh, & Mikitiuk, 2010; Schaffer, Tiffany, Kantack, & Anderson, 2016) or a virtual practicum using telehealth with real patients (Grady, 2011) could be relevant for schools with constrained placement opportunities.

The use of high-fidelity manikins, the expectation that students engage in database searching during class, and social media use have all changed campus-based learning and faculty–student interactions. Developments will continue faster than they are reported in the literature, and it behooves curriculum developers to be aware of learning technology available in their institutions and to lobby for those technologies that could be integrated into their curriculum.

It is neither possible nor necessary for curriculum developers to know all the technology that is used in health care. Rather, data are needed about the technologies that students will likely encounter and be expected to know during their professional practice placements. Along with this, information about electronic health record systems and healthcare agency policies about the use of electronic communication devices is important to acquire.

Environment

Environment is a broad contextual factor that refers to the atmospheric, physical, biological, and psychological milieu of a community, and it can extend beyond geographic and political boundaries. For example, chemical, biological, physical, sociological, and psychological hazards and stressors can pose threats to individual, family, and community health locally, nationally, and internationally. Data about national and international events and possible threats are important, although curriculum developers will likely focus on information about their immediate community. These data could include some or all of the following issues, in particular those that seem most relevant to the locale of the school of nursing:

- Weather patterns such as severe blizzards, extremely hot summers, droughts, tornadoes, or hurricanes
- Effects of climate change
- Air and water quality
- Presence of local industries known to produce environmental pollutants and hazards
- Environmental disasters, such as oil spills or forest fires
- War
- Terrorism
- Newly emerging diseases and their spread

Social, Political, and Economic Conditions

Social, political, and economic conditions form another broad contextual factor that encompasses forces, situations, or circumstances in the external environment. Because social, political, and economic events and issues are strongly

interconnected, with each affecting the others, they are presented as one contextual factor. Information about this factor can influence curriculum planning.

Data about each of the previously identified external contextual factors (demographics, culture, healthcare system, professional standards and trends, technology, and environment) are related to social, political, and economic conditions. Consequently, some data pertinent to this factor may be obtained while collecting information about the others.

Data to obtain about social behaviors and issues that affect health, and thus may influence the curriculum might include:

- Rate and type of illicit drug use in the community
- Unemployment rates and patterns
- Housing availability, affordability, and quality
- Teen pregnancy rates
- Nature and rate of crime in the community

Political and legislative (local, regional, provincial/state, and national) priorities and policies affect higher education, nursing education, health and social services, and eligibility for services. Pertinent data with potential curriculum implications could be:

- Support for nursing and nursing education from elected political parties, government officials, and community representatives
- Public concern about nursing shortages and access to health care
- Projections for changes to the healthcare system and health insurance coverage

Data about economic conditions that can affect the curriculum may include:

- Present and projected local, provincial/state, and national economies
- Government financial support for higher education and nursing education
- Private, community, or public funding for:
 - Curriculum development
 - Faculty and student grants or scholarships

It would be advisable for curriculum stakeholders to carefully assess these and other social, political, and economic issues that can have a direct bearing on the curriculum to be developed.

Summary of External Contextual Factors

In summary, external contextual factors are those forces, situations, and circumstances that originate outside the educational institution in the community, region, country, and world. It is incumbent upon nursing curriculum developers

to obtain data about the external contextual factors so that a future-oriented, evidence-informed, context-relevant curriculum can be created. This type of curriculum is developed in response to demographic trends, culture, health and healthcare trends, professional standards, technology and informatics, the environment, and social, political, and economic conditions. Knowledge of these will make it possible for nurse educators to prepare professional nurses capable of caring for culturally diverse individuals, families, and groups within a dynamic society and healthcare system.

Approaches to Gathering Contextual Data for Curriculum Development

In this text, the term *data gathering* is used rather than *data collection* to differentiate the activities of obtaining information for curriculum development purposes from the acquisition of information for research purposes. Although some methods may be the same, the purposes and rigor vary. Some differences are identified in **Table 8-1**.

Characteristics	Data Gathering for Curriculum Development	Data Collection for Research
Purpose	Obtain information that will influence curriculum development	Obtain information to answer specific research questions and/or test hypotheses
Scope of information	Very broad	More limited
Procedures to obtain information	Planned, but open to change Quantitative and qualitative methods used	Formalized and limited by research design
Procedures to analyze information	Planned, but less prescribed than data analysis for research	Planned analysis, in accordance with research design
Instruments	Quantitative and qualitative instruments or guides specific to school and curriculum context Pilot-tested with convenience sample for comprehensiveness and comprehension Quantitative tools generally not assessed for psychometric properties and may not be reused	Quantitative tools: <ul style="list-style-type: none"> • Instruments with known psychometric characteristics preferred • Psychometric testing with each use Qualitative questionnaires or interview guides specific to each research project Pilot-testing of new quantitative and qualitative tools and guides
Anonymity of data	Generally, yes	Yes
Requirement for approval by ethics review board	Generally, no, unless data are also being used for research or publication purposes	Yes

A thorough understanding of the context in which the curriculum will be offered can be gained only through careful planning about data to be gathered. Some faculty members may believe that they have adequate knowledge of the contextual situation and, therefore, that only a small amount of effort is required to gather data. However, this perspective is not sound. General knowledge about the context is an insufficient basis for curriculum development. The accumulation of detailed information and the curriculum decisions that flow from analysis of the information ground the curriculum in the context and ensure its relevance.

Planning for data gathering requires agreement about the contextual factors requiring investigation, and identification of relevant data, data sources, and methods to obtain the information. The process of data gathering represents a strong public statement that a redesigned curriculum will be forthcoming, because the activities are dependent on interactions between nursing faculty and other members of the educational institution, key personnel in healthcare agencies, and community members. Although the intention to develop a curriculum is known to stakeholders involved in the planning that precedes data gathering, it is at this time that expectations for curriculum change are raised in the wider community. Moreover, external data gathering conveys the message that the curriculum will be relevant to its context. Because of the public nature of these activities, curriculum developers are obligated to present themselves in a credible manner, and this requires planning and organization.

The scope of data that are gathered about contextual factors and the subsequent data interpretation are foundational to the nature, relevance, and longevity of the curriculum. When deciding on the necessary data, data sources, and methods for data gathering, curricularists strive to achieve a reasonable balance between a desire to acquire breadth and depth of data on the one hand, and to progress in a timely manner on the other.

Deciding on Necessary Contextual Data and Data Sources

It is vital that the contextual data required for curriculum development be agreed upon so that suitable sources can be identified, and, if necessary, data gathering tools developed. There should be openness to the acquisition of data that are not initially identified but subsequently recognized as important. For example, it might be decided that data about the intended programmatic directions of the major healthcare agencies in the community would be essential, that particular healthcare leaders are appropriate data sources, and that interviews would be the most expedient method of acquiring the data. If, in the course of an interview, however, an administrator comments that community-based clinics will be opened for a particular population, it would be prudent to ask

for more information immediately, because there could be curriculum implications. In making decisions about which data to obtain, curriculum developers consider the following:

- Which contextual factors seem most germane? What is the potential utility of the data for curriculum development?
- What are the precise data required?
- What is “nice to know,” but not imperative for curriculum development?
- How accessible and available are the data?
- How quickly can data be gathered?
- Is acquisition of any data so important that a delay in curriculum development is justified?
- What are the consequences of failing to gather these data?

When curriculum developers decide upon the necessary data for each contextual factor, the interrelated nature of the factors will be apparent. In other words, data to be gathered could be pertinent to more than one factor. When data are recorded, it is best to make a note of the information for all the factors to which it pertains, rather than spending time on discussions about where it belongs.

Myriad individuals, groups, organizations, and documents can be used as data sources to provide information that may influence curriculum decisions. Determining which sources would be most useful is dependent on the situation within each school of nursing and the community. The decision requires judgments about information such as:

- Richness of data likely to be obtained
- Accessibility and availability of data sources
- Purpose of data gathering (solely as a basis for curriculum development or also for research)
- Resources available for data gathering

Data Gathering Methods

Knowledge that shapes the curriculum is generally not obtained according to the rigorous standards of a formal research study. However, attention to institutional research ethics approval procedures is necessary if research is conducted or publications are anticipated along with curriculum development. If there is overlap or ambiguity about what is research and what is data gathering for curriculum development, it is imperative that institutional definitions of research are clarified and policies about obtaining data are heeded.

When decisions are being made about appropriate methods to gather data about the internal and external contextual factors, the main considerations are:

- Length of time scheduled for data gathering in the curriculum development critical path
- Time to locate extant documents, develop interview questions and/or surveys, and gather and analyze data
- Expertise of curriculum developers in data gathering and analysis methods
- Resources to support data gathering and analysis, such as secretarial support or hiring of assistants

Many methods could be employed to gather data about internal and external contextual factors. Those that will yield valuable data as expeditiously as possible, and for which the curriculum designers possess the required skills, are most appropriate. Frequently-used data gathering methods for curriculum development are briefly described below.

Literature and Internet Surveys

The purposes of surveying the literature and Internet are to learn from others and to stimulate new ideas (Neuman & Robson, 2012) about trends, philosophical approaches, and strategies for nursing education, along with significant directions for health care research about student learning. Learning about nursing education beyond the local situation, and gaining insight into the convictions and opinions of experts, can expand curriculum developers' viewpoints to include national and international perspectives. Ideas from beyond national borders can furnish new and relevant understandings, even though the origins of the concepts or their implementation are geographically and/or politically distant.

Additionally, published curriculum designs and examples of courses can serve as models for new curricula. Many authors provide suggestions arising from the successes and difficulties they have encountered with particular curriculum designs and implementation. Particularly valuable can be research reports about the outcomes of specific teaching-learning strategies or programs, because they provide evidence that can guide future educational practices. Authors whose ideas are particularly attractive or faculty from a school with an appealing curriculum might serve as consultants if resources permit.

Document and Website Reviews

A review of existing documents can be an inexpensive means of acquiring data identified as necessary for curriculum development. Some documents may be readily available, such as results of curriculum evaluations, professional practice and educational program accreditation standards, or the institutional mission,

vision, philosophy, and strategic plan. Conversely, others may require a more protracted effort to obtain. These might include government or healthcare agency reports. Those documents that are judged to have particular relevance for future curriculum directions should be reviewed and pertinent data extracted.

In addition to focused Internet searches, review of specific websites can furnish valuable data. For example, many documents, such as nursing legislation, the NCLEX-RN[®] test plan, and information specific to educational institutions are available online.

Key Informant Interviews

Key informants are people known to have information relevant to the purpose of the data gathering. Individual, semi-structured interviews (face-to-face, telephone, or email) can be an effective and inexpensive method to acquire pertinent data quickly. The interviewer requires excellent listening skills; the ability to ask meaningful and comprehensible questions; adeptness at probing, summarizing and rephrasing; and quick understanding of responses to follow up with evocative questions (Le May & Holmes, as cited in Addo, 2014).

The interview questions should be carefully planned so that maximum relevant information can be acquired without unduly imposing upon an informant's time. Providing the main questions in advance of the interview can help the informant prepare. During the interview, the same question types as are used in research interviews are employed as appropriate: introductory, follow up, probing, specifying, direct, indirect, structuring, and interpreting queries, as well as silence (Brinkmann & Kvale, 2015).

Key informant interviews are semi-structured so that ideas can be pursued, and unexpected information explored. It is "the interviewer's skills and situated personal judgment in the posing of questions" (Brinkmann & Kvale, 2015, p. 71), and the informant's openness, that ultimately determine the depth and scope of data obtained.

Typically, the interview begins with a statement of its purpose, an explanation of how the informant's data will be used, and a request for permission to make notes or audio-record the interview. Formal consent may be necessary if it may ultimately be possible to identify the interviewee. Responses are recorded (usually by taking notes) so that information is not forgotten. As the interview is ending, it is wise to ascertain whether it would be acceptable to follow up, either in person, by telephone, or via email, if clarification or additional data are required.

Focus Group Interviews

Focus group interviews are planned group discussions intended to obtain information from knowledgeable participants about a specified topic in a

nonthreatening environment. This method of data gathering capitalizes on group interaction to explore perceptions, attitudes, beliefs, and opinions about a particular topic or issue.

The focus group typically comprises 6 to 12 individuals with a common set of interests. A facilitator, whose role is to assist the group to explore the topic in depth, generally within a loose structure, guides the discussion. The dialogue is audio- or video-recorded. The facilitator requires the same skills noted for one-to-one interviews and a sensitivity to group dynamics, to ensure that all members have sufficient opportunity to express their views. As well, the facilitator has the responsibility of redirecting the discussion if it strays from the main topic (Bryman, 2012). Moreover, if there is the possibility of emotions being evoked (for example, students describing sources of distress in the curriculum), then it is necessary to consider who should conduct the focus group and to plan for how to respond (Dempsey, Dowling, Larkin, & Murphy, 2016).

Although the structure is not fixed, open-ended questions are prepared in advance. According to Kreuger and Casey (2000), questions should be developed to match the following sequence of categories: opening, introductory, transition, key, and ending. Ideas are recorded (often on flipcharts in addition to audio-recording) and periodically reviewed to ensure accuracy of recording and comprehension. The goal is not consensus; rather, it is a full exploration of the topic.

Focus groups, for the purpose of gathering data for curriculum development, can be used productively with faculty members, students, staff nurses, and other stakeholders. The interview can be broad, covering many topics relevant to a new curriculum. Or, it can be narrow in its focus, examining one aspect of curriculum, such as the nature of professional practice learning experiences.

Surveys

A survey is a means to obtain data from a large number of people in a relatively short period of time. All respondents normally answer the same questions in the same order (Neuman & Robson, 2012). Questionnaires are often equated with surveys, but this is not always the case. Survey data can also be obtained through interviews conducted face-to-face, over the telephone, by email, regular mail, and the Internet (de Vaus, 2016).

Both quantitative and qualitative responses can be requested and thus, curriculum developers can gain a broad perspective of curriculum stakeholders' views. The aim of a survey about curriculum is not to test a hypothesis, but rather to obtain descriptions (both statistical and narrative) of opinions and attitudes that will inform curriculum development.

Survey data are typically obtained from current and former students. Examples of information that could be requested on both student and faculty

surveys are opinions about the aspects of the current curriculum that should be retained or changed, attitudes toward particular types of learning experiences, and ideas about learning experiences that might be developed. Surveys of local nursing faculty members, and nursing colleagues in other schools, might request opinions about future health care and desirable curriculum directions.

Surveys are a means to obtain data from a large sample of curriculum stakeholders. However, questionnaire development requires considerable time to ensure that items are understandable and unambiguous. Response rates may be low (Neuman & Robson, 2012), particularly if students are asked to complete surveys near an examination period. The time required for data entry can be lengthy, although web-based survey systems eliminate this problem. Descriptive statistics can be readily generated from quantitative responses, but qualitative responses will require more time for interpretation. Curriculum developers need to weigh the advantages and disadvantages when considering surveys as a means of data gathering.

Delphi Technique

The Delphi technique is a structured forecasting survey that provides a means of obtaining input from stakeholders who may be geographically distant and separate, but whose ideas are deemed essential. The aim is to come to a point of common agreement on a particular issue (Taylor & Martindale, 2014). A panel of experts is asked to complete an iterative series of questionnaires that address their opinions, judgment, or predictions about a topic. Each set of responses is summarized and another questionnaire, based on the summary, is sent to the same individuals for confirmation. The iterative process is repeated until consensus is achieved about the issue of interest (Polit & Beck, 2018).

The Delphi technique can be used to support curriculum development (Sitlington & Coetzer, 2015; Vallor, Yates, & Brody, 2016). For example, the technique could be used to ascertain nursing leaders' beliefs about essential content for a curriculum (Bobonich & Cooper, 2012). Selection of the experts, diminishing return rates with each questionnaire round, and the total time for the process to be completed (Keeney, Hasson, & McKenna, 2006) should be considered by curriculum developers.

Consultations

Consultations with experts and/or peers at other institutions can provide valuable knowledge, insights, and guidance about specific aspects of curriculum development, future directions for nursing practice and education, and/or implementation challenges of some curricular designs. Frequently, the counsel they offer is gained from experience that has not yet been committed

to publication. The contributions of consultants and peers from other institutions can be substantial when considered within local realities. Cost is likely a factor with external consultants; therefore, when a consultant is contracted, it is wise to ensure that the purpose of the consultation has been made clear and that the relevant curriculum developers are able to participate in discussions.

The Work of Data Gathering

There is no formula for deciding which data to obtain about the contextual factors, data sources to contact, or data gathering methods to employ. Rather, it is worthwhile for curriculum developers to give attention to the questions and considerations posed in the previous sections. Then, using their knowledge of the school, experience, and judgment, they can reach consensus about what is reasonable and realistic. Most likely, the conclusions will be different for each school. A worksheet could help focus thinking about data gathering and, when posted, serve as a visual reminder of work to be completed.

Table 8-2 presents examples of data, data sources, and data gathering methods for the internal contextual factors of mission, vision, philosophy, and goals; culture; financial resources; and infrastructure. **Table 8-3** presents similar information about the external factors of culture, healthcare systems, and professional standards and trends.

Internal Contextual Factors	Data	Data Sources	Data Gathering Methods
Philosophy, Vision, Mission, and Goals	Published philosophy, vision, mission, goals, strategic plan Values and guiding principles	Institutional and school documents and websites Key informants (e.g., senior academics, school leader)	Document and website review Interviews
Organizational Culture and Climate	Organizational structure Interaction styles Formal and informal decision-making styles Values	Organizational chart Key informants (e.g., faculty members, committee chairs)	Document review Interviews
Financial Resources	Institutional budget priorities Current and projected school budget	Institutional planning documents School leader	Document review Interview
History	Key features of school and institutional history Factors contributing to successes	Institutional reports Senior academics	Document review Interviews

Table 8-2: Examples of Data, Data Sources, and Data Gathering Methods for Internal Contextual Factors (continued)			
Internal Contextual Factors	Data	Data Sources	Data Gathering Methods
Programs and Policies	Evaluation of current curriculum	Evaluation reports	Document review
	Curricular emphases in other school programs	Program chairs	Interviews
	Range of courses in other departments	Institutional calendar, websites	Website review
	Policies regarding admission, progression, etc.	School and institution websites, calendars	Document and website review
Infrastructure <i>1. Human resources</i>	Employment agreements	Collective agreements	Document and website review
	<u>Nursing Faculty</u>		
	Number of part- and full-time faculty members	School leader	Interviews
	Credentials and expertise	Faculty members	Interviews
	Expected retirements and resignations	School website	Website review
	Characteristics of adjunct faculty		
	Pool of potential faculty	Chair of graduate program	Interview
	Pool of potential preceptors	Healthcare agencies	Surveys, focus groups
	<u>Non-Nursing Required Support Course Faculty Members</u>		
	Interest and availability of non-nursing support course faculty members to develop and teach new courses	Department chairs Non-nursing support course faculty members	Interviews
	<u>Students</u>		
	Applicant numbers and characteristics	Chair of admissions committee	Interview
	Demographics of current students	Admission committee reports	Document review
	Attrition, completion rates	School records	Document review
	<u>Support Staff</u>		
Numbers, skill sets	School administrator, support staff	Interviews	
Role descriptions		Role descriptions	
<i>2. Physical resources</i>	Office space	Observation	Observation
	Classroom space and facilities	Physical plant documents	Document review
	Technology, including technology for distributed learning	Information technology director	Interview
		Department website	Website review

(continued)

Table 8-2: Examples of Data, Data Sources, and Data Gathering Methods for Internal Contextual Factors (continued)			
Internal Contextual Factors	Data	Data Sources	Data Gathering Methods
3. <i>Resources to support teaching and learning</i>	<u>Library</u> Holdings and services	Librarian Library website	Interview Website review
	<u>Faculty Development Services</u> Nature and availability of services	Website	Website review
	Possibility of creating new services to support redesigned curriculum	Director of institution-wide services	Interview
	<u>Teaching Support</u> Availability of graduate teaching assistants	Graduate program chair	Interview
	Support for distributed learning design and implementation	Director of support services for distributed learning Website	Interview Website review
	Access to institutional funding for curriculum development	Funding announcements	Institutional website
	<u>Student Support</u> Nature and availability of services	Student services website	Website review
	Possibility of creating new services if warranted by new curriculum	Director of student services	Interview

Table 8-3: Examples of Data, Data Sources, and Data Gathering Methods for External Contextual Factors			
External Contextual Factors	Data	Data Sources	Data Gathering Methods
Demographics	Population size Age and gender profile Educational levels Urban–rural ratio Income levels Birth and death rates Percentage single or married Average number of children Percentage with health insurance Immigration and emigration patterns	Government and business development websites	Websites review

Table 8-3: Examples of Data, Data Sources, and Data Gathering Methods for External Contextual Factors (continued)			
External Contextual Factors	Data	Data Sources	Data Gathering Methods
Culture	Values, beliefs, and practices of: <ul style="list-style-type: none"> • dominant culture • major ethnic groups • subcultures • healthcare system and providers 	Key informants Publications of ethnic and cultural organizations Mission statements of healthcare agencies	Interviews Document review Document and website review
Health and Health Care	Services provided by public and private organizations Plans for changes in services Gaps in services Ratio of professional to nonprofessional staff in major agencies	Websites Agency key informants Healthcare leaders Consumer groups Government policy statements Annual reports Key informants	Website review Interviews Interviews Interviews Document and website reviews Document and website reviews Interviews
Professional Standards and Trends	Practice regulations Scope of practice NCLEX® test plan Nursing care trends Approval and accreditation standards Nursing education trends	Licensing bodies Legislation National Council of State Boards of Nursing Professional bodies Nursing literature Nursing leaders Practicing nurses Approval and accreditation bodies Nursing education leaders Nursing education literature	Document and website review Document and government website review Document and website review Document review Literature review Interviews, focus groups Delphi technique Document and website reviews Survey, interviews Literature search
Technology and Informatics	Educational technology and information systems in use in educational institution Healthcare technology and information systems students will likely encounter	Information and educational technology specialists Clinical leaders Faculty members engaged in professional practice and teaching	Interviews Interviews Focus groups

(continued)

Table 8-3: Examples of Data, Data Sources, and Data Gathering Methods for External Contextual Factors (continued)			
External Contextual Factors	Data	Data Sources	Data Gathering Methods
Environment	Recurrent environmental events, such as hurricanes Environmental threats Plausible environmental catastrophes	Curriculum developers' personal knowledge Faculty from environmental studies department Government websites	Interviews Web search
Social, Political, and Economic	Governmental policies, initiatives, and funding related to higher education Public support for nursing Grants, scholarships, and other funding for students, faculty, and the school Regional economic situation and outlook	Government reports Newspaper reports Consumer groups Alumni associations Professional bodies Foundations Government websites Student services Government and business development websites	Document review Web search News review Interviews Document review Web search Interviews Web search

The work of data gathering may be given to a specific task force or shared more widely among curriculum developers. Sufficient time should be allowed to ensure that a full picture is obtained of the internal and external contexts. If the new curriculum is to endure into the future, it must be based upon accurate and comprehensive data.

It is helpful to have a central repository so that data will be readily accessible for subsequent analysis. Moreover, methods that will speed analysis (such as immediate computer entry of returned questionnaire responses by an administrative or research assistant, or use of web-based questionnaires) should be employed whenever possible. All data from all sources for each contextual factor should be recorded together. Data that seem particularly compelling could be highlighted so that attention is given to it when the data are analyzed.

As data gathering proceeds, ideas will arise about possible concepts, processes, or learning experiences that could be included in the curriculum. It is natural to begin to extrapolate curriculum possibilities from the data. These ideas should be recorded with the understanding that they are only tentative and

based on incomplete knowledge. It is wise to exercise caution to avoid drawing premature conclusions about what the curriculum should be like. It is only when all data are assembled, interpreted, and synthesized that evidence-informed, context-relevant, unified curriculum ideas will emerge.

Relationship of Gathering Contextual Data to an Evidence-Informed, Context-Relevant, Unified Curriculum

A curriculum that is *evidence-informed* is based on systematically and purposefully gathered evidence about:

- Students, learning, teaching, and nursing education
- Clients and their responses to health situations
- Nursing practice
- The context in which the curriculum will be offered, as well as the context in which graduates will practice nursing

Further, a curriculum that is *context-relevant* is:

- Responsive to students; current and projected societal, health, and community situations; and current and projected imperatives of the nursing profession
- Consistent with the mission, philosophy, and goals of the educational institution and school of nursing
- Feasible within the realities of the school and community

A *unified* curriculum is one that contains curricular components that are conceptually, logically, cohesively, and visibly related. In part, this means that curriculum concepts and professional abilities, derived from the contextual data, are evident in the curriculum goals or outcomes, and throughout the curriculum.

The creation of an evidence-informed, context-relevant, unified curriculum begins with assembling organized, comprehensive, and accurate data about the context in which the curriculum will be offered and in which graduates will practice nursing. This type of curriculum is defined by, and grounded in, the forces and circumstances that affect society, health care, nursing education, recipients of nursing care, the nursing profession, and the educational institution. Context-relevant curricula have unique features reflective of local and/or regional circumstances, and these circumstances are known by purposeful data gathering about them.

Data gathering about the context is tantamount to gathering evidence for the curriculum. Therefore, it is important that the process be organized and comprehensive. Subsequently, the analysis of the contextual data will result in the identification of the core curriculum concepts and the key professional abilities of graduates. These will be evident throughout the curriculum and will

be an important aspect of its conceptual and visual unity. Thus, the process of gathering contextual data is the basis of an evidence-informed, context-relevant, unified curriculum.

Core Processes of Curriculum Work

Faculty Development

The overall goal of faculty development in relation to data gathering about contextual factors is to expand members' appreciation and knowledge of the relationship between the contextual factors and development of an evidence-informed, context-relevant, unified curriculum. Faculty development can include a session in which internal and external contextual factors are reviewed. Discussion about which factors are significant and how these factors can influence curriculum development will help novice curriculum developers understand the importance of systematic data gathering. During such a discussion, some pertinent data, data sources, and methods to gather data can be identified, with final decisions possibly being reserved for a task force or curriculum subcommittee.

Attention can be given to differentiating between data gathering for curriculum development and data collection for research, and to ethical considerations. It may be appropriate to include information about, and practice in, interviewing key informants if this will be a new activity for some. These faculty development activities can be readily facilitated by those members with expertise in data gathering and curriculum development.

Ongoing Appraisal

When gathering data, curriculum developers repeatedly ask themselves questions such as:

- Are the essential data being obtained? If not, what needs to be done?
- Are there other data that would be important for curriculum development?
- Should a decision not to gather data about particular contextual factors be reconsidered?
- Will the data gathering methods selected garner the most relevant data as expeditiously as possible?
- Have any groups, individuals, or documents with relevant data been overlooked?
- Is the correct balance between allowing sufficient time for data gathering and moving forward with curriculum development in a timely fashion being achieved?

Scholarship

There is considerable opportunity for scholarship projects related to data gathering about contextual factors. Most directly, the scholarship of teaching and learning could include presentations and manuscripts about the methods used to gather and record contextual data, with recommendations for future data gathering during curriculum development. Another idea that could encompass the scholarships of discovery and teaching and learning might be to conduct qualitative studies of the reactions of participants (those gathering and those providing data) to the process. It would be worthwhile to determine the extent to which those who provide data expect their ideas to be reflected in the curriculum.

CHAPTER SUMMARY

Data gathering about internal and external contextual factors that have the potential to influence curriculum is fundamental to the creation of an evidence-informed, context-relevant, unified curriculum. This public activity heralds a forthcoming curriculum change. Faculty members should first identify those factors they deem to be most relevant to the school of nursing and curriculum development. Then, decisions can be made about pertinent data, data sources, and methods to gather the data. It is essential that adequate time be given to data gathering, because the strength and longevity of a reconceptualized curriculum will rest upon the quality of the data gathered and the subsequent analysis. Finally, ideas about the core processes of curriculum work are provided, including faculty development to prepare members for the decisions and activities of data gathering, questions to guide ongoing appraisal, and possible scholarship projects.

SYNTHESIS ACTIVITIES

The Two Bays University School of Nursing case describes preparations for data gathering for curriculum development and is followed by questions that provide a basis for consideration of the situation. Then, questions are offered that might assist readers when planning data gathering for curriculum development in their own settings.

■ Two Bays University School of Nursing

Two Bays University is situated on a peninsula between two bays of a large lake. All members of the academy take great pride in the scenic campus

and make full use of the lakeside paths that allow them to walk or bicycle around the perimeter of the peninsula.

The School of Nursing offers several programs: RN-BSN, upper-level BSN, specialty Master's, and DNS. Undergraduate enrollment is 1,000 and graduate enrollment is 160. Of these students, approximately 8% are from foreign countries. Thirty-three full-time and eight part-time faculty members teach classes and labs in the programs. Additionally, there is a host of part-time faculty members who facilitate professional practice experiences in all programs.

Full-time faculty members are either tenured (N=23) or working toward tenure (N=10). Of those tenured, six have spoken of retiring within the next 5 years.

Concurrently with a decision by the School of Nursing to reconceptualize the undergraduate nursing programs, the university has set a goal to increase enrollment of international students in all programs, with the aim of having 18% of total enrollment from abroad within 5 years. Ideas proposed at the university level have included:

- Expanding the number of online programs so that students are not required to be on campus
- Planning programs so that students can complete part of the program online and then be present on campus for no more than one-half of their program
- Vigorously recruiting international students and intensifying financial and academic support for them
- Setting up satellite campuses in other countries where programs could be partially or fully offered

The goal to increase international enrollment is exciting for some faculty members and uncomfortable for others. However, there is general agreement that more information is required to determine exactly what this university-wide initiative could mean for all the nursing programs.

Faculty members tentatively agree to a plan for data gathering based on the schema presented in Tables 8-2 and 8-3 of this chapter, with the addition of a survey of all undergraduate students to determine their opinions about the current curriculum and their ideas about what could be important in a changed curriculum. However, during discussion about the practicalities of data gathering, the following matters are raised:

- Time required to complete the work
- How to integrate this work into current research and teaching commitments

- Reconsideration of whether all the information is really necessary
- Concern about who will arrange interviews, develop interview questions, create a questionnaire, administer the survey, record data, and subsequently analyze data

■ **Questions and Activities for Critical Analysis of the Two Bays University School of Nursing Case**

1. Consider the extent to which each of the discussion matters reflects a readiness to gather data for curriculum development.
2. Describe strategies that might have been implemented to prepare faculty members to engage in data gathering activities.
3. Identify the people and resources necessary to implement the data gathering plans. Be specific.
4. Specify the information that should be gathered about the university's intention to increase enrollment of international students. Would the required data be the same for all the nursing programs? If so, why? If not, what would be the required information for each program?
5. Propose how a change in international enrollment from 8% to 18% might affect the curricula of Two Bays University School of Nursing.
6. Ascertain other matters relevant to data gathering for Two Bays University School of Nursing.

■ **Questions and Activities for Consideration When Gathering Contextual Data in Readers' Settings**

1. Consider how to explain that gathering contextual data for curriculum development is important.
2. Develop criteria to determine the contextual data essential for curriculum development.
3. Apply the criteria to decide whether it is necessary to gather data about all internal and external contextual factors.
4. What would be the important data and data sources for each contextual factor?
5. Decide how the data could best be obtained. Will data gathering instruments be necessary? If so, what type, and who will design them?
6. How could the work of data gathering be organized?

7. Create a detailed plan for gathering data that includes people to be involved, resources, and a timeline.
8. How could data gathering be organized if only two or three faculty members are available to participate?
9. Identify resources necessary to expedite the work of gathering and recording data. What resources are available? How can the gathering and recording of data be accomplished if time and support are limited?
10. Establish a central repository for data.
11. Plan faculty development activities about data gathering for curriculum development.
12. Propose a plan for incorporating ongoing appraisal into the processes of gathering and recording data.
13. How can scholarship projects become part of the processes of gathering and recording data? Suggest some suitable and feasible scholarship projects.

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Analyzing and Interpreting Contextual Data for an Evidence-Informed, Context-Relevant, Unified Curriculum

CHAPTER PREVIEW

Once data have been gathered about the internal and external contexts and recorded in an organized manner, it is time to integrate the information and determine its meaning for the curriculum. The contextual data become the basis from which curriculum concepts and professional abilities are derived, curriculum possibilities become evident, and an evidence-informed, context-relevant, unified curriculum begins to take shape.

Following definitions of terms is a description of the cognitive processes involved in the analysis and interpretation of contextual data. These processes include integrating data, inferring curriculum concepts and professional abilities that program graduates will require, proposing curriculum possibilities, deducing curriculum limitations, and identifying administrative issues that affect curriculum design. Also discussed is the determination of core curriculum concepts and key professional abilities through syntheses of ideas generated from the contextual data, as well as the importance of carefully defining the core concepts. To enhance clarity, the thinking processes that bridge data gathering and the emerging curriculum are presented in a systematic fashion. However, the processes are iterative and integrative in nature, with all ideas influencing previous and subsequent thinking. The relationship between the analysis of contextual data and an evidence-informed, context-relevant, unified curriculum is explained. The core processes of curriculum work are addressed. After the chapter summary, a case is presented to illustrate the main ideas. Questions to guide consideration of the case are included, as well as questions to stimulate thinking about analyzing and interpreting contextual data in readers' settings.

QUESTIONS ADDRESSED IN THIS CHAPTER

- What are the cognitive processes inherent in analysis and interpretation of contextual data?
- How are core curriculum concepts and graduates' key professional abilities derived from the analysis and interpretation of internal and external contextual data, and subsequent synthesis of ideas?
- Why is careful definition of the core curriculum concepts important?
- How are the analysis and interpretation of contextual data related to an evidence-informed, context-relevant, unified curriculum?
- In what ways can faculty development, ongoing appraisal, and scholarship be integrated into analysis and interpretation of contextual data?

Definitions

A number of terms are introduced and defined. They are presented in a conceptually logical order that matches the order of their full explication in the chapter, rather than in a more conventional alphabetical sequence.

Curriculum concepts are abstract ideas that form the substance of the curriculum. The *core curriculum concepts* are derived from the contextual data and are the big ideas that are essential for graduates to know and use in the contexts in which they will practice nursing. These concepts permeate the curriculum and contribute to its uniqueness and unity.

Professional abilities are the capabilities necessary for nursing practice. They also are derived from the contextual data. The professional abilities include, but are not limited to:

- Cognitive skills, such as use of theory in practice, problem solving, critical thinking, and clinical reasoning
- Affective skills, including caring, empathy, and professional comportment
- Technical skills necessary for the execution of healthcare procedures and use of health and information technologies
- Interpersonal skills, such as communicating effectively, collaborating, leading, and delegating
- Ethical decision making and principled comportment
- Professional judgment, that is, the integration and judicious use of the aforementioned skills and behaviors within the context of nursing

The *key professional abilities* are essential for nursing practice and are derived from the contextual data. They form the basis of curriculum goals or outcome

statements, are emphasized throughout the curriculum, and contribute to the curriculum's uniqueness and unity. Knowledge is prerequisite to all professional abilities.

Curriculum foundations are those ideas that underpin the entire curriculum. They are the essence of the curriculum, and continuous attention to them is essential to ensure curriculum unity. The foundations are composed of the core curriculum concepts, key professional abilities, and philosophical and educational approaches.

Curriculum possibilities are imaginative ideas about potential teaching-learning experiences, curriculum design options, courses, and content areas.

Curriculum limitations are restrictions or constraints on teaching-learning experiences, curriculum design options, or potential content areas.

Administrative issues are those logistical, personnel, and/or budgetary matters that are beyond the authority of faculty members to resolve, but which can significantly affect the curriculum design.

Analysis and Interpretation of Contextual Data

Analysis (determining essential elements), interpretation (deriving meaning), and synthesis (combining parts to form a whole) of the contextual data are necessary to arrive at the core curriculum concepts and key professional abilities. These iterative and interactive processes require a combination of logical, convergent, divergent, and creative thinking, facilitated by open mindedness, reflection, professional judgment, and free communication.

Analyzing data about contextual factors and deriving meaning to reach conclusions about the curriculum entail a confluence of examination, integration, interpretation, reflection, and inference-making about curriculum concepts and professional abilities; generation of curriculum possibilities and recognition of contextual limitations; identification of administrative issues; and decision making. These deliberations occur in collaboration with colleagues whose perspectives, conclusions, and values may be divergent. Therefore, considerable frank discussion may be necessary before consensus is reached about the developing curriculum.

The following five processes are components of the analysis and interpretation of contextual data:

1. Examining and integrating contextual data to identify patterns and trends
2. Inferring curriculum concepts and professional abilities
3. Proposing curriculum possibilities
4. Deducing curriculum limitations
5. Identifying administrative issues

These processes are highly interrelated, and may occur almost simultaneously, with ideas about one aspect sparking many others in free-flowing conversations. However, the processes are deliberately presented separately in this chapter. This manner of presentation facilitates explanation and may promote understanding by making apparent how an evidence-informed, context-relevant, unified curriculum is derived from contextual data.

Examining and Integrating Contextual Data

Examining and integrating data are activities for the total faculty group. All those who develop and eventually implement a new curriculum must understand the context in which the curriculum will be operationalized and in which graduates will work. Therefore, individual members should review the data about the contextual factors, determine the influence factors have upon one another, and generate ideas about trends. Individual or small-group reviews form the basis for discussion by the total faculty group. Collectively, members discuss the ideas that were generated and identify patterns or trends. Data, patterns, and/or trends will reveal the current and projected state of affairs and form the basis of an evidence-informed, context-relevant, unified curriculum. Curriculum developers can ask two questions:

- What data are available about this contextual factor?
- What patterns and/or trends emerge from the data about this one factor?

A review and discussion about data and trends for individual contextual factors will make apparent the overlap and connections among data for several factors, and how data and trends about one contextual factor influence, and are influenced by, data and trends of other factors. The overall goal of reviewing contextual data and identifying trends is to achieve an integrated view of the data and a shared understanding of the context in which the curriculum will be operationalized and graduates will practice nursing. Some of the questions that might be considered include the following:

- How do data or trends about one particular factor affect trends in other contextual factors? For example, how might changes in legislation about health insurance, or benefits to people with disabilities, influence care recipients and providers?
- If a particular trend continues, what might the consequences be for other contextual factors? For instance, what might nursing shortages mean for publicly funded hospitals?
- What are the dominant features of the context in which the curriculum will be offered and graduates will practice nursing?

Predicting possible futures in response to these and similar questions helps curriculum developers anticipate the context for which the curriculum will be developed and in which it will be implemented. In understanding the big picture, curricularists also come to agreement about which contextual factors should be most important in influencing curriculum. More important factors may be readily apparent and agreed upon; less important ones might require discussion and consensus. There is no need to quantify the relative importance of each factor. Instead, faculty members need to reach accord with respect to the comparative weight of all contextual factors so that the most, more, and less important ones are determined. In this way, the curriculum becomes responsive to the predominant aspects of the context.

Inferring Curriculum Concepts and Professional Abilities

Review of contextual data, trends, and patterns will lead to insights about curriculum concepts (i.e., the abstract ideas that form the substance of the curriculum). Further, professional abilities essential for nursing practice can be inferred. The professional abilities, as noted previously, include, but are not limited to, cognitive, affective, technical, and interpersonal skills; ethical comportment; and professional judgment. These abilities will incorporate the competencies required for licensure. The professional abilities explicated in baccalaureate nursing programs will undoubtedly be more comprehensive than the minimal requirements for licensure in jurisdictions where a baccalaureate degree in nursing is not required for entry to practice.

Curriculum concepts and professional abilities are inferred mainly from the external contextual factors, although some may also be evident from internal factors. Furthermore, additional ideas about possible curriculum concepts and professional abilities are stimulated by those already suggested. The generation of these ideas is concurrent. Curriculum developers can ask the following questions:

- What inferences about important curriculum concepts that graduates should know and apply in nursing practice can be made from the contextual data and from patterns and trends?
- What inferences about professional abilities can be made from the contextual data, from patterns and trends, and from curriculum concepts?
- What additional ideas about relevant curriculum concepts arise from the professional abilities that have been suggested?
- What additional ideas about professional abilities arise from the curriculum concepts that have been suggested?

The intent is to record all the ideas that arise from brainstorming, without reservation, censorship, or concern about the format in which they are expressed.

Proposing Curriculum Possibilities

From ideas about curriculum concepts and professional abilities, thoughts about curriculum possibilities flow spontaneously. Curriculum possibilities (i.e., imaginative ideas about potential teaching-learning experiences, curriculum design options, courses, and content areas) result from creative thinking, unfettered by consideration of logistics. To determine the curriculum possibilities, this question could be posed: What possibilities arise from the contextual data, patterns, trends, curriculum concepts, and professional abilities about:

- Curriculum design options?
- Potential fit with content areas?
- Courses?
- Educational processes and experiences?

Ideas about curriculum possibilities can be drawn directly from data, trends, curriculum concepts, professional abilities, or from a combination of these. If, for instance there is decreasing funding for publicly supported health care, then a possibility might be to consider experiences in which students provide some home health care and/or offer care in free clinics. If, as another example, the curriculum concept of professional responsibility and the professional abilities of critical thinking and political action are identified, then experience with the political action committee of a professional organization might be proposed as a curriculum possibility.

The intent is to generate many ideas about curriculum possibilities. Some may seem preposterous, and others more conventional. The apparently outlandish possibilities may be appealing, but impractical. However, with subsequent application of pragmatic and logical thinking, these might later be modified into innovative and feasible suggestions.

Inferences about curriculum concepts and professional abilities, and proposals about curriculum possibilities, could lead to considerable discussion and debate, even when only a single contextual factor is being examined. For example, some faculty members may interpret a high teen pregnancy rate in the community as signaling a need for a curricular emphasis on prenatal assessment and health promotion, while others may conclude that school health experiences, including teaching teens about sexual health, could be important. It may be that both ideas will ultimately be accepted or combined with other possibilities. Some ideas, such as health promotion, could be considered a

concept, professional ability, and/or a potential content area. It is unnecessary to decide which category it fits best. Rather, possibilities should be recorded in every applicable category. Repeated recording of the same idea in several categories signifies its importance to the curriculum.

It is useful to record all thoughts about concepts, abilities, and experiences that occur, and at this stage to avoid debate about suitability, categorization, inclusions, or exclusions. Such decisions will be made in subsequent integrative discussions about curriculum and course design. The reasons for producing and recording as many ideas as possible are that they naturally arise from an examination of the contextual data and help curriculum developers move forward. The suggestions being recorded are tentative and should be retained for detailed curriculum and course design. They may be accepted, modified, or eliminated as curriculum development proceeds.

Identifying Curriculum Limitations

In contrast to curriculum possibilities, curriculum limitations are restrictions or constraints on teaching-learning experiences, curriculum design options, or potential content areas. These are derived from a pragmatic or logical interpretation of the contextual data, trends and patterns, curriculum concepts, professional abilities, and curriculum possibilities. Curriculum builders might ask the following questions:

- How do internal and external contextual data and trends constrain what might be possible in the curriculum?
- What restrictions do curriculum concepts and/or professional abilities place on curriculum possibilities?

Both internal and external contextual data can point to curriculum limitations that warrant serious attention by the curriculum team. For example, a faculty group whose nursing practice expertise lies mainly in acute care might identify the faculty profile as a limitation, if community-based professional practice experiences have been proposed as a curriculum possibility. Another example could be that particular professional practice experiences are constrained by limited availability of student placements.

Importantly, some of the curriculum possibilities and limitations can lead to actions that could profoundly change the school and the curriculum. For example, data about the nursing profession likely include a statement describing the current and projected worldwide shortages of nursing faculty. This fact could limit the likelihood of successfully implementing a small-group, case-based curriculum, which would require relatively large numbers of faculty members. Alternatively, it could be a catalyst to lobby senior administrators to initiate

vigorous faculty recruitment and retention efforts, or to enlist clinicians with adjunct university appointments to lead the small groups.

Deducing Administrative Issues

Invariably, administrative issues (i.e., those logistical, personnel, and/or budgetary matters that are beyond the authority of faculty members to resolve) that might affect the curriculum will become apparent as contextual data are analyzed and curriculum possibilities and limitations identified. The question to be answered is: What logistical, personnel, and/or budgetary issues could limit the curriculum, and therefore, should be raised with the school leader?

It is essential to note administrative issues and bring them to the attention of the school leader early, specifying the effects they could have on the curriculum, and describing the desired resolution. Then, with the school leader's support, guidance, and action, strategies can be developed and implemented to address the situation. Indeed, the curriculum design will likely be dependent on the resolution of some administrative matters.

Summary of Processes

Several processes have been described to illuminate the thinking that emanates from the contextual data: examining and integrating contextual data, inferring curriculum concepts and professional abilities, proposing curriculum possibilities, identifying curriculum limitations, and deducing administrative issues. Although delineated separately, the processes are interactive and occur almost concurrently, with each idea influencing others.

The processes involved in analyzing and interpreting contextual data are illustrated in **Table 9-1** and **Table 9-2**. Table 9-1 includes data about internal contextual factors for Eastern Seascape University School of Nursing, which is described in the Synthesis Activities section at the end of this chapter. The internal factors typically yield relatively few ideas about curriculum concepts and abilities but may point to curriculum limitations and administrative issues that influence the curriculum design. Some of the same limitations and administrative issues may be identified once again as external data are analyzed, thereby highlighting their importance. Table 9-2 is an example of how data about the external contextual factors, also for Eastern Seascape University School of Nursing, could be analyzed. Included in both tables are highly abbreviated sets of contextual data and the patterns and trends arising from the data. Curriculum concepts, professional abilities, curriculum possibilities and limitations, and administrative issues are suggested. The columns in the tables provide a convenient and organized method of recording ideas but are not meant to imply sequential or segmented thinking.

Table 9-1: Analysis of Internal Contextual Data for Eastern Seascope University School of Nursing

Data	Patterns and Trends	Curriculum Concepts	Professional Abilities	Curriculum Possibilities	Curriculum Limitations	Administration Issues
Philosophy, Mission, and Goals						
Publicly funded university Values: outcomes-based education, accountability, development of knowledgeable citizens	Emphasis on measurable outcomes			Development of a competency-based curriculum		Need to involve faculty expert in evaluation to ensure that curriculum and its outcomes conform to accountability measures
University strategic goals: 1. Increase external research funds 2. Increase minority and international student admissions		Evidence-informed practice Knowledge generation Respect, cultural competence, cultural humility Inclusion	Evidence-informed nursing practice Cultural competence Cultural humility	Research course; student involvement in faculty research Experiences with diverse groups Anthropology course Emphasis on support for minority and international students throughout the school and curriculum Course on international nursing or international health International placements Course re international health could be interprofessional		Competing requirements for school's success: research productivity vs. faculty involvement in curriculum development Investigating suitable non-nursing courses Possibly negotiating a course focusing on culture Partnering with student services officers re support for minority and international nursing students Negotiating international placements Partnering with other health disciplines for an international health course

(continued)

Table 9-1: Analysis of Internal Contextual Data for Eastern Seascope University School of Nursing (continued)						
Data	Patterns and Trends	Curriculum Concepts	Professional Abilities	Curriculum Possibilities	Curriculum Limitations	Administration Issues
Philosophy, Mission, and Goals						
School philosophy emphasizes: student-centeredness; respect for differences; ethical behavior; importance of nursing to society; development of students to provide safe, quality care; collective responsibility to contribute to the knowledge base for nursing and nursing education practices		All concepts that form the school's philosophy	Provide care in accordance with philosophy			
Decentralized authority for academic programs		Leadership Decision making Team work	Leadership	Leadership course Leadership, delegation experiences in healthcare agencies, nursing organizations; analysis of leadership behaviors in different contexts		
Interdisciplinary research valued and supported		Interdisciplinary Multidisciplinary Interprofessional	Interprofessional collaboration	Interprofessional education and experience Analysis of healthcare team		No faculty expertise in interprofessional education Planning and scheduling interprofessional education and practice with other disciplines and agencies

Culture					
Tension between research-focused and teaching-focused faculty members	Values Professional career paths Nursing roles Respect, civility, team-building	Conflict resolution			
History					
Student placement contracts in place with healthcare agencies. Relationships generally good, although two acute care units are not supportive of students	Change Team functioning	Work effectively in difficult situations	Ensure that students are supported in difficult situations Consider other placement sites	Reluctance of some faculty to consider teaching in new sites	
Curricular emphasis has been acute care, with limited focus on community, home health care	Social determinants of health Community resources	Assessment of clients' social situation, need for nursing care outside the hospital Ability to view community as client	Placements with home health and community agencies	Most faculty members have expertise in acute care nursing	Negotiating new placements Faculty development and/or recruitment of faculty members for community health
Financial Resources					
Constrained university budget related to decreased government funding School budget is tight, but meeting present needs	Budget constraints will continue		Reduced professional practice time to limit costs First year of curriculum; coursework and lab only, no placements	Purchase of learning resources limited	

(continued)

Table 9-1: Analysis of Internal Contextual Data for Eastern Seascap University School of Nursing (continued)						
Data	Patterns and Trends	Curriculum Concepts	Professional Abilities	Curriculum Possibilities	Curriculum Limitations	Administration Issues
Programs and Policies						
MSN, PhD programs in school University policies regarding undergraduate degree requirements School can create policies for nursing programs	Lifelong learning Career planning	Engage in ongoing learning, value education, knowledge development	Undergraduate and graduate student involvement in faculty-supervised research			
Infrastructure						
Human Resources 24 tenured or tenure-track faculty members 18 full-time contract faculty 108 part-time contract faculty 6 secretarial and clerical staff 825 undergraduate students 220 graduate students Almost all students are employed half-time to full-time	Retiring tenure-track faculty not replaced and increasing number of contract faculty over past 5 years Constantly changing part-time contingent Increasingly fewer are truly full-time students			Curriculum design to include a path for part-time students	Many who will implement the curriculum are not involved in its development Faculty members who are not researchers may not be able to teach meaningfully about evidence-informed practice	Stabilizing part-time faculty contingent Faculty development regarding new curriculum for all members Administrative staff concerns about increasing workload

<p>Physical Resources</p> <p>Smart classrooms</p> <p>Skills and simulation labs</p> <p>Campus computer labs for students</p>	<p>Continuous upgrading of classrooms, labs</p>			<p>More reliance on data searching as part of in-class activities</p> <p>Increase range of simulations</p>	<p>Few faculty ready to develop simulations or teach with simulations</p>	<p>Faculty development re simulation creation</p>
<p>Resources to support teaching and learning</p> <p><u>Library</u></p> <p>Wide range of journals available electronically</p> <p>Many new e-books</p> <p>One librarian dedicated to nursing</p> <p>Library open 17 hours each day</p> <p><u>Student Services</u></p> <p>Wide range of services: academic and personal counseling, financial aid, chaplains, health services, recreational services, gym membership, bus passes</p> <p><u>Faculty development</u></p> <p>University faculty development center provides programs related to teaching, and educational research</p>	<p>University and donor funds ensure excellent library services and resources</p>			<p>Expanded involvement of librarian in teaching of library searching, assessment of website credibility, etc.</p>		<p>Ensure all faculty members are aware of resources to support student success</p> <p>Ensure that all faculty members are aware of the faculty development center and its programs</p>

Table 9-2: Analysis of External Contextual Data for Eastern Seascape University School of Nursing						
Data	Patterns and Trends	Curriculum Concepts	Professional Abilities	Curriculum Possibilities	Curriculum Limitations	Administrative Issues
Demographics						
Life expectancy: Females 81.2 yrs. Males 76.4 yrs. Age profile: <5 yrs. 5.6% 6–18 yrs. 14.4% 19–64 yrs. 61.4% >64 yrs. 17.6%	Greater numbers and percentage of seniors and the “old-old”	Aging Aging in place Healthy aging Health promotion Social support Health and health promotion and maintenance throughout the lifespan Evidence-informed practice	Health promotion Care of individuals with chronic illness(es) Care of elders with concurrent acute and chronic illness Provision of care in institutions and community Retrieve, critique, and use evidence Use information technologies	Course on gerontological nursing or interprofessional course on aging Health promotion and maintenance throughout the lifespan Professional practice experiences in community, long-term care, and acute care agencies	Limited student placements on labor and delivery units	Limited faculty expertise in gerontological nursing or community nursing
Fertility rate: 1.86 Birth rate: 12.4/1,000	Declining birth rate overall More home deliveries by midwives; no student placement opportunities	Maternal–infant health	Health promotion from pre-conception to post-natal Care of women during labor and delivery Care of the neonate	Community-based experiences to promote healthy child growth and development Involvement in prenatal classes at public health unit		Need to establish relationships and placement agreements with midwives

<p>Teen pregnancy rate: 22.3/1,000</p>	<p>Declining teen pregnancy rate</p>	<p>Physiological, psychological, and social aspects of teen pregnancy and child-rearing Effects of noxious substances on fetus, newborn Family and social support Evidence-informed practice Social support</p>	<p>Referral to social agencies</p>	<p>Health promotion with pregnant teens in schools, community centers Theory course re maternal and child health Traditional labor and delivery practice placements Labor and delivery simulations</p>	
<p>13% of U.S. population is foreign-born</p>	<p>Population growth through immigration Immigrants' main origins: Mexico, China, India, Philippines</p>	<p>Culture Cultural safety</p>	<p>Cultural competence Communication enhancers and inhibitors</p>	<p>Health promotion sessions (e.g., BP, diabetes prevention clinics) with particular ethnic or cultural groups Attention to culture in all classes and professional practice experiences</p>	<p>Difficulty negotiating access to some cultural groups</p>
Culture					
<p>Western/North American culture dominates</p>		<p>Cultural norms, values, traditions, beliefs</p>	<p>Working effectively in different cultures and with people of different cultures</p>	<p>Raise issues of ethnicity and culture in classroom and professional practice experiences</p>	<p>Caution not to teach stereotyped images of cultures</p>
					<p>Identify and build relationships with cultural groups in the community</p>

(continued)

Table 9-2: Analysis of External Contextual Data for Eastern Seacoast University School of Nursing (continued)						
Data	Patterns and Trends	Curriculum Concepts	Professional Abilities	Curriculum Possibilities	Curriculum Limitations	Administrative Issues
Presence of Mexican and Asian groups in the community	Immigrant generation rooted in culture of origin; North American-born generation caught between cultures Continued growth in racial/ethnic minority populations	Cultural safety Diversity Intercultural stress Intergenerational family stress	Cultural competence Cultural humility Recognizing situations of family stress Working with community leaders and members Adapting health promotion and caring strategies to diverse cultural groups	Cultural competence training Health promotion activity with seniors or school children of particular ethnic or cultural groups Written assignment about health beliefs of several cultures, including student's own culture	Most faculty are of Western or Central European origin with few links to other groups	
Health and Health Care						
Heart disease, cancer, stroke, chronic lung disease, accidents, and diabetes are the major causes of death and chronic illness	Incidence of diabetes, obesity increasing among all age groups Smoking rates increasing among teen girls	Perceptions and meanings of health and illness Specific physiological concepts (e.g., oxygenation, perfusion, elimination, hormonal regulation) Pathophysiology	Provision of care during preventative, acute, and rehabilitation phases Use of knowledge in care Rapid decision making Health promotion Culture of mental illness, street people Retrieve, critique, and use evidence Use information technologies	Traditional acute care placements Placements with home health nurses, outpatient clinics	Many health science students (nursing, OT, PT, medical, etc.) exhaust patients	Need to negotiate new placements with home health and public health unit (possibly immunization clinics, prenatal classes)
25% of population with mental illness 1 in 5 emergency admissions are related to mental health	Association between mental illness and homelessness	Mental health and mental illness Marginalization Stigmatization Health promotion		Separate course on mental health/psychiatric nursing or integrate relevant concepts throughout the curriculum		

<p>6 acute-care centers 2 rehabilitation centers 1 psychiatric hospital with outreach teams</p> <p>Public health unit focuses on maternal-child health, prevention and control of infectious diseases</p> <p>Case managers in coordinating center for homecare services arrange home care by contracting services</p> <p>Nursing shortage in local hospitals</p> <p>Home healthcare agencies</p>	<p>Emphasis on safety</p> <p>Shorter hospital stays; more emphasis on home care</p> <p>Individuals awaiting long-term care placement or rehabilitation sometimes take up acute care beds</p> <p>Shorter stays in psychiatric hospitals; more community-based services</p> <p>Nursing shortage is expected to worsen</p> <p>Many patients are distant from home community while receiving care in the city</p>	<p>Culture of safety</p> <p>Evidence-informed care in all settings</p> <p>Personal safety in community settings</p> <p>Social support</p> <p>Determinants of health</p> <p>Professional boundaries</p> <p>Cultural competence</p> <p>Epidemiology, infection control</p> <p>Delegation</p> <p>Social support</p> <p>Navigating the healthcare system</p> <p>Assessment</p> <p>Decision making</p> <p>Clinical judgment</p>	<p>Use relevant health technology</p> <p>Provision of safe, competent care</p> <p>Assessment, intervention, and reflection on care in all settings</p> <p>Health promotion in all settings</p> <p>Delegating</p> <p>Advocacy</p> <p>Interprofessional collaboration</p> <p>Assessing</p> <p>Making clinical decisions and judgments</p>	<p>Professional practice experiences in many settings</p> <p>In class: case studies requiring students to seek evidence in real time</p>	
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Table 9-2: Analysis of External Contextual Data for Eastern Seascope University School of Nursing (continued)						
Data	Patterns and Trends	Curriculum Concepts	Professional Abilities	Curriculum Possibilities	Curriculum Limitations	Administrative Issues
Professional Standards and Trends						
Approval and accreditation standards for nursing programs	Emphasis on accountability, evidence-informed practice, safety, quality, ongoing professional development, interprofessional collaboration	Regulation of the nursing profession Safety and quality in nursing services Role of professional associations	Commitment to maintenance of professional standards and comportment	Inclusion of approval and accreditation elements in curriculum Course on professionalism	Interprofessional practice opportunities Creation of valid and reliable evaluation methods	Negotiation regarding interprofessional course(s) and practice experiences
Practice standards	Professional roles, responsibilities, competence	Professional roles, responsibilities, competence	Competence in all aspects of practice in all settings	Inclusion of all concepts regarding professionalism in all nursing courses		
Licensure or registration requirements	Codes or ethics	Codes or ethics	Adherence to safety and quality standards	Interprofessional course(s) and practice experiences		
Nature and structure of NCLEX	Reasoned thinking	Reasoned thinking	Evidence-informed practice	Formal testing regarding key nursing competencies		
Eclectic philosophies in nursing programs	Evidence-informed practice	Evidence-informed practice	Retrieval, critique, and use of evidence	Evaluation of relationship building in theory and practice courses		
Emphasis on student-centered education	Lifelong learning	Lifelong learning	Enactment of relationships consistent with philosophical approaches			
Competency-based education	Career possibilities and trajectories	Career possibilities and trajectories				
Movement to baccalaureate as the entry to practice requirement in developed countries	Links between school's philosophical approaches and professional relationships (nurse–client, nurse–nurse, and interprofessional)	Links between school's philosophical approaches and professional relationships (nurse–client, nurse–nurse, and interprofessional)				

Technology and Informatics						
Electronic health care record (EHR) Legislation regarding privacy of health information	Increasing dependence on electronic devices at point of care	Relationship of EHR and other documentation formats to culture of safety and quality Confidentiality, accountability regarding health information	Accurate and timely documentation Retrieval, critique, and use of data	Dedicated time regarding use of EHR Incorporation of real-time evidence retrieval in classes	No EHR in the school, restrictions regarding student use in some agencies Faculty discomfort with students being online in class	Negotiation for student access to EHRs in all settings Negotiate with vendor regarding EHRs in school Decisions regarding purchase of point-of-care technology Faculty development in creation of scenarios, teaching, coaching, debriefing
Wireless data retrieval possible from most locations Use of simulated patient scenarios (low, medium, and high fidelity) to replace or augment practice experiences		Criteria for evaluation of online sources Value and purpose of simulated experiences				
Environment						
Summer heat waves Severe winter storms with loss of electrical power and coastal flooding	Generally, more intense weather with global climate change	Disaster planning and response Care of individuals and groups in extreme situations or needing shelter	Care of individuals and groups in extreme situations or needing shelter	Course related to disaster situations, governmental, and nursing responses; could include disaster response officials in planning and delivering parts of the course	No faculty member seems qualified to teach such a course	

(continued)

Table 9-2: Analysis of External Contextual Data for Eastern Seascapes University School of Nursing (continued)

Data	Patterns and Trends	Curriculum Concepts	Professional Abilities	Curriculum Possibilities	Curriculum Limitations	Administrative Issues
Safe water supply except with loss of electricity	Stress Community support Rapid assessment, triage, and intervention			Could expand the above course to be interprofessional		
Social, Political, and Economic						
Local unemployment rate: 4.9% Unemployment rate of 18–25 year old age group: 20%	Economy is slowly recovering, mainly through small business Growing rates of crime, particularly violent crime	Family interactions, stress Domestic violence and safety Social determinants of health Community resources to assist families in distress Health care for underinsured or uninsured Ethical dilemmas regarding care	Assessment of family functioning in all settings Screenings for family violence Referrals to social agencies Contributing to resolution of ethical dilemmas related to insurance status of clients	Family health course Visiting families in community Workshops regarding domestic violence screening Group assignments regarding learning about community resources Course on ethics (could be interprofessional)		Negotiation regarding the creation of an interprofessional ethics course

Determining the Core Curriculum Concepts and Key Professional Abilities

In the following sections, descriptions of the core curriculum concepts and key professional abilities are presented, along with the processes to derive them. These are part of the curriculum foundations (along with the philosophical and educational approaches, and goal or outcome statements) that give clear direction for further curriculum development and that ensure curriculum unity. Therefore, confirmation of the core curriculum concepts and key professional abilities is prerequisite to further curriculum development.

Synthesizing Core Curriculum Concepts

The process for identifying the core curriculum concepts involves integration and synthesis. First, the curriculum concepts derived from the most important contextual factors are reviewed, and commonalities are integrated. Then, the same process is followed separately for the more important and less important contextual factors. The three sets of curriculum concepts that emerge are synthesized, with attention to the factors' relative importance. Concepts not integrated are reexamined to ensure that relevant ones are not omitted. There may be agreement to delete or modify some concepts, or it might seem more suitable to consider such decisions later when more detailed curriculum planning occurs.

Simultaneously with analysis of the contextual data, curriculum developers will be identifying the philosophical and educational approaches for the curriculum (described in a later chapter). The predominant ideas that emerge from these approaches also contribute to the core curriculum concepts.

Synthesis and integration of the curriculum concepts and incorporation of the philosophical and educational approaches lead to identification of the core curriculum concepts. The core curriculum concepts:

- Are overriding ideas nurses should know and use in practice
- Shape students' views about clients and how nurses think and behave
- Permeate and are prominent throughout the curriculum (i.e., in course organization, class discussions, professional practice experiences, student assignments)
- Are part of the curriculum content and structure used to organize content
- Reflect an integrated analysis of contextual data

Questions to guide synthesis of the core curriculum concepts are suggested in **Box 9-1**.

BOX 9-1 QUESTIONS TO GUIDE SYNTHESIS OF CURRICULUM CONCEPTS

- What are the commonalities among curriculum concepts inferred from each of the most important, more important, and less important contextual factors?
- Can curriculum concepts inferred from the more and less important contextual factors be integrated with those of the most important contextual factors?
- Of those curriculum concepts that have not been integrated, which should be included in the curriculum?
- Does the synthesis reflect the relative weighting assigned to the contextual factors?
- Are there ideas evident from the combination of and inter-relationships among contextual factors that have not been identified?
- Which concepts from the philosophical and educational approaches should also be included?
- Does the synthesis truly encapsulate the important ideas that are essential for graduates to know and use, so they can practice successfully within present and future societal and healthcare contexts?

Synthesizing Key Professional Abilities

The professional abilities identified for each factor are synthesized in the same fashion as the curriculum concepts. The synthesized professional abilities lead to identification of the key professional abilities. Questions to guide the synthesis of professional abilities are included in **Box 9-2**. Further, the philosophical and educational approaches also influence these key professional abilities.

The key professional abilities serve a similar function in the curriculum as the core curriculum concepts. The key professional abilities:

- Are overriding professional abilities that nurses utilize in all practice contexts
- Shape students' thinking about the nature of nursing practice
- Permeate and are emphasized throughout the curriculum
- Form part of the curriculum content
- Are evident in professional practice experiences
- Reflect an integrated analysis of contextual data

BOX 9-2 QUESTIONS TO GUIDE SYNTHESIS OF PROFESSIONAL ABILITIES

- What are the commonalities among the professional abilities inferred from each of the most important, more important, and less important contextual factors?
- Can the professional abilities inferred from the more and less important contextual factors be integrated with those of the most important contextual factors?
- Of the professional abilities that have not been integrated, which should be included in the curriculum?
- Does the synthesis reflect the relative weighting assigned to the contextual factors?
- Are there ideas about professional abilities evident from the combination of and inter-relationships among contextual factors that have not been identified?
- Are there abilities deduced from the philosophical and educational approaches that should also be included?
- Does the synthesis truly encapsulate the important professional abilities that are essential for graduates to practice safely and successfully within present and future societal and healthcare contexts?

Confirming Core Curriculum Concepts and Key Professional Abilities

Finally, the curriculum team must employ its professional judgment about the core curriculum concepts and key professional abilities that have been derived. Members will want to review all completed work before committing themselves to these curriculum foundations. To reach agreement, considerable discussion could be necessary. Understandably, decisions can be fraught with conflict if aspects of the current curriculum valued by some faculty members or stakeholders are likely to be excluded or reduced in prominence. It is natural for faculty to use the current curriculum and personal teaching experience as a frame of reference for discussion. If consensus is difficult to reach, it would be wise to review the reasons for curriculum redesign, the data about the most important contextual factors, and values held by faculty. This reexamination could lend objectivity to the discussion.

It is vital that the total faculty group achieve resolution. Confirmation is essential, because a successful curriculum is dependent on the full support of all those who will implement it. Final decisions about the core curriculum concepts

and key professional abilities should be clearly justifiable by the constellation of contextual data and responsive to the reasons that led to curriculum development in the first place. Only then can curriculum developers be assured that they are building the foundation of a unified curriculum that will be evidence-informed and relevant for its present and future contexts. Once the core curriculum concepts and key professional abilities are confirmed, curriculum goals or outcome statements are formulated with attention to the philosophical and educational approaches. The curriculum design is then created.

Grouping and Defining the Core Curriculum Concepts

Once the core curriculum concepts have been identified, along with additional concepts present in the statement of philosophical and educational approaches, they should be organized in a meaningful way to form a framework for further curriculum design. This first requires synthetic thinking to combine and possibly rename similar concepts (as described previously). Then, the concepts can be grouped into three to five categories that form a basis for further curriculum design.

It is essential that there be a consistent understanding of each concept. Thus, the core concepts need to be defined or briefly described so all curriculum participants share a common understanding and interpretation of them. In this way, the use of the concepts in classes, professional practice situations, and all student learning experiences will be consistent. However, greater depth in the application of the concepts is essential as students progress through the curriculum.

The explication of each concept may be no more than three or four sentences in length and can include a listing of some subconcepts. There needs to be consensus about the definitions of the concepts so that faculty members will use them in the same way, and so students will gain a firm grasp of their meaning. Unwavering attention to the core concepts and consistency in their interpretation are essential to the implementation of a unified curriculum.

Definitions or descriptions of the concepts can be completed by a task group after confirmation of the list of concepts. The task group can seek feedback about them, make necessary modifications, and then finalize the work, in the same way that other aspects of the curriculum are completed.

Relationship of Analysis and Interpretation of Contextual Data to an Evidence-Informed, Context-Relevant, Unified Curriculum

The contextual data provide evidence upon which a curriculum can be designed. The derivation of core curriculum concepts and key professional abilities from

the contextual data ensures that these two aspects of the curriculum foundations are evidence-informed and context-relevant. Moreover, the core concepts and key abilities will be prominent throughout the curriculum and will be an important part of the unity within the curriculum. Identification of curriculum limitations and administrative issues, and subsequent attention to these in curriculum planning, grounds the curriculum in the feasible realities of the internal and external contexts. Finally, creative ideas about curriculum possibilities provide a basis for further thinking as curriculum design proceeds. The curriculum possibilities will be assessed in relation to their congruence with the curriculum foundations and the curriculum context. The ideas that are accepted will further contribute to creation of an evidence-informed, context-relevant, unified curriculum.

Core Processes of Curriculum Work

Faculty Development

The goal of faculty development in relation to analysis and interpretation of contextual data is to expand appreciation and understanding of the processes involved in deriving the core curriculum concepts and key professional abilities, and how the processes relate to curriculum development. Participants require this knowledge because decisions based on the contextual data will determine part of the curriculum foundations and thus shape the school's activities for a number of years.

Faculty development, in workshop format, can be focused on the processes that will move faculty and other stakeholders from contextual data to curriculum foundations and should be based on contextual data that have been obtained. In this way, faculty development is integrated into the work that will lead to a completed curriculum.

First, participants could discuss the contextual data to gain a common understanding of the environment. Then, they might divide into groups to derive curriculum concepts, professional abilities, curriculum possibilities and limitations, and administrative issues for one contextual factor. In this way, all could have experience in the analysis of the same contextual factor, so that differing perspectives would be evident and discussed. The remaining contextual factors could be divided among groups, with each group considering a different factor, thereby expediting the curriculum development process. Practice with the process should promote understanding. Presentation of the subgroups' work could lead to synthesis of the concepts and professional abilities derived, to determine the core concepts and key professional abilities. This will likely entail further discussion about the processes and the decisions achieved and

could require some values clarification. These activities can be facilitated by those members with experience in this aspect of curriculum development, or if appropriate, an external expert.

Ongoing Appraisal

Ongoing appraisal is an inherent part of the discussions that result in identification of the core curriculum concepts and key professional abilities. During discussion, curriculum developers can ask questions such the following:

- Do the curriculum concepts and professional abilities flow logically from the contextual data? Are they really appropriate for the context? What alternative interpretations could or should be considered?
- Are concepts and abilities identified at a suitable level of abstraction or synthesis?
- Has anything important been missed?
- Are there other core curriculum concepts and key professional abilities that should be discussed?
- Are the conclusions likely to be supported? Why or why not?

Scholarship

There are many possibilities for scholarship projects related to analyzing and interpreting contextual data. First, a description of the context might form the basis of a manuscript, which could also include an explanation of how the contextual data shaped the curriculum plans. A relatively straightforward project would be to describe the processes and discussion that lead to consensus about core curriculum concepts and key professional abilities, and then to offer suggestions about the process. A more ambitious project could be to compare the conclusions reached by groups of curriculum development participants who have examined the same contextual data independently, offer explanations for similarities and differences in their conclusions, and propose the curriculum implications of the differences. As in all phases of curriculum development, a study could be undertaken to examine participants' perspectives. In this case, it would be perspectives about engaging in the process of analyzing and interpreting contextual data and the contribution of the activity to their understanding of nursing curriculum development.

CHAPTER SUMMARY

In this chapter, a further step in the curriculum development process is described, namely the analysis and interpretation of contextual data to derive

the core curriculum concepts and key professional abilities. The processes of analyzing and interpreting contextual data and synthesizing ideas generated from the analysis are emphasized as being iterative and nonlinear, although a procedural approach is described for explanatory and practical purposes. Questions are provided to assist in integrating data, inferring curriculum concepts and professional abilities, proposing curriculum possibilities, identifying curriculum limitations, and deducing administrative issues. Confirming the core curriculum concepts and key professional abilities can involve emotions and values. Therefore, open communication, values clarification, and rigorous intellectual discussion are essential to achieve acceptable foundations for an evidence-informed, context-relevant, unified curriculum. Ideas for faculty development activities, ongoing appraisal, and scholarship are proposed.

SYNTHESIS ACTIVITIES

In the Eastern Seascape University School of Nursing case, a description is given about how curriculum developers came to consensus about core curriculum concepts and key professional abilities that were derived from contextual data in Tables 9-1 and 9-2. The data in the tables form part of the case. These data are condensed from what would normally be gathered, but should be sufficient to illustrate the processes described in the chapter. The case is followed by questions and activities that provide a basis for examining the case. Then, ideas are offered to assist readers when analyzing and interpreting contextual data in their own settings.

■ Eastern Seascape University School of Nursing

Eastern Seascape University is located in a coastal city of 800,000 people. The university offers a full range of undergraduate and graduate programs, attracting students from the local region, other states, and abroad. A recent university-wide initiative has been to expand enrollment of minority and international students, with the intent that:

- The proportion and mix of minority students should mirror the community profile
- 15% of all students should come from abroad

The School of Nursing was founded in 1951 and initially offered post-RN certificates in public health, hospital administration, and teaching. Over the years, programs have been added and changed. Currently, the school offers BSN completion, 4-year integrated BSN, MSN, DNS, and PhD programs.

The School of Nursing is currently composed of 825 undergraduate students and 220 graduate students. Few are from minority groups. There are 42 full-time faculty members, 24 of whom are tenured or on the tenure track. The remaining 18 have contracts of 2, 3, or 5 years, with an emphasis on teaching and a small research commitment. Faculty research mainly addresses acute-care situations. More than 100 clinicians are employed on a part-time basis for professional practice teaching.

The School of Nursing is now developing a new 4-year undergraduate curriculum. The intent is that a new RN-BSN curriculum will subsequently be created, in accordance with the same curriculum foundations.

Faculty members have engaged in extensive data gathering and are now ready to interpret the contextual data. Dr. Isabella Gomez, the curriculum leader, has organized a 1-day retreat of faculty and stakeholders to review and analyze the contextual data. There has been a previous faculty development workshop about analyzing contextual data.

Faculty and other stakeholders are committed to the ideas of inferring curriculum concepts and professional abilities, proposing curriculum possibilities, and deducing curriculum limitations. However, some members are not convinced of the need to identify administrative issues. They believe they already know what the administrative issues are: not enough faculty and an insufficient budget.

Dr. Gomez has organized the data for each contextual factor on a chart and prepared hard copies for distribution. The chart was loaded onto laptop computers so ideas generated during group discussion could be immediately recorded and preserved. The total group was divided into subgroups, each to examine all the data to get a sense of the complete context in which the curriculum would be offered and graduates would practice.

The group first examined all the data to understand each factor and the interrelationships among the contextual factors. In the discussion, they also addressed curriculum concepts, professional abilities, and curriculum possibilities without labeling the ideas in this way. They raised such ideas as:

- The influence of an aging population on healthcare and nursing services
- Whether the nursing shortage might mean that they should plan for increased enrollment, in spite of budget constraints
- How government healthcare priorities would influence healthcare services, and, in turn, student placement opportunities

- How changes to health insurance would affect low-income people
- Growing reliance on point-of-care health technology and employers' expectations that graduates know the technology
- Their responsibility to contribute to the university initiative to recruit minority and international students

In trying to reach a shared understanding of the context in which the curriculum would be implemented and graduates would practice nursing, several integrated summaries were offered. Each resulted in some disagreement. Finally, the group agreed that the environment could be described as one in which:

- Over time, there will be greater emphasis on community-based care, although acute care will continue to be a dominant feature of health care.
- Independent decision making and supervision of nonprofessional healthcare providers will become a stronger feature of baccalaureate nursing practice.
- Vulnerable groups in the community may grow in size.
- The proportion of aged people in the community will increase.
- Ethnic diversity may become more apparent.
- The severity and frequency of winter storms may increase because of climate change.

When considering which contextual factors should be most influential in shaping the curriculum, the group proposed that all factors were of equal weight, apart from the internal factors of history, philosophy, mission, goals, and culture, all of which seemed less important. Subsequently, the group discussed whether it was the recipients of nursing services (demographics), the nature of nursing (professional standards and trends), or the location and nature of health services (health care) that was most important. Finally, they agreed that most important were the people being served, and, therefore, demographics and external culture would be most significant in determining the curriculum concepts and professional abilities. History was immediately labeled as being of least importance. Eventually, there was consensus about the ordering of contextual factors:

1. Demographics, external culture
2. Health care, professional standards, and trends; infrastructure
3. Social, political, and economic conditions

4. Technology and informatics
5. Environment
6. Philosophy, mission, and goals of the university and school of nursing; internal culture; and history

Not all members were satisfied with the idea that the university goals should be at the end of the list. They believed that it was essential to give attention in all planning to the goal of increasing minority and international student enrollment. However, with the suggestion that this initiative be an overarching feature of all planning for teaching and learning activities, they agreed that the group could proceed with its work.

Small subgroups were formed. Each subgroup was assigned two internal and two external contextual factors from which to derive and propose curriculum concepts, professional abilities, curriculum possibilities, curriculum limitations, and administrative issues. Thus, each contextual factor was considered by two subgroups of workshop participants. Dr. Gomez believed that this would lead to a wide range of ideas about each factor.

In reviewing the contextual data, faculty members recognized that curriculum concepts, professional abilities, and curriculum possibilities and limitations did not necessarily arise from each internal factor. However, they noted that the data about some of the factors could ultimately influence decisions about curriculum, either limiting or propelling the curriculum design. For example, when examining the school's infrastructure, they recognized that the existence of wired classrooms meant that in-class database searching was a possibility in all courses, whereas the school budget and faculty numbers could constrain the curriculum design. Accordingly, they reaffirmed their intention to identify the curriculum possibilities and limitations as they examined each contextual factor. As the subgroups worked, they recognized again that the contextual factors do not operate in isolation and that their ideas reflected the interrelated nature of the internal and external contexts. The ideas arising from the internal and external contextual data were recorded and are presented in Tables 9-1 and 9-2.

■ Questions and Activities for Critical Analysis of the Eastern Seascape University School of Nursing Case

1. Explain why the ordering of the contextual factors does (or does not) seem reasonable. If the ordering completed by the Eastern Seascape faculty does not seem reasonable, propose another arrangement and provide rationale for it.

2. Review Tables 9-1 and 9-2. What missing data would be important to include?
3. Examine Tables 9-1 and 9-2. Propose other interpretations of the data, concepts, professional abilities, curriculum limitations and possibilities, and administrative issues.
4. Based on the analyses in Tables 9-1 and 9-2, complete the synthesis of the curriculum concepts and professional abilities to determine the core curriculum concepts and key professional abilities.
5. Critique the processes used by the Eastern Seascapes School of Nursing to analyze the contextual data.
6. Discuss how ongoing appraisal might have been deliberately included in the processes followed by Eastern Seascapes faculty members and stakeholders.
7. Propose an expedient method for members of Eastern Seascapes School of Nursing to define the core curriculum concepts and to reach consensus about the concepts. Consider the scholarship possibilities in the work being completed by Eastern Seascapes faculty members.

■ Questions and Activities for Consideration When Analyzing and Interpreting Contextual Data in Readers' Settings

1. How can faculty development be planned to prepare for analyzing and interpreting contextual data?
2. Who should be involved in the analysis and interpretation of contextual data?
3. In what way can the contextual data be organized and displayed in a manner that will be helpful for analysis?
4. Describe approaches that could be useful for achieving a common understanding of the contextual data.
5. Devise procedures that could be used for analyzing and interpreting the contextual data in a manner that balances expediency with faculty and stakeholder involvement.
6. If it is not possible for all (or most) faculty to be involved in the analysis and interpretation of contextual data, how could this work be accomplished? How could faculty agreement be ensured?

7. Suggest a feasible plan for recording the analysis of contextual data.
8. Propose a procedure to determine the relative weighting of the contextual factors.
9. Determine how curriculum concepts and professional abilities can be synthesized. How can consensus be achieved?
10. By whom should core curriculum concepts be defined? How can consensus be reached about the definitions?
11. What is a reasonable timeframe in which to accomplish this work?
12. Propose ideas about how divergent viewpoints might be addressed constructively.
13. Create a faculty development plan and a means to incorporate ongoing appraisal into the analysis and interpretation of contextual data.
14. Suggest some desirable and feasible scholarship projects.

Establishing Philosophical and Educational Approaches for an Evidence-Informed, Context-Relevant, Unified Curriculum

CHAPTER PREVIEW

In this chapter, philosophical and educational approaches are addressed. Curriculum philosophy is introduced first with definitions and purposes. Several educational philosophies are presented from the perspectives of general education and nursing education. Traditional philosophies are considered, followed by more contemporary philosophies and perspectives that influence nursing curricula. Then, ideas about teaching and learning include information about learning theories, frameworks and pedagogies, and the science of learning, with specific reference to their use in nursing curricula. This is followed by the authors' conceptualization of philosophical and educational approaches for curriculum, including their development and relationship to an evidence-informed, context-relevant, unified curriculum.

The core processes of curriculum work are addressed: faculty development, ongoing appraisal, and scholarship. After the chapter summary, a case illustrates the main ideas of the chapter. Questions to guide consideration of the case are included, followed by questions to stimulate thinking about developing philosophical and educational approaches in readers' settings.

QUESTIONS ADDRESSED IN THIS CHAPTER

- What are the purposes of philosophical and educational approaches in curriculum development?
- What are some philosophies, theories, frameworks, and pedagogies relevant for philosophical and educational approaches?
- How can philosophical and educational approaches be developed?

- How are philosophical and educational approaches related to an evidence-informed, context-relevant, unified curriculum?
- In what ways can the core processes of faculty development, ongoing appraisal, and scholarship be integrated into the processes of establishing philosophical and educational approaches?

Curriculum Philosophy

Philosophy is the study of the most general and abstract features of the world and categories with which we think: mind, matter, reason, proof, truth, and so forth. In philosophy, the concepts with which we approach the world themselves become the topic of enquiry. A philosophy of a discipline . . . seeks to study . . . the concepts that structure such thinking, and to lay bare their foundations and presuppositions. In this sense philosophy is what happens when a practice becomes selfconscious. (Blackburn, 2014)

More specifically, “philosophy of education is the philosophical study of education and its problems” (Noddings, 2016, p. xiii). In general, educational philosophies address ideas such as beliefs about human nature; the purpose and goals of education, instruction, and learning; and the roles of teachers, students, and programs. An educational philosophy thus provides a perspective to guide, interpret, and examine all aspects of education. The educational philosophy (or a combination of philosophies) then forms the basis of a curriculum philosophy, which is a statement of beliefs about education that are particularized to the curriculum context. A curriculum philosophy provides a basis for:

- Curriculum development, implementation, and evaluation—that is, determination of goals or outcomes, subjects and content to include, methods and materials to use, organization of content, teaching-learning processes, activities and experiences to emphasize, and what and how to evaluate (Orstein & Hunkins, as cited in Oliva, 2009; Wiles & Bondi, 2011)
- Discussions about educational practices and preferences
- Professional development (Petress, 2003)

Curriculum Philosophy in Nursing Education

In nursing education, the curriculum philosophy is a description of the value system that grounds the curriculum. As such, it is a critical part of the curriculum foundations.

The curriculum philosophy includes statements of belief about the:

- Purposes of nursing education
- Nature of learning
- Roles of students and faculty members and nature of their interactions
- Teaching, learning, and evaluation processes

Because an important part of the mission of all undergraduate schools of nursing is to prepare graduates for safe practice and quality health care, the curriculum philosophy also includes reference to the metaparadigm of nursing (nature and goals of nursing, role of nurses in society and healthcare systems, persons, rights and obligations for health, and environment). Although the components of the metaparadigm may be described in greater detail in a separate document, these beliefs form an essential part of the curriculum philosophy. Within the description of nursing are core concepts and key abilities drawn from the analysis of contextual data.

The curriculum philosophy must be congruent with the philosophies and goals of the parent institution and the school of nursing (Valiga, 2016). In this way, the curriculum, when implemented in accordance with the written philosophy, both reinforces and supports the value system of the institution.

Traditional Curriculum Philosophies and Their Influence on Nursing Curricula

Although classical philosophies date back some 2,500 years to Greek scholars of the 6th century BCE, differences in the philosophical bases of various disciplines began only in the last 2 centuries (Uys & Smit, 1994). It was not until the late 1800s that the first well-rounded philosophy about nursing education was developed by Florence Nightingale (Csokasy, 2005). Since Nightingale's time, traditional curriculum philosophies have been evident in nursing curricula. These traditional philosophies include idealism, realism, pragmatism, perennialism, essentialism, progressivism, and social reconstructionism (Oliva, 2009; Wiles & Bondi, 2011).

Idealism

According to the philosophy of idealism, truth is universal, values are unchanging, and individuals desire to live in a perfect world of high ideals, beauty, and art. The curriculum is built on humanism, liberal arts education, and promotion of intellectual growth. Teachers serve as role models for students, who are encouraged to think and expand their minds by applying knowledge to life. Ideas of social justice and service learning in nursing curricula are rooted in idealism.

Realism

The main tenet of realism is that natural laws compose the world and regulate all of nature. The curriculum is structured to present and reflect these universal laws, and is organized around content. Teachers provide information sequentially in an efficient, simple-to-complex manner. Students are motivated to learn through positive reinforcement, and they are rewarded for learning basic skills and responding to new experiences with scientific objectivity and analysis. Nursing curricula that are content driven and in which testing is mainly by means of multiple-choice examinations reflect some element of the philosophy of realism.

Perennialism

According to the philosophy of perennialism, the aims of education are the disciplining of the mind, development of reasoning ability, and pursuit of truth that is unchanging. Emphasis is placed on logic and classical literature. A nod to perennialism is given in nursing curricula in which students are taught to think like a nurse, using cognitive processes essential to the discipline. However, the idea of unchanging truths that can be absolutely known is not consistent with science and contemporary health care.

Essentialism

The philosophy of essentialism is built on the idea that cultural heritage must be preserved and that it is the role of education to do so. Similar to perennialism, the aims of education within an essentialist philosophy are intellectual development, with curricula built around subjects essential to a field of study. This idea persists in nursing curricula with required subjects such as physiology or psychology, both of which are viewed as essential bases for nursing knowledge and practice. Behaviorist learning theories are associated with essentialism.

Pragmatism

Central to the philosophy of pragmatism is the testing of ideas, a combination of idealism and realism. Pragmatism in education is based on the idea that change is constant (Henson, 2010), and students need to experience the world in a realistic way. Therefore, in a pragmatist framework, students are actively engaged in learning and exploring, laboratory work, simulations, field trips, and social and community activities. They are encouraged to take in new information, interpret it, and apply it to previous learning and current client experiences (Csokasy, 2002). Learning outcomes are assessed through examinations and observation of students interacting with clients.

Progressivism

Progressivism holds that the growth of students, not the subject matter, should be the center of educational activities. Because the world is constantly changing, students must learn to think in order to function successfully (Kilpatrick, 2014). Thus, education is not subject matter to be mastered, but a lifelong process of learning. According to this philosophy, students should be actively engaged in experiences that build their mental, emotional, physical, spiritual, social, and cultural capacities. The scientific method, humanism, gestalt psychology, cognitive constructivism, and critical inquiry are consistent with progressivism in that individual potential is developed through activities that invoke student involvement in problem solving, shared decision making, logical and creative thinking, reflection, and divergent thinking. Nursing curricula in which students are engaged in active learning and exploration of a wide range of human and nursing experiences reflect ideas of progressivism.

Reconstructionism

Reconstructionism, also known as *Social Reconstructionism*, is a philosophy that emphasizes the addressing of social questions with the overall aim of creating a better society. This school of thought holds that the purpose of education is to improve society; therefore, students are helped to increase their awareness of significant social and political situations so they can have an impact on those situations (Conti, 2007). Students examine controversial social problems, envision an improved future, and reach solutions to problems through consensus. Reconstructionism is evident in nursing courses in which students address social, healthcare, and professional situations where inequities or questionable practices exist. The goal of reconstructing a situation is at the root of questions such as: *How can you address this in your role as a student? What can you do when you are a practicing nurse? How should the profession take this matter in hand?*

Contemporary Philosophies and Perspectives and Their Influence on Nursing Curricula

Below are brief descriptions of some philosophies and perspectives (presented in alphabetical order) and their influence on nursing curricula. There is overlap among many, particularly those that reflect a belief in the importance of equity and social justice. As well, many include ideas of personal autonomy and social reconstructionism.

Critical Theory

Critical Theory, sometimes called *Critical Social Theory*, is a school of thought concerned with justice, equality, and freedom. Both Marxism and feminism, for example, can be termed critical theories, because they are “conceptual accounts of the social world that attempt to understand and explain the cases of structural domination and inequality in order to facilitate human emancipation and equity” (Levinson, 2011, p. 2). Premises of the theory are that critique of society is necessary to bring about transformative change, and meanings and truths are created and interpreted in the context of social history. Understanding patterns of human behavior involves consciousness-raising, and knowledge of existing social structures and the communication processes that define them. Change is possible through individual and, more often, collective agency.

Within nursing education, the term *Critical Theory* is often used in a general sense to refer to the perspective that analysis of social structures leads to an uncovering of inequity and recognition of privilege and disadvantage. Such an analysis provides opportunities for students and faculty to share a revisioning and reconstruction of oppressive and coercive cultural, political, and social ideologies and practices. With this action-oriented perspective, nursing students can examine health care and other structures that exhibit or support inequities, “contemplate their own social positionalities and professional practice, as well as how they can participate in a social justice agenda” (Mohammed, Cooke, Ezeonwu, & Stevens, 2014, p. 492). The belief is that health is a collective social responsibility and that nurses have a role in advancing health and equity. Service learning is based, in part, on Critical Social Theory.

Feminism

Feminism is an ideology originally premised on values and beliefs about women, and relationships of gender, specifically that gender is “a difference that makes a difference” (di Stefano, as cited in Tong, 2007). Although there are many forms of feminism (e.g., liberal, radical, multicultural, Black, global, eco-feminism, intersectoral), they all view patriarchal norms and power imbalances as the central issues leading to social inequities through marginalization, oppression, discrimination, and lost opportunities (Sundean & Polifroni, 2016). More broadly interpreted, feminism values persons regardless of gender, with the goal of ending previous dehumanizing polarizations and achieving social, political, and economic equality of the sexes.

Feminism provides a framework that promotes development of intellectual growth and activism. It incorporates values such as caring, compassion, and connection (Noddings, 2016), self-awareness, independence, empowerment, and patterns of knowing. As such, it is closely aligned with nursing values. In curricula

based on, or influenced by, feminism students question, reflect, and challenge values and assumptions of society and nursing practice. Together with faculty members and clients, they co-construct meaning from life experiences, giving value to participants' lived experience (Dadds, 2011). Students are empowered and test ideas through critical thinking, analysis, synthesis, and self-evaluation.

Feminism involves an ethic of care and this applies to educational as well as client situations. Faculty members demonstrate their caring of students through the quality of their faculty–student relationships (modeling), dialogue about how they demonstrate care for students, provision of opportunities for students to practice caring in educational experiences (e.g., through group work, professional practice experiences), and confirming the good in students (Noddings, 2016).

Humanism

A philosophy of humanism is concerned with the rights, autonomy, and dignity of human beings, and a belief that people have the capacity and responsibility to lead meaningful lives that contribute to societal good. Individual autonomy and personal agency are necessary to create the changes needed to improve society. Humanism incorporates the beliefs that learning is motivated by a desire for personal growth and fulfillment, and that learning and personal growth should be linked with social change. Learning is both affective and cognitive and involves “identity development in a reflective and dialogical way in a social context” (Veuglers, 2011, p. 2). The educator's role is to facilitate development of the whole person.

In humanistic curricula, faculty view themselves as agents of social transformation and active shapers of educational messages and processes, including democratic processes that promote personal growth and social welfare. This requires viewing students as worthy and capable, and facilitating the development of emotional intelligence, curiosity, critical and reflective thinking, values identification, independent thought, accountability, involvement with social issues, attainment of personal goals, and the courage to act in ambiguous situations (Aloni, 2011). Faculty members question the need for outcome assessment and rely instead on students' critical thinking, application of knowledge, and interpretation of learning experiences.

Multiculturalism, Diversity, and Inclusiveness

Multiculturalism is “a policy or process whereby the distinctive identities of the cultural groups within . . . a society are maintained or supported” (“Multiculturalism,” n.d.). Individual differences are respected and celebrated, in contrast to the idea of a “melting pot” where all groups are assimilated into a homogeneous dominant culture with loss of their unique features. Support

for multiculturalism reflects a belief in the value of all people, their histories, and their cultures.

Specific multicultural education has four goals: to build tolerance of other cultures, eliminate racism, extend students' knowledge of cultures, and expand students' thinking to view the world from differing cultures' perspectives (Spring, as cited in Noddings, 2016). These goals can be addressed in nursing curricula through the inclusion of courses such as anthropology or transcultural nursing, integration of readings about nursing practice in other parts of the world, and/or specific attention to the concept of *culture* in all situations. As well, practice placements with groups or clients whose culture is different from that of the involved nursing students can bring ideas of culture to life.

Within educational institutions, multiculturalism is partially expressed in policies and practices that support diversity, specifically the inclusion and success of underrepresented groups. Such a stance connotes values of equity and social justice. *Inclusion* refers to active and ongoing efforts to recruit and accept all members of the community into the educational institution and create an environment where they are comfortable to participate fully without reservation (Verma, 2017). The diverse groups to which support is offered can be defined by characteristics such as race, ethnicity, gender, sexual orientation, ability, language, socioeconomic status, and so forth, or can be categorized more broadly in terms such as adult, international, or undocumented students (Baker, Schmalig, Fountain, Blume, & Boose, 2016; Wilson, 2015).

In nursing curricula, an ethos of inclusion, and thus, an inclusive culture, can be fostered through policy development related to recruitment, retention, and support of underrepresented groups. As well, intentional actions to engage all curriculum participants fully in teaching-learning activities and decision making through respect of diverse viewpoints can be implemented on a daily basis (Bleich, MacWilliams, & Schmidt, 2015; Murray, Pole, Ciarlo, & Holmes, 2016). These strategies can include the bridging approach (incorporating students' cultural knowledge, preserving cultural or ethnic identity, providing role models, and facilitating negotiation of barriers) (Yoder, 2001); language support (Abriam-Yago, Yoder, & Kataoka-Yahiro, 1999); peer mentoring (including proactive suggestions to cope with difficulties); shared governance (Latham, Singh, & Ringl, 2016); financial support; and formal mentoring by faculty members.

Ideas About Teaching and Learning as Part of Curriculum Philosophy

Ideas about learning and teaching, that is, the educational approaches, form part of the curriculum foundations, along with the core curriculum concepts,

key professional abilities, and the philosophical approaches. The educational approaches can be based on a single learning theory or framework, or a combination of ideas about learning and teaching. As with other aspects of the curriculum, there must be logical consistency among the ideas selected.

In addition to brief comments about educational approaches in the curriculum philosophy, a full description of these can be prepared as part of a curriculum manual. Such a description would assist all curriculum participants (faculty members, students, clinicians, guest speakers, etc.) to understand how teaching-learning encounters are conducted in the school, and why.

Learning Theories

There are numerous theories that explain learning and they have been grouped in many ways. Below is a common categorization of the theories most evident in nursing education curricula: behaviorist, cognitive, humanist, and social and situational. One or two examples of learning theories belonging to each category are included.

Some learning theories have characteristics of more than one category. However, for purposes of clarity, the category to which each is assigned is based on the more prominent aspects of the theory. For example, cognitive constructivism gives attention to the social context in which the learning occurs. However, it is labelled as a cognitive theory because the description of the thinking process is the strongest feature of the theory.

Behaviorist Theories

In behaviorist theories, *learning* is defined as a change in observable behavior. Learning is stimulated by events in the external environment.

The basic premise of classical, contiguous, and operant conditioning is that responses can be elicited and shaped through a process of reward and reinforcement, which can be physiological (e.g., food) or psychological (e.g., praise, grades). Although nurse educators do not train students to behave in certain ways, behaviorism is evident in nursing education in the use of objectives, psychomotor skill development, checklists, and competency-based education. Ideas about shaping behavior and reinforcement are evident in faculty members' provision of feedback about student performance, opportunities for repeated practice, and ongoing feedback.

Cognitive Theories

Cognitive theories focus on internal mental processes such as information processing, memory, and perception. Learning is viewed as cognitive structuring or restructuring. Accordingly, educators have a responsibility to structure

learning activities whose purpose includes student development of the skills and capacity to learn better.

Cognitive Apprenticeship

Cognitive apprenticeship is a teaching-learning approach in which students participate with experts in a community of practice to learn expert knowledge, physical skills, procedures, thinking processes, and the culture of the profession. Students observe, participate in, and discover expert practice through teaching strategies such as modeling, coaching, scaffolding (hints, directions, reminders, physical assistance), and through learning strategies such as articulating their learning, reflecting, exploring their understandings in new contexts, and increasing their independence (Taylor & Care, 1999; Thompson, Pastorino, Lee, & Lipton, 2016).

More broadly, Benner, Sutphen, Leonard, and Day (2010) have advanced the idea of three “high-end” apprenticeships that encompass the whole range of professional practice, in which students learn: (1) nursing knowledge and science, (2) skilled knowhow and clinical reasoning, and (3) ethical comportment and formation. The apprenticeship involves integrative learning experiences that make visible key aspects of practice, supervision of student practice, coaching to help students articulate and examine their practice, attention to the salient features of a situation, and reflection on practice.

Cognitive Constructivism

Cognitive Constructivism is a learning theory based in cognitive psychology, particularly understandings of how memory works and how ideas are linked and transformed in an iterative fashion. The theory holds that people build knowledge, in contrast to merely acquiring it. Priority is given to students’ construction of concepts and the relationship of new understandings to previous learning, with individuals developing their own meanings. Thus, learning occurs in a spiral fashion, with new ideas influencing previous conceptions and being understood within each person’s mental framework (Brandon & All, 2010). Knowledge is subjective, with people forming their own truths within the context of social situations (Schunk, 2012).

Curricula are characterized by active, student-centered learning that allows learners to develop deep knowledge and meanings. Factual information emerges from preparatory reading, experience, and discussion. Emphases are on students’ ability to build and link concepts, construct meanings, and use those understandings in analysis and professional practice (Biggs & Tang, as cited in Joseph & Juwah, 2012; Richardson, 2003). Students are active learners who are responsible for organizing and using knowledge.

Transformative Learning Theory

Transformative Learning Theory addresses how people change their perspectives. Mezirow (2000, 2009) proposes that adults have a frame of reference, their own perspective with which they view and interpret the world. The perspective is developed from experiences and the associated emotions, prior learning, unexamined instincts, and habits of the mind. When confronted with events or ideas that do not conform to their perspective, people may discount the event, or experience a disorienting dilemma. The disorientation can lead to critical reflection on their beliefs and possibly a perspective transformation. A transformation in perspective is a 10-step process that begins with recognition of a situation inconsistent with present beliefs; leads to self-examination, reflection, and development and testing of new ideas and skills; and culminates in the establishment of a new perspective.

Morris and Faulk (2012) have proposed that Transformative Learning Theory be a basis for nursing curricula and continuing development in nursing, with emphasis on critical reflection, critical self-reflection, and critical dialogue. Spadoni, Doane, Sevean, and Poole (2015) used Transformative Learning Theory as the basis of a course to expand students' understanding of relational caring through mask making, a traditional part of indigenous culture in the area where the school of nursing is located. Other examples of use of the theory include development of a framework for critical reflection in cultural competence (Blanchet Garneau, 2016) and a process for guiding students to explore concepts related to client experience (McAllister, Lasater, Stone, & Levett-Jones, 2015).

Social and Situational Theories

Social and situational theories of learning combine ideas about cognitive, affective, and situational factors in learning. The premise is that learning occurs in social contexts in which individuals observe their own behavior and that of others, experience and observe the affective and behavioral consequences of actions, mentally process observations and experiences, and reach conclusions about themselves. Educators using these theories provide role modeling, opportunities for individuals to have relevant experiences, feedback, and repeated opportunities to build self-efficacy, including self-efficacy about learning (Schunk, 2012).

The most researched example of a social and situational learning theory is Albert Bandura's (1986, 1997) Social Cognitive Theory, which is described in a previous chapter on faculty development. Examples of the theory's use in nursing education include an examination of the effects of the following on student self-efficacy: a dedicated education unit (George, Locasto, Pyo, & Cline, 2017), an intensive writing intervention (Miller, Russell, Cheng, & Skarbek,

2015), simulation preparation methods (Franklin, Gubrud-Howe, Sideras, & Lee, 2015), and clinical instructors (Rowbotham & Owen, 2015).

Modeling, one aspect of Social Cognitive Theory, is used extensively in teaching-learning situations, particularly lab and professional practice settings. Cognitive modeling has been used to enhance students' problem solving (Colella & Beery, 2014). Direct modeling of psychomotor, interpersonal, and professional behaviors (Lasater, Mood, Buchwach, & Dieckmann, 2015; Ó Lúanaigh, 2015) have favorably affected students' skills and attitudes. Modeling has also been used as preparation for simulation (Franklin et al., 2015).

Theories for Digital Learning

Connectivism

Connectivism is a theory that posits that all learning is a network phenomenon, influenced by socialization and technology (Siemens, 2006). Learning is “the ability to construct and traverse connections” (Downes, as cited in Tschofen & Mackness, 2012). Therefore, all learning starts with a connection and the connections occur on neural, conceptual, social, and digital levels. For learning to occur, specialized nodes or information sources must be accessed, both within and outside the learner. The principles of connectivism are listed in **Box 10-1**.

BOX 10-1 PRINCIPLES OF CONNECTIVISM

- Learning and knowledge rest in diversity of opinions.
- Learning is a process of connecting specialized nodes or information sources.
- Learning may reside in nonhuman appliances, such as a scanner of an ID bracelet.
- Capacity to know is more critical than what is currently known.
- Nurturing and maintaining connections is needed to facilitate continual learning.
- Ability to see connections between fields, ideas, and concepts is a core skill.
- Currency (accurate, up-to-date knowledge) is the intent of all connectivist learning activities.
- Decision making is itself a learning process. Choosing what to learn and the meaning of incoming information is seen through the lens of a shifting reality. While there is a right answer now, it may be wrong tomorrow due to alterations in the information climate affecting the decision.

Central to connectivism is the idea of *networks*. A network is a web of connections between and among entities. Computer networks, power grids, and social networks all function on the principle that people, groups, systems, nodes, or entities can be linked to create an integrated whole (Siemens, 2004). A connective **knowledge** network is one where learning can occur and one that possesses four traits:

- *Diversity*: A wide spectrum of viewpoints is revealed.
- *Autonomy*: Individuals contribute to interactions voluntarily, according to their own knowledge, values, decisions, reasoning, and reflection.
- *Interactivity*: Knowledge is produced through interaction and not merely an aggregation of members' perspectives.
- *Openness*: There is a means for perspectives to be entered into the system, heard, and interacted with by others (Downes, as cited in Tschofen & Mackness, 2012).

According to the theory of connectivism, individual students are responsible for developing their own learning tools, environments, networks, and communities. In a participatory community, the community itself is the knowledge repository (Wheeler, 2015). Online nursing courses reflect a belief in some aspects of connectivism, particularly that technology networks are venues for people to interact and learn. Moreover, in all nursing courses, students are encouraged to seek their own learning resources, and they generally do this via the Internet. The desire to be constantly connected to their mobile devices is evidence of students' intrinsic acceptance of technology as a communication and learning tool, an intimate part of their personal networks.

Heutagogy

Heutagogy is a theory of self-determined learning that has shared learning as a prominent feature. The central tenet is that people inherently know how to learn, and do so in a nonlinear, self-determined fashion in response to complexity, when faced with the limits of their own knowledge. The theory builds on elements of andragogical self-directed learning (Blaschke, 2012), reflection, complexity theory, and double-loop learning (Hase & Kenyon, 2007). Importance is given to learners' autonomy and values development. Learning is seen as active and proactive, with the learner determining what will be learned and how it will be learned. Moreover, knowledge-sharing is emphasized in the theory because of a belief that this is necessary to address the complexities of society and professional practice. In accordance with this assertion, Cordon (2015) has reported that oncology nurses engage in heutagogy to keep their knowledge and skills current, with the ultimate goal of providing good care.

A heutagogical learning environment promotes the development of learner competencies (skills and knowledge), capability (confidence in one's competence and ability to transfer skills and knowledge to new situations), and capacity to learn. Heutagogy is both supported and advanced by personal technologies in formal and informal educational contexts (Hase & Kenyon, as cited in Wheeler, 2015). Web 2.0 and social media offer an environment that supports development of learner-generated content and learner self-directedness in discovering information and defining the learning path (Blaschke, 2012). Active use of social media to create learner-generated content has been found to be more effective in cognitive and metacognitive skill development than passive consumption (Porto & Kurtz, as cited in Blaschke, 2012).

Use of heutagogy in formal education requires course design elements that include learner-defined contracts, flexible curricula, learner-initiated questions and subsequent discussion, negotiated assessment, and reflection. Learning journals, action research, formative and summative evaluation, and collaborative learning are possible strategies (Blaschke, 2012). Green and Schlairet (2017) have described how a flipped classroom has moved students from pedagogical to more andragogical and heutagogical learning dispositions.

In nursing professional practice situations, a heutagogical approach can be used when students are faced with unexpected events that challenge the limits of their knowledge and skill. In such situations, the instructor or preceptor can encourage students (individually or as a group) to:

- Define what they need to learn and how to do so.
- Share what they have learned.
- Propose possible courses of action about the situation.
- Choose and implement actions.
- Reflect on the outcomes, their learning about the situation, and their learning processes.

Ultimately, it is the student who has the responsibility for accumulating nursing experiences and the associated learning (Bhojrub, Hurley, Neilson, Ramsay, & Smith, 2010).

Educational Frameworks and Pedagogies

The following alphabetical listing of current nursing curriculum frameworks and pedagogies, albeit merely highlighted, evidence some differences, but also commonalities. As can be detected, there is a blending of philosophy and learning theory or framework, as well as an intermingling of beliefs, values, and teaching and learning applications.

Andragogy (Adult Learning)

Andragogy is premised on the belief that adults are self-directed, goal-oriented, and motivated to learn in response to real-life problems, situations, or roles that require knowledge and/or skills they lack. Adults are oriented to relevancy and practicality in their learning, which is influenced by their life experiences. Adults are seen as being able to structure their learning experiences, that is, to identify their learning needs and goals, resources to meet those goals, and criteria for assessing their success. They are also capable of evaluating their achievement against the self-defined criteria. Respect for learners and their experiences and preservation of their self-esteem are important in learning situations (Knowles & Associates, 1984; Knowles, Holton, & Swanson, 1998).

In an integrative literature review of andragogy and cognitive science, Hagen and Park (2016) sought to understand how andragogically-informed instructional practices impact cognition and memory. They concluded that the core assumptions of andragogy (self-direction, prior experience, readiness to learn, and immediacy of application) have a connection to the neural networks related to memory and cognition. In **Figure 10-1** the linkages among brain structures, cognition, andragogical assumptions, and educational techniques are illustrated.

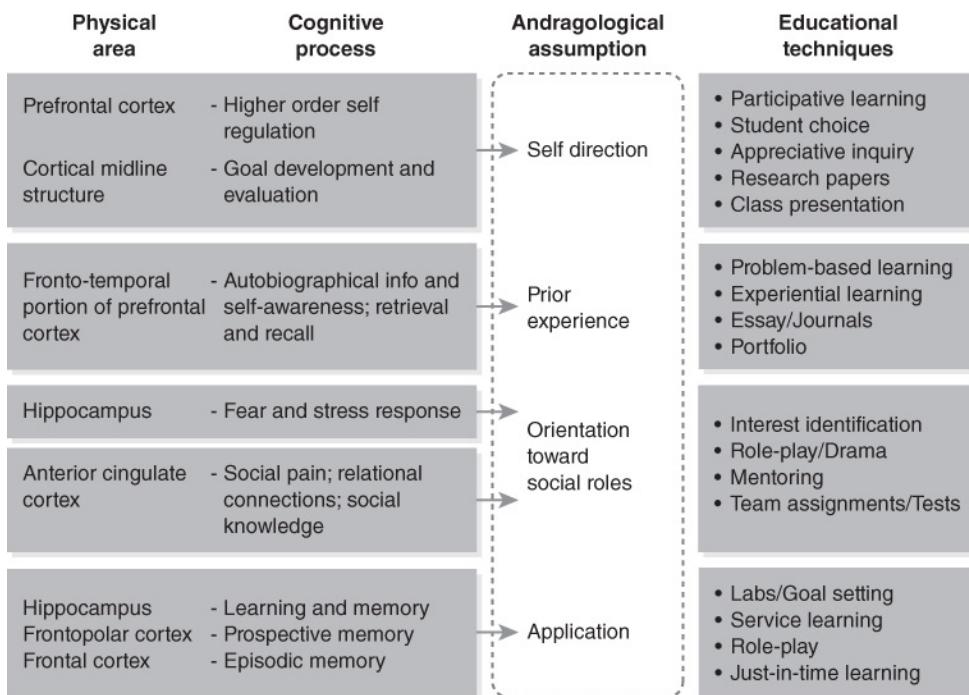


Figure 10-1. A model of adaptive cognitive neuroscience, adult learning structure.

Reproduced with permission from Hagen, M., & Park, S. (2016). We knew it all along! Using cognitive science to explain how andragogy works. *European Journal of Training and Development*, 40(3), 171–190. © Emerald Publishing Limited all rights reserved.

Concept-Based Learning, Teaching, and Curricula

Concept Learning

A concept is a mental construct. *Concept learning* refers to the formation of mental constructs or representations to identify attributes, generalize them to new examples, and discriminate between examples and nonexamples (Schunk, 2012). Meaningful concept learning occurs through a process of active engagement in the construction of new knowledge based on a strong understanding of anchoring concepts (Erickson, as cited in Getha-Eby, Beery, Xu, & O'Brien, 2014). Thus, concept learning in nursing is a progressive and iterative process in which advanced concepts are built on foundational nursing concepts and those from other disciplines. Active engagement in intellectually challenging and discipline-specific theoretical and practical experiences leads to a growing depth of understanding as new concepts are added and interpreted, and former knowledge reconstructed.

A focus on concepts allows learners to “rise above endless facts to a higher level of abstraction to organize and process information” (Erickson, Lanning, & French, 2017, p. 2). More specifically, concept-based curricula assist learners to:

- Develop brain schema for sorting, organizing, and patterning information.
- Process facts and skills to a deeper intellectual level, relating them to concepts, generalizations, and principles.
- Engage in synergistic thinking, the cognitive interplay between facts/skills and conceptual understanding.
- Transfer knowledge and skills through a conceptual level to new situations. (Erickson & Lanning, 2014)

Concept-Based Curriculum

A concept-based curriculum is one in which core concepts form the organizing framework of the total curriculum and individual courses. In nursing curricula, the core concepts are those necessary for graduates to practice nursing safely and to provide quality health care. Concepts are deduced from data about the environments within and external to the school of nursing (see previous chapters), and these concepts form the substance of the curriculum. The concepts are addressed within the context of nursing, and with increasing complexity as students move through the curriculum, with the expectation that students will use the concepts with growing depth as they advance in the curriculum. It is through professional practice exemplars of the concepts that traditional nursing content is examined (Giddens & Brady, 2007), and theory and professional practice are integrated (Nielsen, 2016).

Concept-Based Teaching

Concept-based teaching refers to educational processes in which assisting students to acquire and build concepts is prominent. Concepts are the focus of learning activities. This approach requires explicit attention to the structure and critical attributes of the concept, provision of positive examples that make the attributes evident, and then presentation of increasingly difficult examples that require students to determine the attributes and whether the example matches the concept (Tennyson & Park, as cited in Schunk, 2012). Concept-based teaching requires consistent and continuing attention by faculty members to the concepts in class, professional practice experiences, simulations, assignments, and examinations. In this way, students gain a deep understanding of the concepts and their relevance, presence, and use in professional practice. Specific teaching strategies include denoting the concept as the class topic and attending to the nurse's role in relation to the concept, making concepts the focus of professional practice experiences (Giddens, 2016; Nielsen, 2016), and asking students to complete concept maps with identification of linkages between and among concepts (Daley, Morgan, & Black, 2016).

An ongoing focus on curriculum concepts is premised on:

- Faculty members' thorough and identical understanding of the concepts
- The use of student-centered teaching-learning strategies
- A constant emphasis on the concepts and their relation to previous learning and to practice situations

In this approach, faculty members must broaden their perspectives from specific clinical areas to help students see the application of the concepts across the life span and in a variety of settings (Giddens & Brady, 2007; Giddens et al., 2008).

Competency-Based Education

Competency-based education combines an intentional and transparent approach to curricular design with an academic model in which the time it takes to demonstrate competencies varies and learning is held constant. Students acquire and demonstrate their knowledge and skills by engaging in learning exercises, activities, and experiences that align with clearly defined programmatic outcomes. Students receive proactive guidance and support from faculty and staff. Learners earn credentials by demonstrating mastery through multiple forms of assessment, often at a personalized pace. (Competency-Based Education Network, 2016, para. 1)

With its roots in behaviorism, performance-based education, and a demand for institutional accountability, competency-based education is premised on the

idea that students should graduate from a program of study with knowledge, skills, values, and attitudes relevant for the world beyond academia. This requires close relationships between the academic institution and employers to ensure that graduates' competencies are relevant.

Curricula are designed so that the competencies (cognitive, psychomotor, interpersonal, affective, etc.) are progressively complex, all leading to the competencies required for a particular field of endeavor, and for life as an informed, thinking citizen. Evaluation is criterion-referenced and students progress only when specified competencies are achieved. Therefore, a robust and comprehensive assessment plan is necessary (Gervais, 2016), as well as remediation opportunities. Further, attention needs to be given to the validity and reliability of competency assessments, and to ensuring that the assessments remain authentic and current (Goff et al., 2015; Vorhees & Bedard-Vorhees, 2017). With a sound, criterion-reference assessment plan that includes detailed marking rubrics, faculty members can confirm that graduates of competency-based programs have mastered degree-specific competencies (Williams, Moser, Youngblood, & Singer, 2015). As well, a competency-based program enables graduates to describe what they can do in terminology relevant to employers.

In nursing education, competency-based curricula are generally offered in the same sessional divisions as the parent institution (i.e., semesters or terms). Thus, learning is not entirely self-paced because course competencies must be achieved within the time span of each course. Additionally, assessments are usually completed at scheduled times throughout the term and not at a personalized pace.

Faculty members in competency-based curricula are required to ensure that courses are designed so competencies build to desired curriculum outcomes; course activities are clearly related to the competencies; and assessments are criterion-referenced, authentic, valid, and reliable. Students require a high degree of self-direction and mentoring by faculty members, particularly if there are no time limits for completion of assessments (Gravina, 2017).

Deep Learning

Deep learning is seen as a process of exploration, discovery, and growth in which students invest themselves (Platow, Mavor, & Grace, 2013). It involves critical analysis of new ideas and linking of new ideas to previously known concepts and principles. The result is understanding and long-term retention so concepts can subsequently be used for problem solving in unfamiliar contexts. To achieve deep learning, students must make connections among concepts and experiences within and beyond course content.

Deep learning is characterized by students' intrinsic motivation, engagement with the subject matter, and a desire to know everything about a given topic. Conversely, students who opt for a surface approach to learning are not interested in the task *per se*, but aim at learning the minimum amount of material required to pass a course (Chamorro-Premuzic, as cited in Dinsmore & Alexander, 2012). Citing research into deep learning, Postareff, Parpala, and Lindblom-Ylänne (2015) report that a student-centered learning environment (supportive faculty members and peers, relevant courses, constructive feedback) contributes to students' intention to engage, as well as their actual engagement in active knowledge construction. As well, deep learning is related to perceived workload, task complexity, motivation, self-efficacy, and self-regulation, including organized study schedules and intentional efforts to link concepts.

Within an educational stance that values deep learning, such as in a concept-based curriculum, *covering content* is not a focus. Rather, students are expected to be self-motivated, interested in the topics, and willing to do the necessary intellectual work to achieve understanding of the relationships between and among concepts and topics. Faculty members are facilitators of intellectual exploration, critical analysis, and the creation of connections to previous learning. They might also provide guidance to students about how to be successful through organized study habits, review and (re)interpretation of course material, and focused effort to link concepts so that course material forms a logical whole. Case analysis, simulations, and project work can all provide opportunities for deep learning. It is important how these activities are constructed and how learning is guided.

Intentional learning is an approach that can lead to deep learning. In professional practice situations, the approach consists of nursing intervention-based learning, case-based learning, concept-based learning, focused direct client care, and integrative experiences (Nielsen, Noone, Voss, & Mathews, 2013). Reported outcomes include increased complexity of student learning (Nielsen et al., 2013), enhanced critical thinking, and greater insight into the complexity of client situations and rationale for care priorities (Rush, Wilson, Costigan, Bannerman, & Donnelly, 2016), all examples of deep learning.

Experiential Learning

Experiential learning theory was developed by David Kolb (1984) to explain how people learn from experience. The theory proposes a learning cycle that involves:

1. Concrete experience, in which a person has a physical experience
2. Reflective observation, in which the individual thinks about the experience, reflecting on what happened, including own reactions

3. Abstract conceptualization, where the person forms abstractions and generalizations from the experience and from reflective observation
4. Active experimentation wherein the generalizations are tested, thus creating new concrete experiences

The theory has a natural fit with nursing education, specifically with professional practice experiences, simulations, and service learning, wherein students have concrete experiences. Teaching encompasses the provision of concrete experiences, and then leading a post-conference or debriefing session to assist students with the remainder of the cycle. According to Iwasiw and Sleightholme-Cairns (1990), faculty members initiate discussions that allow students to purposefully and collectively engage in:

- Reflective observation
 - Recall and share what happened
 - Compare what happened with what was expected, with reference to theory, data (such as lab values), and previous experience
 - Explain discrepancies between the expected and the actual experience and outcomes
- Abstract conceptualization
 - Identify key features of the experience and their meaning
 - Form generalizations about aspects of the experience
 - Deduce principles or guidelines for future practice
- Planning for active experimentation
 - Analyze if and when the generalizations, principles, or guidelines will apply
 - Propose how the generalizations, principles, or guidelines will influence future practice, both generally and in examples of concrete situations

Learner-Centeredness (Student-Centeredness)

A learner-centered approach is premised on the idea that learners and the learning process are paramount in teaching-learning encounters, not the faculty member. Student engagement, which is “a dynamic process marked by a positive behavioral, cognitive, and affective state exhibited in the pursuit of deep learning” (Bernard, 2015, p. 8) is necessary in learner-centered experiences. Learner preconditions necessary for engagement are self-investment, motivation, and a valuing of learning, all leading to satisfaction, a sense of well-being, and personal development (Bernard, 2015). Faculty preconditions for a learner-centered approach are a thorough orientation to the philosophy of learner-centeredness, an ability to assist students to set goals and select or

design learning experiences, and skill in facilitating task performance and learning (Reigeluth, Myers, & Lee, 2017).

With a learner-centered approach, the psychological environment of learning contexts is termed *safe*, that is, students are supported in their learning efforts, free to explore ideas without criticism. They take responsibility for their learning and classroom processes, and thus are motivated and empowered to learn. Student experiences and knowledge are valued in learning that is relevant to their lives and goals (Colley, 2012). Learner-centered strategies that enhance learner cognitive, emotional, and physical investment in learning include, among others, simulations, problem-based learning, gaming, narratives, discovery learning, case-based learning, assignment options, collaborative learning, and flipped classrooms.

Although the preceding description is the general understanding in nursing education, Neuman (2013) comments that the term *student-centered* has several meanings and is often used without clear explication of what is intended. From his analysis of the literature, he proposes three “relational contours,” or learning contexts. The teaching-learning relationship may center *in* students: Students control what and how they learn. The relationship may center *on* students: They are allowed choices and flexibility within a framework established by a faculty member. The third relationship is *with* students. This is a partnership, reflective of reciprocal planning and learning with decreased relational distance, and in which the partners cocreate the curriculum. In nursing education, faculty members generally create the educational framework and experiences, thereby adhering to a focus *on* students. However, within the course framework, many nursing faculty members give considerable attention to the other two relationships.

Narrative Pedagogy

Narrative Pedagogy is a humanistic educational approach (Brown, Kirkpatrick, Mangum, & Avery, 2008) that has a significant basis in interpretative phenomenology. It allows for conventional, alternate, and new approaches to converge (Diekelmann, 2001). This pedagogy relies on the lived experience of faculty members, students, clients, and clinicians as the basis of student learning. The multiple perspectives of those involved in narratives are explored, so that students gain many views about the meaning of experiences, nursing, and nursing care. Public sharing and collective interpretation of narratives enrich learning and make the learning memorable. In this student-centered approach, “thinking is an experience of participative and interpretative practices that attend not only to issues of content (what is known and not known), but also to multi-perspectival issues of significance” (Ironside, 2005, p. 447).

Narrative may form the main content of a curriculum, or it may be used to illuminate particular aspects of content. For example, Sheilds (2016) used student-generated stories about client situations to highlight different ways

of knowing, varying interpretations of a situation, and the value of client story-telling for nurse–client relationships.

Science of Learning (Brain-Based Learning)

Research findings from neuroscience, education, psychology, and neuroeducation have led to conclusions about learning and insights into conditions for learning. Learning involves the active construction of neural pathways that functionally connect many brain areas. These pathways can differ from person to person, and thus, optimal teaching approaches may vary for individual students. Moreover, learning is social, emotional, and influenced by culture and physical well-being (Immordino-Yang & Fischer, 2016).

According to Sousa (2017), research about the brain has (among other results):

- Reaffirmed that the brain continuously reorganizes itself on the basis of input. This neuroplasticity continues throughout life.
- Demonstrated that neurons can regenerate, enhancing learning and memory.
- Challenged the idea that the brain can multitask.
- Shown how emotions influence learning, memory, and recall.
- Suggested that movement and exercise improve mood, increase brain mass, and improve cognitive processing.
- Identified that intelligence and creativity are separate abilities, both of which can be modified by the environment and schooling.

As cognitive neuroscience continues to provide insights into mental processes, neural systems, and learning, educators are considering applications to their practice, specifically how educational processes and environments can be shaped to enhance learning. For example, Straumanis (2012) has summarized research findings from six Science of Learning Centers in the United States about conditions that promote robust learning. Robust learning entails (1) long-term retention, (2) preparation for further or deeper learning and application, and (3) transfer of knowledge to new situations. The conditions for robust learning are:

- Engagement of the brain’s motivational and reward systems. The intrinsic rewards of engaging in learning activities should outweigh the rewards associated with distracters, such as online social sites.
- Plenty of social interaction.
- Use of multimodal forms of input, such as adding music to cognitive content. When more than one part of the brain is engaged, the neural systems reinforce one another, particularly if the pleasure center of the hippocampus is stimulated.

- Sufficient sleep to consolidate memory. Different types of learning are reinforced by different sleep phases.
- Management of the timing of practice and reinforcement. Learning performance plotted against assistance yields a U-shaped curve. For each task there is a time when assistance is most effective. Also, the longer the interval between reinforcement sessions, the longer the retention.
- Engagement through active learning such as short writing breaks, self and peer explanations, problem solving, and discussion.

From the findings given here as well as other cognitive neural research, some conclusions about learning have been drawn:

- Relaxed alertness is fundamental to learning (Caine, Caine, McClintic, & Klimek, 2016).
- Multitasking slows down learning (Thomson, 2012; Van Dam, 2013).
- Emotions play an important role in learning (McGinty, Radin, & Kaminski, 2013).
- Immersion in complex experiences is necessary for meaning-making (Caine et al., 2016).
- Active processing of experiences is necessary for learning (Caine et al., 2016).

Research findings and subsequent extrapolations about brain-based learning and teaching do not constitute a philosophy in themselves. However, if faculty members attend to research findings about learning and effective teaching, appraise their soundness and utility, and institute practices stemming from the research, they reflect a commitment to active learning by students and evidence-informed teaching. This commitment ought to be evident in the philosophical statements of the curriculum and in statements about teaching and learning.

Concluding Comment

The preceding descriptions of learning theories, educational frameworks and pedagogies, and the science of learning are merely an overview of some, because it is beyond the scope of this text to provide a comprehensive description of these perspectives. The theories, frameworks, pedagogies, and science all attempt to describe learning and all lead to ideas about curriculum, teaching, and participant responsibilities. Implications of some philosophies and educational approaches are summarized in **Table 10-1**. Many include similar ideas, and therefore, there is overlap among the implications. The implications listed are not exhaustive, but are intended to provide some guidance about the consequences of choosing particular philosophical and educational approaches.

Table 10-1: Implications of Selected Philosophical and Educational Approaches for Nursing Curricula				
Educational Approach	Key Ideas	Curricular Manifestations	Implications for Faculty Members	Implications for Students
Andragogy	Adults are self-directed learners whose experiences influence their learning. They are motivated to learn in response to real-life situations, capable of setting own learning goals, and able to evaluate their success. Emotional climate is important.	Learning contracts Student-determined topics and assignments Self-assessments	Guide students toward greater self-direction. Emphasize the relevancy of learning. Draw on and respect students' experiences. Engage students in participatory decision making. Plan for student–student interaction.	Take responsibility for learning. Identify own learning goals, resources, and criteria for evaluation. Contribute relevant experiences to discussion. Strive to identify and extend the theory base of actions.
Apprenticeship	In a master–apprentice relationship, the novice learns from the master. The apprenticeship can encompass nursing knowledge and science, skilled knowhow, clinical reasoning, and ethical comportment.	Experiences in which students buddy with practicing nurses Preceptorships Nursing internships Research internships	Pair students with master nurses who can: <ul style="list-style-type: none"> • articulate their practice • coach and supervise • focus on many aspects of nursing practice • foster students' integrative thinking. 	Learn by example. Be receptive to coaching and motivated to question observed practice in order to increase understanding.
Cognitive Constructivism	Knowledge is constructed, linked to previous knowledge, and transformed iteratively in response to new experiences. Constructions of knowledge are individual and facilitated by interaction with others.	Scaffolding of concepts Peer discussion Assignments requiring integration of concepts	Use high-level questioning to facilitate idea creation and linking, critical analysis, deep thinking, reasoning, collaboration, and co-construction of meaning.	Do preparatory reading. Articulate understandings and discuss with peers. Do the necessary intellectual work and use new understandings in analysis and professional practice.

Table 10-1: Implications of Selected Philosophical and Educational Approaches for Nursing Curricula (continued)				
Educational Approach	Key Ideas	Curricular Manifestations	Implications for Faculty Members	Implications for Students
Concept-Based Learning	The formation of concepts is essential to learning because it is not possible to learn all the facts necessary for professional practice. Concept learning occurs through mental construction of new knowledge based on prior understanding of basic concepts.	<p>Identification of core curriculum concepts</p> <p>Use of concepts as the curriculum's organizing framework</p> <p>Scaffolding of concepts within and among courses</p> <p>Courses and course activities built around concepts</p>	<p>Plan classes around concepts with exemplars to illuminate the concepts and extract facts.</p> <p>Direct students' attention to concepts in all learning contexts.</p> <p>Ask students to complete concept maps.</p>	<p>Learn the attributes of the concepts.</p> <p>Prepare for class discussion of the designated concept and exemplars.</p> <p>Plan for application, recognition, and analysis of the concepts in professional practice contexts.</p>
Competency-Based Education	Graduates should have demonstrable competencies relevant to professional nursing practice and life as an informed, thinking citizen.	<p>Clearly defined programmatic outcomes</p> <p>Progression in the complexity of competency expectations</p> <p>Authentic, valid, and reliable assessments</p>	<p>Design valid and reliable assessments that are clearly linked to course competencies.</p> <p>Develop detailed criterion-referenced marking/grading rubrics.</p>	<p>Understand the competencies to be achieved.</p> <p>Be self-directed in preparing for competency assessments.</p> <p>Seek assistance as necessary to achieve competencies.</p>
Connectivism	Learning is the ability to construct and traverse connections. Learning is a network phenomenon, influenced by socialization and technology.	<p>Online courses</p> <p>Blended courses</p> <p>Group work</p> <p>Activities and assignments that require searching credible sources</p>	<p>Provide orientation to digital networks, data-searching, credibility of sources.</p> <p>Create online courses that require interaction and cognitive connecting with self, peers, and instructor.</p> <p>Plan peer and collaborative learning experiences.</p>	<p>Participate in online discussions, actively relating new information to previous knowledge.</p> <p>Seek own learning resources.</p> <p>Reflect on own learning.</p>

(continued)

Table 10-1: Implications of Selected Philosophical and Educational Approaches for Nursing Curricula (continued)				
Educational Approach	Key Ideas	Curricular Manifestations	Implications for Faculty Members	Implications for Students
Critical Theory	Meanings and reality are interpreted in the context of social history. Self and experience are examined through critical self-reflection. Autonomy, empowerment, emancipation, and self-responsibility are goals.	Service learning Intentional focus on equity, inequities, and nursing's response to inequities Empowering experiences for students	Assist students to identify inequitable situations. Pose questions and problems to simulate analysis, critical self-reflection, and intention to create change. Arrange service-learning experiences.	Share in revisioning and reconstructing oppressive and inequitable practices. Develop empathy, confidence, and competence in human relations. Advocate for change.
Deep Learning	Learning is a process of exploration, discovery, and growth in which students invest themselves.	All learning activities that extend to knowledge integration and synthesis Student choice in topics and/or assignments	Facilitate intellectual depth through questioning, problem posing, allowing time for exploration of concepts, and stimulating students to make connections in their learning.	Be self-motivated and make time to explore a topic in depth. Invest self in learning. Make connections among concepts and experiences within and beyond course content.
Experiential Learning	Learning is cyclic, beginning with concrete experiences. Experience is interpreted through reflective observation. Abstract conceptions are formed and then tested through active experimentation.	Professional practice experiences Psychomotor and interpersonal skills labs Simulations that illuminate theory Service learning Debriefing after experiences	Plan or choose professional practice experiences in parallel with theory classes. Debrief with attention to all phases of the experiential learning cycle.	Prepare for, and engage fully in, the experience. Contribute to debriefing sessions. Test generalizations in new experiences.

Table 10-1: Implications of Selected Philosophical and Educational Approaches for Nursing Curricula (continued)				
Educational Approach	Key Ideas	Curricular Manifestations	Implications for Faculty Members	Implications for Students
Feminism and Feminist Pedagogy	<p>People in all circumstances are valued. Lived experiences, creative and critical thinking, and empowerment are means to advance learning and emancipation.</p> <p>Self-awareness, independence, empowerment, caring, and patterns of knowing are incorporated.</p>	<p>Emphasis on the lived experiences of clients, nurses, students</p> <p>Incorporation of democratic practices in curriculum development, implementation, and evaluation</p>	<p>Facilitate student empowerment through democratic practices, discussion of power relationships, and questions that stimulate analysis of values and assumptions.</p>	<p>Question, reflect, and challenge values and assumptions.</p> <p>Co-construct meaning from experience with peers, clients, nurses, and faculty members.</p>
Heutagogy	<p>People inherently know how to learn and do so in a non-linear, self-determined fashion.</p> <p>Knowledge-sharing is necessary to address complexity.</p>	<p>Learner-defined contracts</p> <p>Flexible curriculum</p> <p>Negotiated assessment</p> <p>Online courses</p> <p>Active learning that incorporates peer discussion</p>	<p>Promote student self-determination in course planning and implementation.</p> <p>Encourage reflection, provide feedback.</p> <p>Plan peer and collaborative learning experiences.</p>	<p>Determine learning needs and take action to meet them.</p> <p>Create learning networks.</p> <p>Share learning.</p> <p>Reflect on learning and learning process.</p>
Humanism	<p>Learning is motivated by a desire for personal growth.</p> <p>Personal meaning and autonomy are important.</p>	<p>Incorporation of democratic practices in curriculum development, implementation, and evaluation</p> <p>Emphasis on active learning and student self-evaluation and reflection</p> <p>Respect is central</p>	<p>Encourage experiential learning and facilitate students to establish and attain their own goals.</p> <p>Be a colearner with students.</p> <p>Focus on interpretation, critique, and reflection.</p>	<p>Establish own goals and strategies to achieve them.</p> <p>Identify own values.</p> <p>Be a colearner with peers and faculty members.</p> <p>Engage in active learning.</p>

(continued)

Table 10-1: Implications of Selected Philosophical and Educational Approaches for Nursing Curricula (continued)				
Educational Approach	Key Ideas	Curricular Manifestations	Implications for Faculty Members	Implications for Students
Learner-Centeredness	<p>Student learning processes, not the faculty member, are the focus.</p> <p>Students are motivated to learn in safe environments where they have some control over activities and where their knowledge and experiences are valued.</p> <p>Student engagement in active learning is important.</p>	<p>Few lectures and/or brief lectures</p> <p>Class activities requiring group participation</p> <p>Flipped classrooms</p>	<p>Give up lecturing and control of ideas.</p> <p>Give students choices and support their learning efforts.</p> <p>Plan learning sessions that require active learning such as case study analysis, problem-based learning.</p>	<p>Participate actively in learning sessions.</p> <p>Share ideas with peers.</p> <p>Take responsibility for learning and do not expect that everything will be “covered” in the classroom.</p>
Multiculturalism, Diversity, Inclusion	<p>All cultures are worthy of expression and respect.</p> <p>All people are entitled to full participation in education and to retain their cultures.</p>	<p>Policies related to recruitment, retention, and support of under-represented groups</p> <p>Use of the bridging approach (Yoder, 2001), mentoring</p> <p>Inclusion of courses relevant to cultural understanding</p>	<p>Encourage diverse viewpoints without singling out students.</p> <p>Use readings whose authors and/or content represent diverse cultures.</p> <p>Attend to the concept of <i>culture</i>.</p>	<p>Be accepting and respectful of diverse peers, clients, and perspectives.</p> <p>Learn about other cultures.</p> <p>Consider the influence of culture on health care.</p> <p>Participate in student support groups.</p>
Narrative Pedagogy	<p>Public sharing and interpretation of the lived experience of faculty, students, clients, and clinicians are the bases of student learning.</p>	<p>Identification of important concepts</p> <p>Classes built around client and nurse stories that illuminate the concepts</p>	<p>Invite story-telling by individuals relevant to class focus.</p> <p>Use literature and film to convey stories of human experience.</p> <p>Facilitate interpretation of stories and connections to theory.</p>	<p>Share own perspective and appreciate perspectives of others.</p> <p>Participate in interpretation of stories.</p> <p>Journal to capture own stories.</p> <p>Connect theory and develop concepts and generalizations from stories.</p>

Table 10-1: Implications of Selected Philosophical and Educational Approaches for Nursing Curricula (continued)				
Educational Approach	Key Ideas	Curricular Manifestations	Implications for Faculty Members	Implications for Students
Science of Learning (Brain-Based Learning)	Learning is continually possible and is influenced by individuals' emotional and physiological state. Individuals have different capacities. Frequent changes in focus, pace, and style of interaction are required to maintain student motivation.	Classes timetabled with breaks between them Variety in learning and evaluation methods across courses Assessments scheduled to limit student stress	Plan a variety of meaningful learning activities that have limited stress and are intrinsically rewarding. Plan for student–student interaction. Use multimodal methods. Space learning, review, and reinforcement sessions.	Take care of needs for food, hydration, and rest. Engage fully in learning activities. Attend to learning task. Pair learning and study with nonintrusive pleasant stimuli to build neural pathways.
Social and Situational Theories	Learning occurs in social contexts in which individuals observe their own behavior and that of others; experience and observe the affective and behavioral consequences of actions; mentally process observations and experience; and reach conclusions about themselves.	Preceptorship Simulations Psychomotor and interpersonal skills labs Planned feedback sessions during professional practice experiences Debriefing sessions	Provide role modeling, relevant experiences for students, feedback, and repeated opportunities to build self-efficacy.	Observe and understand modeled behavior and its consequences. Practice behavior and attend to instructor feedback and self-feedback about performance and outcomes. Continue to practice as necessary.
Transformative Learning	Individual perspectives can be transformed by disorienting dilemmas and critical reflection.	Values clarification Provision of experiences that could challenge students' assumptions and beliefs	Facilitate identification of values and assumptions. Foster critical reflection, critical self-reflection, and critical dialogue.	Identify personal perspectives and challenges to them. Engage in critical reflection, critical self-reflection, and critical dialogue.

Philosophical and Educational Approaches

It is important that the curriculum be built on an explicated and coherent philosophical base that is then embodied in the curriculum and evident throughout it on a daily basis. Because most, if not all, nursing education curricula are based on blended concepts derived from analysis of contextual data, philosophies, and ideas about teaching and learning, the term *philosophical and educational approaches* is more fitting than *philosophy*. This conceptualization can encompass eclecticism, pluralism, assumptions, beliefs, and values. Some latitude in thoughts, views, values, assumptions, principles, and beliefs is thus possible. There must, however, be logical consistency among the ideas and the curriculum foundations, and consistency with the values of faculty members and the educational institution.

Developing Statements of Philosophical and Educational Approaches

A sound beginning in the development of a statement of philosophical and educational approaches is for a subcommittee to create a draft document. The group might decide to divide the task so that one subgroup initially works on philosophical approaches and the other works on educational approaches, while keeping in touch to share resources and ensure that there is some consistency in their thinking. They will eventually need to merge their results as they prepare an overall draft statement of philosophical and educational approaches.

One step is to conduct a literature search about curriculum and nursing education philosophies; learning science, theories, and frameworks; and nursing curricula. Because of the blending of nursing education philosophies and educational approaches, there could be considerable overlap in the literature that is accessed by each subgroup. Therefore, sharing the literature will accelerate the work. In addition, a review of the statements of philosophical and educational approaches of other schools of nursing could be beneficial, if these are readily available. Literature and Internet searches will assist the subcommittee members to:

- Appreciate the range of philosophical and educational ideas that could influence nursing curricula
- Identify ideas that resonate with them
- Assess the style in which statements of philosophical and educational approaches are expressed in other schools of nursing

The subcommittee has a responsibility to understand the beliefs and values of colleagues, because all faculty members will be implementing the curriculum. One strategy could be to summarize the main precepts of several philosophies

and educational theories, frameworks, and pedagogies gleaned from the literature and request that curriculum development participants indicate those that best fit their ideas. Alternately, a template could be given to faculty members and other stakeholders, with a request that they write their beliefs about matters such as teaching and learning, the nature and purpose of student–faculty and nurse–client relationships, health, and so forth. Common ideas within the responses could be the basis of the curriculum’s philosophical and educational approaches. A third activity might be to delineate the teaching and learning implications of several philosophical approaches and seek information about participants’ preferences.

Furthermore, it is necessary for the subcommittee to be current with the analysis of contextual data, which may be happening simultaneously. The ideas that emerge about major concepts for the curriculum and key abilities of nurses will be incorporated into the statement of philosophical and educational approaches.

Once information is obtained from colleagues and stakeholders, literature, websites, and the contextual analysis, a draft of the statement of philosophical and educational approaches for the curriculum can be prepared and distributed with a request for feedback. This might generate considerable discussion, because differing beliefs will have to be reviewed, examined, and reconciled. Several drafts are generally required before agreement is reached.

The following questions could be considered when developing the philosophical and educational approaches statement for the nursing curriculum:

- How can knowledge about philosophical and educational approaches in general education and nursing education be obtained?
- Should value statements, assumptions, or a single, pluralistic, or eclectic approach be used for the curriculum? What are the advantages and disadvantages of each?
- How can faculty members’ and stakeholders’ views be obtained in a reasonable time period?
- Which philosophical and educational approaches seem most consistent with the beliefs and values of curriculum participants and the educational institution?
- What are the curriculum implications of the preferred philosophical and educational approaches?

The statement of philosophical and educational approaches is typically prepared by a small group of faculty members who acquire, exchange, develop, and appraise ideas before arriving at a draft set of ideas. However, in circumstances of constrained resources, this task might fall to one or two individuals. If so, the ability to seek information and test ideas might be limited. It would be

prudent, therefore, for those individuals to consult informally with colleagues to ensure that their developing ideas are in line with others' views.

Confirming Philosophical and Educational Approaches

The importance of consensus among the total faculty group about the philosophical and educational approaches cannot be overemphasized because these approaches form part of the curriculum foundations. Therefore, time spent on reaching agreement and achieving a common understanding is time well spent. Once this is accomplished, the subcommittee can attend to finalizing the written statement.

Relationship of Philosophical and Educational Approaches to an Evidence-Informed, Context-Relevant, Unified Curriculum

The philosophical and educational approaches are statements of the value orientation of faculty members. They represent carefully examined ideas about nursing and education, and a promise about the tone and enactment of the curriculum. The philosophical and educational approaches, along with the core curriculum concepts and key professional abilities, form the foundations of the nursing curriculum.

Ideas derived from the analysis of the contextual data and reading about educational and philosophical approaches ensure that the curriculum foundations are evidence-informed and context-relevant. Information about present and potential students and faculty members and their values, as well as abilities needed by graduates, provide a basis for evidence-informed decision-making about philosophical and educational approaches.

The inclusion of some of the major curriculum concepts and key professional abilities in the statement of philosophical and educational approaches adds to the conceptual and visual unity of the curriculum. Furthermore, preliminary ideas about teaching and learning developed in the analysis of the contextual data will subsequently be confirmed, modified, or rejected on the basis of the chosen educational approaches. The subsequent selection of learning experiences and evaluation methods, stemming from the philosophical and educational approaches, will be important in the unity of the curriculum.

Development of the statement of philosophical and educational approaches is a basis for:

- Discussions about educational practices and preferences
- Ongoing design of the curriculum

- Identification of curriculum concepts and professional abilities that may not have been identified in the analysis of the contextual data
- Descriptions of desired patterns of thought and conduct within a nursing program (Lawrence & Lawrence, 1983)
- Professional development (Petress, 2003)

Although statements of philosophical and educational approaches have the potential to be prepared and forgotten, they are meant to be part of the living curriculum, to underpin and direct it. When based in the best evidence for the curriculum context and adhered to faithfully, the statements of philosophical and educational approaches contribute importantly to unity within the curriculum. These statements guide the curriculum design, implementation, and evaluation, and also form part of its content.

Core Processes of Curriculum Work

Faculty Development

Faculty development can focus on the purpose and importance of agreed-upon philosophical and educational approaches in the curriculum. Values and beliefs about nursing, education, persons, learning, and so forth should be discussed. This discussion can serve to clarify and examine beliefs, and can be used as a source of information for the subcommittee drafting the statements of philosophical and educational approaches. Information about educational philosophies, theories, frameworks, pedagogies, and learning science could be presented and their curriculum implications discussed.

Sample statements of philosophical and educational approaches might be circulated to help those in attendance see what others have developed. The drafting of beginning belief and value statements could occur in a faculty development session.

Ongoing Appraisal

Ongoing appraisal is an inherent part of the discussions that result in a statement of philosophical and educational approaches. During discussion, curriculum developers might ask some or all of the following questions:

- What would these ideas mean for this context? How would the ideas be enacted?
- How will the curriculum look if this philosophical or educational approach were adopted? What will teaching be like? What would be expected of students? What would be the nature of faculty–student interactions? What types of evaluation of learning will be consistent?

- Is it possible for the ideas to be applied consistently in all teaching-learning contexts? How can they be applied to student and faculty interactions with clients?
- Has sufficient knowledge about the use of these ideas in other schools of nursing been gathered?
- In what ways are the preferred ideas consistent with the curriculum concepts and key professional abilities that have been identified? In what ways are the ideas aligned with faculty, student, and stakeholder values and preferences?
- If combined approaches were to be used, is there logical consistency among them?
- Is there sufficient evidence to support the appropriateness of these ideas for this context?
- Are the conclusions about philosophical and educational approaches likely to be supported? What evidence suggests this is the case?
- How can the written statement of philosophical and educational approaches be as clear, complete, and understandable as possible?

Scholarship

There are many possibilities for scholarship projects related to the development of philosophical and educational approaches. A description of processes and discussions undertaken to develop the statements of faculty members and to achieve consensus about them could be instructive to colleagues at other schools. It would also be valuable to design a research project in which faculty members from one school, or several schools, describe their involvement in the decisions about philosophical and educational approaches, and their subsequent degree of commitment to the decisions. A study of students' understandings and application of philosophical underpinnings in the curriculum could be illuminating. A final suggestion is to conduct a survey of other schools of nursing to determine the philosophical and educational approaches currently in use, and their expected impact on nursing practice.

CHAPTER SUMMARY

The philosophical and educational approaches of the nursing curriculum reflect the beliefs, values, and convictions of faculty members. These approaches should be congruent with the philosophy of the educational institution and be enacted throughout the entire curriculum.

In this chapter, the conceptualization and purposes of a curriculum philosophy are presented. Some traditional curriculum philosophies are

briefly described. Ideas about teaching and learning that could form part of a nursing curriculum philosophy are also presented. The authors' view of philosophical and educational approaches is explained, and ideas about how to develop these approaches for the curriculum are offered. Suggestions about faculty development, ongoing appraisal, and scholarship in relation to philosophical and educational approaches precede the chapter summary and synthesis activities.

SYNTHESIS ACTIVITIES

The case of Beaux-Rivières University School of Nursing is presented for review, analysis, and discussion. It includes some ideas about philosophical and educational approaches that are under consideration by faculty members. Questions are offered to stimulate examination of the case. Then, questions and activities are suggested about developing philosophical and educational approaches in readers' settings.

■ Beaux-Rivières University School of Nursing

The faculty members at Beaux-Rivières University School of Nursing are engaged in curriculum development. The current curriculum has been in place for 10 years, and during that time, considerable curriculum drift has occurred. Approximately one-half of the full-time faculty members who developed the curriculum have resigned or retired, and more recently hired faculty members have brought new ideas with them.

Contextual data have been collected and analyzed. The core curriculum concepts and key professional abilities have been determined. A task group is working on the definitions of the core concepts.

A five-member subcommittee has been charged with formulating a draft statement of philosophical and educational approaches. The members reviewed literature and the websites of prominent nursing schools to expand their knowledge of philosophical and educational approaches in use. The subcommittee then developed a document with a synopsis of the main features of the approaches most evident in the material they read, and created statements of belief that incorporated some of the core curriculum concepts and key professional abilities. An opinion survey was developed in which faculty members were asked to rate their support of each of the summarized approaches on a 5-point scale with 1 being *do not agree at all*, 2 *disagree somewhat*, 3 *neutral*, 4 *agree somewhat*, and 5 *strongly agree*. There was also a request to add any missing ideas.

Most full-time faculty and approximately one-third of part-time faculty completed the survey and there was agreement about many of the ideas. Items with mean ratings of 4 to 5 are listed as follows, with concepts and professional abilities from the contextual data analysis in bold type:

- The purpose of undergraduate education in nursing is to prepare graduates who provide **safe, quality nursing care**.
- People strive to achieve health and it is nursing's responsibility to assist them in doing so.
- All people and **cultures** have inherent worth and dignity.
- **Health promotion** in all settings is the focus of nursing care.
- Working with clients to increase their self-efficacy and agency is critical to achieve **social justice**.
- **Collaboration** with clients, other nurses, and interprofessional team members is essential.
- Social justice is an important goal for the nursing profession.
- Teaching strategies derived from the science of learning are essential in a curriculum emphasizing **evidence-informed** nursing practice.
- Students are responsible for their own learning.
- Client safety cannot be compromised by student learning.
- Empathy and caring are essential in nursing.
- Nurses employ **critical thinking** and judgment when providing care.

Each of the following ideas had moderate support, with mean ratings ranging from 3.25 to 3.9:

- A concept-based curriculum is a good way to overcome content overload in the curriculum.
- A competency-based curriculum will ensure that graduates provide safe, quality nursing care.
- Cognitive constructivism is a good basis for our curriculum.
- Some aspects of nursing courses are best taught by lecture.
- Teaching approaches such as discussion, exploration of concepts, and problem-posing should be emphasized.
- Feminist pedagogy is a good fit with nursing education.
- It is important for students to learn political action.
- Students should learn the thinking patterns of nurses.
- Students need to know about disease processes and the related nursing actions.

- Faculty should ensure that students are adequately prepared for professional practice.

Items that yielded means of less than 3.25 were:

- Experience in hospital-based professional practice should be emphasized over other types of professional practice experiences.
- The curriculum should evolve from year to year, in response to student input.
- Andragogy is a good basis for the curriculum.

The subcommittee convened a meeting of faculty members to present the results of the survey. Following discussion of the results, the subcommittee intended to draft a statement of philosophical and educational approaches.

■ **Questions and Activities for Critical Analysis of the Beaux-Rivières University School of Nursing Case**

1. Assess the items that were included in the survey. What other items might have been included?
2. What types of activities might the committee have undertaken in advance of surveying faculty members?
3. Do the results seem logically consistent or inconsistent? Offer the rationale for the response.
4. Propose goals for a meeting between the subcommittee and other faculty members. Plan the meeting.
5. What might be the consequences of choosing one teaching-learning approach (e.g., concept-based or competency-based) over another?
6. Can the ideas about education approaches that had moderate support be reconciled? Should they be?

■ **Questions and Activities for Consideration When Developing Philosophical and Educational Approaches in Readers' Settings**

1. Who should be involved in the development of a statement of philosophical and educational approaches?
2. How should development of the statement proceed so that a thorough examination of ideas is possible within a reasonable time period?

3. Describe what ought to be included in a statement of philosophical and educational approaches.
4. Which curriculum concepts and key professional abilities derived from the analysis of contextual data should be evident in the statement?
5. Identify philosophical approaches and educational approaches that are consistent with the ideas, beliefs, convictions, and values of faculty members and other stakeholders. What can be done to ensure that those ideas, beliefs, convictions, and values are brought to awareness?
6. Is consensus possible if there is inconsistency or conflict among strongly held convictions, values, and beliefs about philosophical and educational approaches for the curriculum? Describe strategies for achieving consensus in this situation. What might be the consequences if consensus is not achieved?
7. Determine if eclecticism or pluralism might be appropriate.
8. In what ways are the developing ideas about philosophical and educational approaches consistent with the institutional philosophy?
9. What resources and how much time will be required to complete the work of developing philosophical and educational approaches? Propose a plan to ensure that the work will be completed in a thorough, yet expeditious manner so that other curriculum work can proceed.
10. Describe faculty development activities that could help in the development of educational and philosophical approaches.
11. Formulate ongoing appraisal questions that could be asked as a statement of educational and philosophical approaches is prepared.
12. Outline scholarship activities that should be considered and undertaken.

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Formulating Curriculum Goals and Outcome Statements for an Evidence-Informed, Context-Relevant, Unified Curriculum

CHAPTER PREVIEW

In this chapter, attention is given to the formulation of curriculum goals and outcome statements. First, taxonomies of thinking and performance are described, followed by clarification and comparison of the terms *objectives*, *goals*, *outcomes*, and *competencies*. The purposes of goals and outcome statements in curriculum development are then explained. The formulation of curriculum goals and learning outcome statements is presented next. Their relationship to an evidence-informed, context-relevant, unified curriculum is illuminated. The core processes of curriculum work are considered, followed by a chapter summary. Finally, synthesis activities conclude the chapter.

QUESTIONS ADDRESSED IN THIS CHAPTER

- What is the meaning of the terms used to describe the intended achievement of students in a nursing curriculum?
- How are the educational taxonomies used as a basis for developing curriculum goals and curriculum outcome statements?
- What are the purposes of curriculum goals and statements of intended learning outcomes for curriculum stakeholders?
- What are the processes that can be employed for formulating curriculum goals and curriculum outcome statements?
- What is the relationship of curriculum goals and intended learning outcomes to an evidence-informed, context-relevant, unified curriculum?
- In what ways can the core processes of faculty development, ongoing appraisal, and scholarship be integrated into the work of formulating curriculum goals and curriculum outcome statements?

Taxonomies of Thinking, Feeling, and Performance: Bases for Describing the Educational Destination

The educational destination of a nursing curriculum is the desired knowledge, skills, values, and comportment of graduates. These are described in the curriculum goals or in curriculum outcome statements, sometimes with an indication of the context in which the abilities are enacted. Similarly, course goals, objectives, and competencies describe the expectations of students completing individual courses.

In education, three realms of thinking and performance are used to describe learning and the educational destination: the cognitive (thinking), affective (values), and psychomotor (movement) domains. Taxonomies of learning have been developed to specify expectations of students in these three domains, and they have been invaluable to educators, enabling them to describe precisely what is expected of students.

A *taxonomy* is a classification of ideas that specifies the relationships among them. Within each of the three learning domains, several levels or categories of thinking or performance are defined, with performance in each level building on success in the previous level(s). Further, there are subcategories that describe student behaviors reflective of each category or level.

The original taxonomies of cognitive and affective learning were developed by Bloom, Englehart, Furst, Hill, & Krathwohl (1956) from an analysis of learning objectives written by educators in the 1940s and 1950s. Each domain was categorized into a hierarchical taxonomy, with every level reflecting greater difficulty or complexity than the preceding level. The aim of Dr. Bloom and his students was not to describe all types of learning that could occur, but rather to codify the expectations teachers had for students at that time (Gander, 2006). Thus, the cognitive and affective taxonomies are named *Taxonomy of Educational Objectives*, although the cognitive taxonomy is commonly referred to as *Bloom's Taxonomy*. Several taxonomies of psychomotor objectives were subsequently developed and published in the 1970s. The one most frequently used in nursing curricula is presented in a later section of the chapter.

Although the taxonomies were developed to classify educational objectives, they are understood to be taxonomies of learning. Hence, they are a basis for describing educational endpoints and students' achievement.

The Cognitive Domain of Learning

The taxonomy of the cognitive (understanding and thinking) domain, as initially conceived, has six categories or levels of achievement: *knowledge*, *comprehension*, *application*, *analysis*, *synthesis*, and *evaluation* (Bloom et al.,

1956). With the exception of *application*, each is divided into subcategories. The categories are ordered from simple to complex and from concrete to abstract. Mastery of each level is assumed to be necessary for advancement to the next level and mastery at any level subsumes achievement of previous levels.

The original Bloom's Taxonomy was revised by Anderson et al. (2001). All categories were renamed with a verb to reflect cognitive processes: *remember*, *understand*, *apply*, *analyze*, *evaluate*, and *create*. The order of the original *synthesis* and *evaluation* was reversed. They also identified four types of knowledge and positioned them on a separate axis. All cognitive processes (remember, understand, apply, analyze, evaluate, and create) can operate with each of the four types of knowledge and thus, a two-way grid of objectives can be created. The four types of knowledge are:

- *Factual*: "basic elements a student must know to be acquainted with a discipline or solve problems in it" (Anderson et al., 2001, p. 29)
- *Conceptual*: "interrelationships among the basic elements within a larger structure that enable them to function together" (Anderson et al., 2001, p. 29)
- *Procedural*: "how to do something, methods of inquiry, and criteria for using skills, algorithms, techniques, and methods" (Anderson et al., 2001, p. 29)
- *Metacognitive knowledge*: "knowledge of cognition in general [and] awareness and knowledge of one's own cognition" (Anderson et al., 2001, p. 29)

In **Table 11-1** is a summary of the cognitive processes of the revised taxonomy, and selected associated verbs that reflect each category and include the subcategories of each level. Although the six main categories are generally referenced in the original and revised cognitive taxonomies, their richness and utility lie in the delineation of the subcategories. The table also includes a modification of the taxonomy by Atkinson (2012a), in which he also uses active verbs, but describes the level behaviors as abilities. The verbs associated with each level are used in writing learning objectives and goals, and outcome and competency statements. These verbs are similar for the taxonomies of both Anderson et al. (2001) and Atkinson (2012a).

The Affective Domain of Learning

The affective domain relates to the development of values, attitudes, and beliefs. The levels of the affective taxonomy, as originally conceived by Krathwohl, Bloom, and Masia (1964) are *receiving*, *responding*, *valuing*, *organizing*, and *characterization by a value set*. These level names were subsequently changed

Table 11-1: Cognitive Process Dimension of the Revised Cognitive Taxonomy and Selected Associated Verbs		
Anderson et al.'s (2001) Cognitive Levels	Atkinson's (2012a) Cognitive Levels	Associated Verbs
Remember: Retrieve information from long-term memory		Arrange, define, describe, enumerate, identify, label, list, name, order, quote, recall, relate, repeat, reproduce, show, state, tabulate, tell
Understand: Comprehend meaning and interpret information		Classify, compare, contrast, explain, exemplify, extend, infer, differentiate, discriminate, distinguish, estimate, explain, extend, illustrate, infer, interpret, paraphrase, restate, rewrite, translate
	Remember and Understand: Ability to recognize information and understand it, and to recall and restate it	Ask, describe, identify, list, name, paraphrase, recall, retrieve, summarize
Apply: Carry out or use a procedure or concept in a given situation	Apply: Ability to apply factual information and presented theories, models, and structures to real-world contexts and problems	Apply, calculate, change, construct, complete, demonstrate, develop, employ, execute, implement, modify, predict, prepare, produce, relate, solve, use
Analyze: Separate material or concepts into component parts and determine the relationships among the parts and to the overall structure	Analyze: Ability to construct complex relationships from single factual elements, reconstruct relationships, and assess needs	Analyze, break down, categorize, classify, compare, connect, contrast, determine, deconstruct, differentiate, discriminate, deduce, examine, infer, point out, relate, separate, structure
Evaluate: Make judgments based on criteria	Evaluate: Ability to make complex judgements about the nature of context, information, and processes to establish new conclusions not represented in the original information	Appraise, ascertain, assess, check, choose, critique, conclude, decide, defend, evaluate, evaluate, judge, justify, hypothesize, recommend, resolve, validate
Create: Build something new from diverse elements	Synthesize: Ability to create new representations of knowledge structures, combining complex assemblages of information in original contexts	Argue, combine, compose, construct, create, design, develop, devise, formulate, generalize, generate, integrate, invent, make, modify, organize, plan, prepare, produce, propose, reconstruct, reorganize, summarize

Data from Anderson, L. W., Krathwohl, D. R., Airasian, P. W., Cruikshank, K. A., Mayer, R. E., Pintrich, P. R., . . . Wittrock, M. C. (Eds.). (2001).

A taxonomy for learning, teaching, and assessing: A revision of Bloom's taxonomy of educational objectives. New York, NY: Longman;

Atkinson, S. P. (2012). Visualizing outcomes: Domains, taxonomies, and verbs. Retrieved from <https://spatkinson.wordpress.com/2012/10/17/visualising-outcomes-domains-taxonomies-and-verbs/>;

Bloom, B. S., Englehart, M. D., Furst, E. J., Hill, W. H., & Krathwohl, D. R. (1956). *Taxonomy of educational objectives. The classification of educational goals: Handbook 1: Cognitive domain.* New York, NY: David McKay; Kennedy, D. (2006).

Writing and using learning outcomes: A practical guide. Cork, Ireland: University College Cork.

to active verbs by Atkinson (2012a): *receive*, *respond*, *value*, *organize*, and *internalize*. However, as with the cognitive domain, Atkinson's descriptors detail abilities and not actions. Atkinson does not provide verbs to describe an individual's activity at each level, but rather verbs that could be used in statements of expected learning. He views the affective domain as applying to both professional and personal skills.

The affective taxonomy describes a progression from simple awareness of a value or belief to internalization of the value such that it is a consistent basis for behavior. In **Table 11-2** are descriptions of the taxonomy levels and related verbs for each level of the affective domain.

Original Affective Taxonomy (Krathwohl, Bloom, & Masia, 1964)		Atkinson's (2012a) Modified Taxonomy	
Levels	Associated Verbs for Learning Objectives	Levels	Associated Verbs for Learning Outcomes
Receiving: Aware, willing to hear, sensitive to ideas	Accept, ask, attend, listen (for), listen to, recognize	Receive: Ability to learn from others	Attend, ask, concentrate, feel, focus, read, retain
Responding: Attend and react to a particular situation	Answer, comply, conform, discuss, examine, react, respond, seek clarification	Respond: Ability to participate responsively, respectfully, and actively as appropriate to the context	Cite, perform, interpret, help, provide, react, seek to clarify, question, write
Valuing: Attach worth to particular ideas, phenomena, or behaviors	Choose, demonstrate, explain, initiate, justify, refute, support	Value: Ability to associate personal and collective values with contextual experiences and express value judgements	Argue, challenge, confront, criticize, debate, justify, persuade, refute
Organization: Organizing values into priorities by contrasting different values, resolving conflicts between them, and creating a unique value system	Adhere, balance, arrange, display, defend, formulate, generalize, integrate, resolve	Organize: Ability to structure, prioritize, and reconcile personal and others' value systems	Arrange, build, contrast, defend, develop, formulate, modify, prioritize, reconcile, relate
Characterization by a value set: Having a value system that consistently controls own behavior	Act, display, internalize, perform, practice, question, resolve, verify	Internalize: Ability to articulate one's own value and belief systems and operate consistently within them	Act, display, influence, solve, practice

Data from Atkinson, S. P. (2012). Visualizing outcomes: Domains, taxonomies, and verbs. Retrieved from <https://spatkinson.wordpress.com/2012/10/17/visualising-outcomes-domains-taxonomies-and-verbs/>; Krathwohl, D. R., Bloom, B. S., & Masia, B. B. (1964). *Taxonomy of educational objectives: Handbook II: Affective domain*. New York, NY: David McKay; Oermann, M. H., & Gaberson, K. B. (2014). *Evaluation and testing in nursing education* (4th ed.). New York, NY: Springer.

The Psychomotor Domain of Learning

The psychomotor domain describes behaviors related to physical movement and proficiency in execution of manual tasks. Like the cognitive and affective taxonomies, the categories are listed from the simplest behavior to the most complex. Although other psychomotor taxonomies have been created, a widely accepted one in nursing education was developed by Dave (1970) (as cited in Oermann & Gaberson, 2014). The categories of Dave's 1970 taxonomy of the psychomotor domain, *imitation*, *manipulation*, *precision*, *articulation*, and *naturalization* (as cited in Oermann & Gaberson, 2014) are observable and amenable to evaluation.

Atkinson (2012b) has modified Dave's taxonomy, changing the names of each category to verbs: *imitate*, *manipulate*, *perfect*, *articulate*, and *embody*, and describing each level as an ability and not an action. The cognitive aspects of psychomotor performance are evident in Atkinson's definitions. Brief descriptions of the original and revised categories, along with some associated verbs, are presented in **Table 11-3**.

Table 11-3: Psychomotor Domain Levels and Selected Associated Verbs		
Dave's (1970) Psychomotor Levels	Atkinson's (2012b) Psychomotor Levels	Associated Verbs
Imitation: Observing and patterning behavior after someone else	Imitate: Ability to copy, replicate the actions of others following observation	Copy, follow, mimic, imitate, repeat, replicate
Manipulation: Performing certain actions by memory or following instructions	Manipulate: Ability to repeat or reproduce actions to a prescribed standard from memory or instructions	Demonstrate, execute, follow, implement, perform, manipulate, recreate
Precision: Performing a skill with control and independently of instruction	Perfect: Ability to perform with expertise and without intervention, and ability to demonstrate and explain to others	Be precise, complete, demonstrate, perform (accurately, smoothly), show
Articulation: Coordinating and adapting a series of actions in an appropriate sequence to achieve harmony and internal consistency	Articulate: Ability to perform actions in a nonstandard way, in different contexts, using alternative tools and instruments to satisfy need	Adapt, combine, construct, develop, integrate, modify, revise
Naturalization: Mastering a high-level performance until it becomes second nature, without needing to think much about it	Embody: Ability to perform actions in an automatic, intuitive, or unconscious way appropriate to the context	Alter, create, change, design, execute (effortlessly), invent

Data from Atkinson, S. P. (2012). Adaptation of Dave's psychomotor domain. Retrieved from <https://spatkinson.wordpress.com/tag/daves-taxonomy/>; Atkinson, S. P. (2012). Visualising outcomes: domains, taxonomies and verbs. Retrieved from <https://spatkinson.wordpress.com/2012/10/17/visualising-outcomes-domains-taxonomies-and-verbs/>; Oermann, M. H., & Gaberson, K. B. (2014). *Evaluation and testing in nursing education* (4th ed.). New York, NY: Springer.

Interrelationships Among the Learning Domains

The existence of three taxonomies (cognitive, affective, and psychomotor) can be interpreted to mean that learning in each domain is compartmentalized, separate, and unconnected to learning in the other domains. However, this is not the case. The domains of learning do not operate in three separate vacuums. For example, the manual execution of a nursing skill requires cognitive processing and a desire to complete the skill correctly (i.e., it is necessary to understand and apply knowledge of concepts, principles, and procedures and to value accuracy). In addition, continuous cognitive evaluation of the precision of performance is an inherent component of providing physical care. Further, all aspects of nursing care are based on knowledge and judgment and are expressed through a set of values and beliefs, which themselves first require knowledge and evaluation. Thus, each domain is intimately interconnected with the others.

Curriculum Goals and Learning Outcomes

Many terms are used to describe the knowledge, skills, and attitudes that students are expected to attain in educational programs: objectives, goals, competencies, and outcomes. The terms are all meant to convey the educational destination that students are required to achieve by the end of a unit of learning. Each implies a slightly different idea from the others, but all are intended to be meaningful to several curriculum audiences.

The terms used to describe the educational destination are paired. Learning *outcomes* and *competencies* together reflect one educational perspective; *goals* and *objectives* connote another approach. Each pair represents a distinct and separate nomenclature. Therefore, *goals* and *outcomes* are not synonymous, although both refer to the expectations at graduation. Similarly, *competencies* and *objectives* are not interchangeable, despite both referring to the learning expectations at the end of a unit of learning. Curricula with outcome statements have level and course expectations that are labelled either outcomes or competencies. Curricula with goals have level goals and either course goals or course objectives, as delineated in **Table 11-4**.

Nomenclature of Expected Student Achievement	Temporal Educational Endpoints		
	Goals	Graduation	Level/term/semester
Objectives			Course
Outcomes	Graduation	Level/term/semester	Course
Competencies		Level/term/semester	Course

The educational destination that students are expected to reach at the end of the nursing program must be specified, because this description becomes the basis for subsequent curriculum decisions. The discussion in this chapter is restricted to identifying and articulating what students should accomplish, and does not address instructional (teaching) goals or objectives.

Clarification of Terms

Learning Objectives

Learning objectives are descriptions of what students' knowledge, skills, and attitudes should be like after successful completion of a learning experience (Mager, 1997). Learning objectives are based on the work of Ralph Tyler (1949), who was interested in broad goals. However, Tyler's format of goals was changed to align with behaviorism and consequently, behavioral learning objectives resulted. Behavioral learning objectives each describe only one specific behavior from one domain of learning and are created from the taxonomies of learning. The objectives should state the behavior and criteria for successful achievement, be attainable within a specified timeframe and/or context, and be measurable.

As conceived, behavioral objectives are far too specific to describe the endpoint of a curriculum, because an endless list would be necessary. Moreover, the complexities of integrated thinking and acting would not likely be evident. Yet, some nursing programs continue to use the term *objectives*, even though the curriculum objectives are multidimensional and more akin to learning goals. In general, programs with curriculum goals will have level or year goals and course goals or objectives.

Learning Goals

Learning goals are student-focused, broad statements that describe the educational destination to be reached by students. A goal can encompass several objectives and domains of learning, or it can stand alone if objectives are not specified. Goals can incorporate cognitive, affective, interpersonal, ethical, and/or psychomotor dimensions; that is, they can integrate multidomain behaviors. Unlike learning objectives, goals do not contain criteria for achievement (Oliva, 2009). In the Model of Evidence-Informed, Context-Relevant, Unified Curriculum Development, the goal statements are student-focused. They are derived from, and incorporate, the philosophical and educational approaches, core curriculum concepts, and key professional abilities (the latter two being derived from the analysis of contextual data) in a comprehensive, holistic fashion. The context of goal achievement is specified.

Learning Outcomes

Learning outcomes are written statements of the abilities students are projected to attain at the completion of an educational program. The outcome statements

focus on students and what they should be able to demonstrate at the completion of a process of learning (Kennedy, Hyland, & Ryan, 2007), including knowledge, attitudes, and skills. More specifically, within nursing curricula, they are practice-oriented statements, integrating several domains of knowledge so that higher level functions, such as nursing care, can be carried out.

The complex thinking patterns and breadth and depth of knowledge inherent in nursing professional practice should be evident. Further, the outcome statements ought to specify the context of the professional behavior and be assessable (Glennon, 2006). The term *outcomes* is most aligned with competency-based education.

In nursing education and general education literature, the term *outcomes* has been used with two connotations. First, the term is employed to describe the **intended** or expected cognitive processes and practice behaviors that students will exhibit at the completion of a unit of study or an entire program. Although generally termed *outcomes*, it is really the statements of *intended learning outcomes* that embody the anticipated professional abilities of graduates. Secondly, the term *outcomes* has been used to describe the **actual** cognitive processes and practice behaviors of graduates. These actual outcomes can be known only through evaluation at program completion and follow-up studies of graduates. Therefore, the curriculum outcome statements should be written in a manner that will provide direction for evaluation of students at program completion and follow-up studies. Often, the intended learning outcomes (or statements of intended learning outcomes) are referred to simply as *outcomes*.

Competencies

Competencies are the knowledge, skills, and attitudes that students need to develop in order to accomplish the intended learning outcomes. They are behaviorally based, although not limited to one behavior or one learning domain. The competency statements are student-focused, specify the type and level of behavior, and include the context in which the behavior is to occur. The competencies are the prerequisites to achieving the outcomes. In nursing education, the term *course outcomes* is sometimes used instead of *competencies*.

In addition to describing student achievements, the term *competencies* is used to describe core knowledge and skills as defined by professional bodies. For example, the American Association of Colleges of Nursing (2008) has defined baccalaureate core competencies, and the College of Nurses of Ontario (2014) has delineated competencies for entry-level registered nurse practice. These documents of competencies provide guidance to nursing educators in their formulation of curriculum goals and learning outcome statements because professional standards and criteria are a critical aspect of the external environment of all schools of nursing.

Comparison of Goals and Outcomes

Learning goals, outcomes, objectives, and competencies are all intended to describe an endpoint of a temporal period of learning, are focused on the student, and describe an integration of knowledge, attitude, and skills. They are projections or expectations of what students will accomplish. Goals and outcome statements elucidate the ends, but not the means by which students will achieve the ends.

Goals, objectives, outcomes, and competencies all have their genesis in the work of Ralph Tyler and behaviorist educators who were influential from approximately 1950 to 1990. All describe the learning that students are expected to attain. The terms *competencies* and *outcomes* have come to prominence with the rise of competency-based education that began in the 1980s (Wittman-Price & Fasolka, 2010) in response to increasing demands for institutional accountability.

Goals, as conceived in the Model of Evidence-Informed, Context-Relevant, Unified Curriculum Development, and curriculum outcome statements are both derived from an assessment of the context. Outcome statements are derived largely from the practice context, whereas goals are derived from a broader assessment of the total environment of the school of nursing, of which the healthcare environment is an important component. Evident in the goals are the philosophical and educational approaches, the core curriculum concepts, and key professional abilities in a comprehensive, holistic fashion. In outcome statements, the philosophical approaches may not be evident, and unless the curriculum is concept-based, significant curriculum concepts may not be strongly apparent.

“Outcomes are practice oriented and should make sense to practicing professionals, as well as academic professionals” (Glennon, 2006, p. 56). This practice orientation makes the statements understandable and appealing to students. In contrast, as traditionally written, goals may not be as directly connected to practice. However, in the model proposed in this text, curriculum goals are generally practice oriented.

The identification of the educational endpoint (abilities of students at various levels, and of graduates) requires the determination of the antecedent abilities of each preceding level of the curriculum. Level goals are derived from curriculum goals. Similarly, level outcomes or competencies are derived from the curriculum intended learning outcomes. Course goal/objectives and course outcomes/competencies are deduced from the level expectations. The course and level expectations provide a roadmap for students’ learning, indicating the progression toward the educational destination.

Writers of outcome statements, competencies, goals, and objectives look to the learning taxonomies to identify the nature and level of learning that they

want students to achieve. Like the original format of objectives, outcome and competency statements should include a description of the context in which the desired behavior will be demonstrated (Wittman-Price & Fasolka, 2010). There is variation in authors' views about whether or not criteria are included in the outcome statements. It seems reasonable to think that if criteria are included, they would be present in the outcome statements of small units of learning, and not the final curriculum outcomes. Goals and outcomes generally include the context in which the learning is to be expressed.

The orientation of course and curriculum endpoints can influence students' ease in articulating what they can offer to employers. Outcome statements allow graduates to answer the question: *What can you do, now that you have your degree?* Although students graduating from a curriculum with goal statements could respond to this question in the same way, they may be more likely to describe what they did to achieve the degree (Purser, Council of Europe, as cited in Kennedy et al., 2007).

An important distinction is in the connotation of the words themselves. The term *outcomes* is confident, definite, and firm. Therefore, outcome statements are a declarative description of achievement. In contrast, the term *goals* conveys a tone of hope and aspiration, something to strive for, but not necessarily to achieve.

Examples of a curriculum goal and a curriculum outcome statement are presented to illustrate the similarities and differences between them. A curriculum goal is: *Graduates will be able to practice ethical, evidence-informed nursing from a health promotion and caring perspective in a variety of settings and contexts with diverse client groups across the lifespan* (Western-Fanshawe Collaborative BScN Program, 2013). Evident in this goal are:

- *Key professional abilities:* practice ethical, evidence-informed nursing
- *Aspects of the philosophical approach:* caring, clients as partners
- *Curriculum concepts:* evidence-informed, health promotion, caring, culture, and context
- *Context where behavior will be demonstrated:* variety of settings and contexts, with diverse clients across the lifespan.
- *Tone:* aspirational (graduates **will be able to**)

An example of a curriculum outcome statement is: *Graduates will plan and deliver care based on integration and judicious application of knowledge from nursing, biological, and human sciences; healthcare systems; and client priorities to individuals, families, and communities of diverse cultures.* This statement incorporates:

- *Action verbs specifying what graduates will do:* plan and deliver care based on synthesis and application of knowledge

- *The context*: to individuals, families, and communities of diverse cultures
- *Tone*: confident (graduates **will**)

Alternately, outcome statements can be written to describe the attributes of graduates. The above example could be presented in this way: *The graduate is an analytical and integrative thinker who applies knowledge from nursing, biological and human sciences, healthcare systems, and client priorities, to plan and deliver care to individuals, families, and communities of diverse cultures.* This outcome includes:

- *Attributes of the graduate*: analytical and integrative thinker
- *Action verbs*: applies knowledge
- *The context*: to plan and deliver care to individuals, families, and communities of diverse cultures
- *Tone*: confident (graduate **is**)

In **Table 11-5** is a comparison of behavioral objectives; goal statements as conceived in the Model of Evidence-Informed, Context-Relevant, Unified Curriculum Development; and curriculum outcomes. Behavioral objectives are included in this table, because they are the root of both goals and outcomes.

Characteristic	Behavioral Objectives	Goals	Outcome Statements
Purpose	Specify what students should achieve	Describe what students are expected to achieve	Describe what students and/or graduates can do, or their attributes
Nature of statement	Expectant	Aspirational	Declarative
Evidence base	<ul style="list-style-type: none"> • Deduced from larger goals • Educator judgement 	Analysis of contextual data, including population characteristics, healthcare system, professional practice competencies, health policy, governmental health priorities, trends, and so on	Interpretation of nursing practice requirements and attention to context
Contextual relevance	Dependent on individual school's connection with community and faculty members' knowledge	Strong	Highly relevant to context of professional practice Relevance to wider context dependent on school's connection with community and faculty members' knowledge

Table 11-5: Comparison of Behavioral Objectives; Curriculum Goals in the Model of Evidence-Informed, Context-Relevant, Unified Curriculum Development; and Curriculum Outcome Statements (*continued*)

Characteristic	Behavioral Objectives	Goals	Outcome Statements
Student-centered	Likely	Yes	Yes
Describes integrated, multidomain behaviors	Possibly	Yes	Yes
Practice-oriented	Possibly, but typically mainly in professional practice courses	Yes	Yes
Major curriculum concepts evident	Possibly	Yes	Possibly
Philosophical bases of curriculum evident	No	Yes	Possibly, but not strongly apparent
Includes context where behavior is demonstrated	Yes	Yes	Yes
Includes criterion/criteria for success	Yes	No	Course and level outcomes or competencies, yes Curriculum level outcomes, no
Assessable	Yes	Yes	Yes
Content-focused	Yes	No	No
Provides a basis for curriculum unity	No	Yes	Yes

Purposes of Curriculum Goals and Curriculum Outcome Statements for Various Audiences

The curriculum goals and curriculum outcome statements, which ultimately appear in published descriptions of the curriculum, are of interest to many groups. Each group reads them for a different purpose.

Curriculum Developers

Curriculum developers use either the goals or the outcome statements as a source of direction for all subsequent aspects of curriculum planning, implementation, and evaluation. This means that the curriculum design, level and course goals, level outcomes and level competencies, and course objectives, learning activities, course requirements, assessment of learning, and curriculum evaluation all derive their focus and intent from the curriculum goal or outcome statements. Curriculum developers are obligated to create and sequence

learning experiences that will allow motivated and capable students to achieve the intended educational endpoint.

Faculty members designing individual courses turn to the educational endpoint and the level expectations as their points of reference for course development, including course goals/objectives or course outcomes/competencies, strategies to ignite learning, and assessments of student learning. The curriculum and level expectations specify what students are to achieve and are the touchstone against which faculty members assess the suitability of their course development and implementation.

Current Students

Students enrolled in a school of nursing look to the curriculum goals or the curriculum outcome statements as the target they should reach by graduation and to course goals or course competencies as targets for smaller units of learning. To make the destination statements meaningful to students, faculty should refer to them frequently, identifying how particular learning activities contribute to achievement of either the goals or outcomes. In this way, the statements have an educational value to students. Additionally, frequent and explicit reference to curriculum and course goals/objectives or to curriculum outcome statements and course outcomes/competencies, helps students to:

- Connect their learning to their educational destination
- Articulate their professional abilities and achievements
- Appreciate the unity of the curriculum

Prospective Students

Potential applicants can review the curriculum goals or the curriculum outcome statements to determine if the curriculum will match their view of nursing, personal expectations, and philosophical orientation. The statements can attract applicants whose interests are aligned with the curriculum purposes and processes.

Clinicians and Potential Employers

These groups can use the published statements to understand what students are expected to accomplish and what professional abilities they will have at graduation. Reference to the curriculum goals or the curriculum outcome statements by faculty can be effective in helping clinicians appreciate why the nursing curriculum is organized as it is. Similarly, statements that indicate curriculum concepts and key professional abilities such as clinical reasoning, reflective and

collaborative practice, or leadership could assist employers to recognize the value graduates can bring to organizations.

Members of the Parent Institution

Faculty members teaching required non-nursing support courses, chairs of institution-wide committees concerned with curricula and standards, and administrators are interested in whether the nursing curriculum goals or curriculum outcome statements are congruent with the mission and values of the parent institution. If institution-wide educational expectations have been delineated for programs, these should be apparent in the nursing curriculum goals or the curriculum outcome statements, although presented within the context of nursing.

The curriculum goals or curriculum outcome statements provide structure from which courses and programs can be evaluated in response to requirements for accountability by provincial or state higher education boards. They may also assist in identifying gaps or overlap in program offerings, and in clarifying instructional, programmatic, and institutional priorities (University of Toronto Centre for Teaching Support & Innovation, 2017).

Accrediting Organizations, State Boards of Nursing, and Provincial Nursing Licensing Bodies

Representatives of organizations concerned with nursing education and nursing practice standards also have a legitimate interest in the curriculum goals or the curriculum outcome statements. They want to be assured that graduates' abilities match the expectations for the program level (practical nursing, associate degree, baccalaureate, or graduate) and are congruent with established standards. The statements are assessed carefully when programs are reviewed for approval or accreditation. Additionally, curriculum goals or curriculum outcome statements, among other information, are evaluated when graduates seek licensure in jurisdictions other than the one in which they were originally licensed.

Members of Professional Nursing Organizations

Members of professional nursing organizations review nursing curriculum goals and curriculum outcome statements to keep abreast of educational expectations and professional abilities of new graduates. The statements could also signal the type of student placement experiences that the school of nursing might request within professional organizations. Further, the statements may contribute to the rationale used to substantiate recommendations to legislators about standards for entry to nursing practice and healthcare policy.

Members of the Public

Members of the public generally read the curriculum goals or curriculum outcome statements only when they encounter a problem in nursing practice. In those instances, if a complaint to a licensing body or a lawsuit is considered, healthcare recipients and/or their legal representatives may want to determine the abilities graduates should have achieved and use that information as part of a claim against a nurse.

Formulating Curriculum Goals and Curriculum Outcome Statements

A first decision in formulating curriculum goals or curriculum outcome statements is which to develop: goals or outcomes? If curriculum developers have a choice, they should consider carefully the curriculum development implications and format of each, and determine which is more aligned with their own perspectives. However, the decision may not rest solely with nursing faculty but be a reflection of institutional practices.

There could be considerable similarity in the curriculum goals or outcome statements of many schools of nursing because curriculum developers are guided by similar contextual influences, such as nursing practice standards; codes of ethics; licensure and accreditation requirements; provincial, state, or national positions on higher education; and prevailing educational philosophies. Yet, as much as possible, the statements should give an indication of the uniqueness of each school's curriculum.

When writing the statements, it would be wise for curriculum developers to remain mindful of the intended audiences and ensure that the terminology is understandable. Attention to the taxonomies of learning, format of the statements, synthetic thinking, artful writing, and ongoing discussion are required for the creation of statements that reflect curriculum developers' vision of graduates, and in the case of goals, make the philosophical and conceptual foundations evident. Typically, there are 7 to 10 goals or outcome statements developed for a curriculum.

Curriculum Goal Statements

In the Model for Evidence-Informed, Context-Relevant, Unified Curriculum Development, goal statements are developed from the agreed-upon philosophical and educational approaches, core curriculum concepts, and key professional abilities. It is recognized that congruence of the goal statements with the mission, vision, and goals of the school of nursing and educational institution is essential.

The language and format of the curriculum goal statements must be consistent with the philosophical and educational approaches, and incorporate the key professional abilities and core curriculum concepts. The statements are future-oriented and say what a person ought to do (i.e., students **will**). The goals are a balance between comprehensiveness and concreteness, that is, they can encompass a combination of knowledge, skills, and attitudes, and yet are concrete enough to be meaningful. They should be sufficiently broad to allow for ongoing curriculum refinement.

It is advisable that those preparing the goal statements be immersed in the philosophical approaches, core curriculum concepts, key professional abilities, nursing education standards, entry to practice requirements, and other relevant information assembled as part of the contextual data. A synthesis of this information is necessary when writing the goals.

Goal statements are composed of four parts:

- Key professional abilities, expressed in an action verb that incorporates a constellation of achievements from more than one learning domain
- Aspects of the philosophical approach
- Major curriculum concepts
- Context in which the action will be demonstrated

Curriculum Outcome Statements

Curriculum outcome statements describe the actions or characteristics of graduates within the context of nursing practice. They are succinct, declarative statements of what graduates can do, or their attributes, and are not time-based. In a competency-based curriculum, with rigorous and authentic assessments, it is possible for educators to assure the parent institution and the public that graduates can demonstrate the described actions. Outcome statements are based on an understanding of current and anticipated realities of nursing practice.

When written as declarations of what graduates can do, the outcome statements are comprised of 2 components:

- Practice-oriented actions that incorporate integration and synthesis of a range of knowledge, cognitive skills, behaviors, values, and attitudes
- The context in which the actions will be performed and/or a description of care recipients

When written to describe the characteristics of graduates, the outcome statements are made up of three parts:

- An attribute (or attributes)
- An action verb that reflects a synthesis of several behaviors, usually from more than one learning domain
- The context in which the behavior will be demonstrated

Typically, the curriculum goals or the curriculum outcome statements are the expectations for the final level of the program. **Table 11-6** includes some questions that curriculum developers might ask themselves as they formulate the goals or outcome statements.

Curriculum Goals	Curriculum Outcome Statements
From a review of the analysis of contextual data, which key professional abilities should be included?	From a review of the current and anticipated practice environments and published professional and educational standards and competencies, what are the practice behaviors (or attributes) that graduates require?
From a review of the analysis of contextual data, which major curriculum concepts should be included?	N/A
From a review of the analysis of contextual data, which contexts (locations and/or descriptions of care recipients) of nursing practice should be included?	In what contexts, or with whom, should the competencies be demonstrated?
How can the philosophical approaches of the curriculum be made evident in the goal statements?	Should the philosophical approaches of the curriculum be reflected in the outcome statements? If so, how?

Formulating Statements of Level Expectations

Once the educational destination has been determined, it is necessary to identify the antecedent abilities students will need to develop in order to achieve the final destination. These abilities are deduced from the endpoint by answering the question: *What will students need to achieve at preceding levels of the curriculum in order to reach the endpoint successfully?* In other words, this answer is reached by identifying the prerequisite goals/objectives or prerequisite outcomes/competencies. These become the Level 3 expectations in a 4-year, integrated curriculum. The prerequisites to Level 3 become the Level 2 expectations, and so forth. **Figure 11-1** illustrates this process and contrasts it with the process experienced by students in the curriculum. **Table 11-7** provides an example of leveled goals, and in **Table 11-8** there is an example of an outcome with leveled competencies.

Curriculum goals or outcomes are typically prepared by a small group of faculty members who exchange, develop, and appraise ideas before arriving at a draft set of statements. In circumstances of constrained resources, this task might fall to an individual or a pair of faculty members, who might want to consult informally with others as they complete this work.

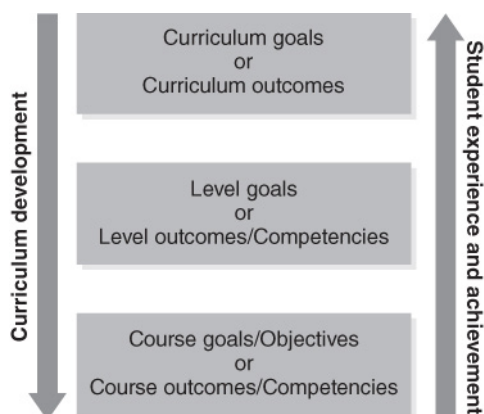


Figure 11-1. Processes of curriculum development and student experience and achievement in relation to curriculum goals or outcomes.

Year 4	Develop effective collaborative and therapeutic nurse–client relationships, and collaborative partnerships within nursing and interprofessionally
Year 3	Practice as a member of an interprofessional team to provide culturally sensitive, client-centered care in a variety of settings
Year 2	Participate as a member of an interprofessional team
Year 1	<ul style="list-style-type: none"> • Examine self in relation to values, beliefs, culture, caring, and communication • Establish culturally sensitive, caring relationships with others

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Outcome	Plan and deliver care based on synthesis and judicious application of knowledge from nursing, biological and human sciences, healthcare systems, and client priorities to individuals, families, and communities of diverse cultures.
Level 3	Plan and deliver care based on synthesis and application of knowledge from nursing, biological and human sciences, healthcare systems, and client priorities to community groups of diverse cultures.
Level 2	Plan and deliver nursing care based on application of knowledge from nursing, biological and human sciences, and client preferences to individuals and families of diverse cultures in acute-care settings.
Level 1	Plan and deliver nursing care based on nursing knowledge and preparatory reading in simulated and long-term care situations.

Confirming Curriculum Goals or Outcome Statements and Level Expectations

Faculty members are rightfully concerned about accuracy, reasonableness, and comprehensiveness in the goal or outcome statements and, therefore, discussion about both the substance and phraseology can be anticipated before approval by the total faculty group is achieved. It is prudent to allow sufficient time for review and discussion of the curriculum and level expectations before proceeding with other aspects of curriculum development. The statements of what students should have achieved at graduation constitute a public promise of what successful students will be like. Therefore, faculty members need to feel satisfied with these statements before they can commit to further curriculum development and subsequent adherence to the curriculum intent during implementation.

Relationship of Curriculum Goals and Outcome Statements to an Evidence-Informed, Context-Relevant, Unified Curriculum

In the Model of Evidence-Informed, Context-Relevant, Unified Curriculum Development, goals embody the educational destination, and this destination includes the key professional abilities that graduates will demonstrate, the major concepts that will influence their nursing practice, and the philosophical foundations of the practice. The concepts and professional abilities are derived from the analysis of contextual data; therefore, the goals are evidence-informed. Furthermore, their relevance to the context in which graduates will practice nursing is ensured.

The philosophical approaches are developed with a view to what is relevant in the current and anticipated healthcare and social contexts, and permeate the curriculum. The inclusion of some elements of the philosophical approaches in the goals creates a foundation for ongoing attention to the philosophy throughout the curriculum.

The presence of the key abilities, major concepts, and philosophical approaches within the goals reinforces the unity of the curriculum. From the curriculum goals, the level goals are derived, and from the level goals, the course goals. In this way, elements of the overall curriculum goals are present in goals throughout the curriculum, contributing to conceptual, visual, and operational unity.

The curriculum goal statements arise from the context and lead to the next phases of curriculum development. They embody the essence of the curriculum's purpose. Ongoing reference to the goals as the curriculum is developed signals the relevance and unity of the curriculum.

In contrast, the evidentiary basis of curriculum outcomes may not be as extensive as that of curriculum goals. Accordingly, it cannot be assured that

the outcomes are related to the complete context, although they are strongly related to the nursing practice context. The lesser emphasis on core concepts and philosophical approaches in the outcome statements may diminish the visual unity of the curriculum. Therefore, outcomes statements may not strongly reflect the foundations of an evidence-informed, context-relevant, unified curriculum.

Core Processes of Curriculum Work

Faculty Development

Faculty development about goal or outcome statements can focus on how to succinctly capture in writing the essence of what students should achieve. For some faculty members, this will require support to move away from the idea that content should determine the educational endpoint. Instead, faculty development could shift their focus to the abilities that nurses require as the starting point for determining and describing the educational destination and subsequent level expectations. Attention should be given to the components of either the goal or outcome statements. For some, an introduction to the taxonomies of learning would be helpful. A standard format for either goal or outcomes statements, and opportunities for practice and feedback, could be provided to ensure consistency throughout the curriculum.

Ongoing Appraisal

As curriculum developers proceed with defining the educational destination of the nursing curriculum, they appraise their work in an ongoing fashion. Questions they might ask of themselves and others include the following:

- Do the statements accurately reflect the intent?
- Does each statement conform to the agreed-to format?
- In total, do the curriculum goal or curriculum outcome statements express what is necessary for graduates to begin nursing practice?
- Are the major curriculum concepts and key professional abilities apparent in the goals?
- Is any thing important missing?
- Are the curriculum expectations reasonable and achievable?
- Is the number of statements reasonable?
- Are the expectations consistent with nursing education standards?
- Are the level expectations logically sequenced with increasing complexity? Are they complete and achievable?
- Do the level expectations “add up” to the curriculum expectations?

Scholarship

Scholarship related to the development and confirmation of curriculum goals or curriculum outcome statements in schools of nursing is limited. Therefore, manuscripts describing the processes undertaken and their inherent challenges would be a valuable contribution to the literature. A shift from generic instructions about how to write curriculum goals or curriculum outcomes to a concrete example of the process could be illuminating for other schools of nursing and novice nurse educators.

It could be worthwhile to conduct a Delphi survey of practicing nurses in staff positions and nurse leaders to determine their views about what students should achieve. This could be completed early in the development of a new curriculum or when curriculum revision is considered, as part of the data gathering about the external context. Such a project would provide evidence for the curriculum endpoints and become the basis of a research manuscript. Similarly, a study to determine how well practicing nurses (particularly preceptors) understand the curriculum goals or outcome statements could be valuable for further curriculum planning.

Follow-up studies of graduates and their employers to determine if the expected practice behaviors are being enacted would provide insight into the reasonableness and relevance of the goal statements or outcome statements, and other aspects of the curriculum. The questions that might be asked are: *To what extent are the curriculum goals (or curriculum outcomes) enacted in practice? To what extent do the curriculum goals or curriculum outcome statements align with the demands of nursing practice?*

CHAPTER SUMMARY

In this chapter, the formulation of curriculum goals and curriculum outcome statements is addressed. The term *goals* is used in the Model of Evidence-Informed, Context-Relevant, Unified Curriculum Development and in many Canadian schools of nursing. The term *outcomes* is in more widespread use in the United Kingdom and the United States. There are similarities and differences in the components of goal and outcome statements, although both describe the educational destination of a curriculum and both incorporate the taxonomies of learning. The purposes of goal or outcome statements in curriculum development for several groups are included. Further, the process of formulating goals and outcome statements is explained. The relationship of curriculum goals and outcome statements to an evidence-informed, context-relevant, unified curriculum is explained. Possible faculty development, ongoing appraisal, and scholarship relevant to formulating goals or outcomes are described.

SYNTHESIS ACTIVITIES

The case of the Great Bear University Faculty of Nursing is presented to illustrate ideas about formulating curriculum outcome statements. This is followed by questions for analysis. Then, as in other chapters, questions and activities are offered to assist readers to formulate curriculum goal or curriculum outcome statements in individual settings.

■ Great Bear University Faculty of Nursing

Great Bear University is located in a region where grizzly bears used to abound. With urbanization, the bears have diminished in number, retreating to the higher slopes of the nearby mountains. Nonetheless, the image of the grizzly, also known as the *great bear*, lives on in the name of the university, its sports teams, and many local businesses. The town motto is *Gateway to Great Bear Country*, and many eco-tourism companies offer camping expeditions to the mountains. Protection of the grizzlies' environment is essential for these and other businesses and for the image of the region. An active group of biologists, botanists, and amateur naturalists lobby for preservation of grizzly habitat.

In accordance with the community ethos of environmental protection, part of the Great Bear University mission is to contribute to the preservation and renewal of native flora and fauna. There is a rigorous program of recycling and re-use of resources on campus; wastage is anathema. Additionally, the entire campus is an arboretum, home to many bird species. Only native plants and flowers are used to beautify the campus. As might be expected, there are undergraduate and graduate programs in ecology, environmental sciences, North American botany and biology, and wildlife management.

Great Bear University Faculty of Nursing has three undergraduate nursing curricula: a 4-year BSN, a RN-BSN, and an 18-month accelerated BSN for degree holders. Each was developed separately at different times in the school's history. Even though all have the same goals, the curricula vary considerably in recognition of the prior knowledge and experience of the student groups. There is acceptance of the fact that the curricula of the three programs should differ. However, there is some feeling that the differences are too great. As well, some faculty members view the accelerated program as too strongly content-driven and oriented to the medical model. The concern is that accelerated students may not be developing the ethos of professional nurses.

In 12 months' time, the undergraduate nursing curricula will be reviewed by the university's internal curriculum appraisal committee, in accordance with institutional accountability requirements. Faculty members support the suggestion of Dr. Cynthia Melbourne, the Dean of the Faculty, that it would be wise to conduct a speedy internal review to determine the alignment of all undergraduate curricula with accreditation requirements, healthcare needs, each other, and particularly with the university and school missions. She further commented that following the review, any necessary alterations could be planned in advance of preparing the report for the university committee.

Dr. Melbourne appoints a task group of four members to assemble and review the available data and to return to the larger faculty group with recommendations in 3 months. The task force is composed of:

- Professor Yasmin Ali, who teaches solely in the accelerated program
- Professor Jeanne Garneau, who is Undergraduate Chair and whose primary teaching responsibility is in the 4-year program
- Professor Ian McLeod, who chairs the Undergraduate Curriculum Committee and whose primary teaching responsibility is in the RN-BSN program
- Professor Galina Petrov, who teaches the undergraduate research course in all BSN programs and a graduate research course

Dr. Melbourne hires a graduate student to assist the task group and also assigns a secretarial assistant to support the task group's work.

The group meets and recognizes that they have essentially been asked to complete an abbreviated assessment of the environment external to the School of Nursing. They recognize that, in addition to the university mission statement and healthcare systems data, they should obtain other information, such as course evaluations, completed employer surveys, and a copy of the *Essentials of Baccalaureate Education for Professional Nursing Practice* (American Association of Colleges of Nursing, 2008).

The group acquires the data available to them, noting that it may be incomplete because of the time constraints. Each member reads all the information, taking note of ideas that seem particularly pertinent to the undergraduate curricula. Then, they meet to discuss the information from each source, noting curriculum implications. Finally, they have an integrative discussion of all the data. From that discussion and previous

notes, the group concludes that the attributes and abilities of graduates should include:

- Planners, providers, and evaluators of evidence-informed care
- Ability to integrate and synthesize knowledge as a basis for care
- Comfortable with ambiguity
- Self-evaluation
- Skills in the use of information technologies
- Critical readers and users of research literature
- Committed to collaboration and shared decision making with clients and other care providers
- Adhere to professional ethics, including when communicating online
- Life-long learners
- Respect diverse cultures
- Able to communicate and work effectively with people across the life span
- Committed to environmentally friendly practices

The task group has not worded the ideas above consistently as attributes or as abilities of graduates. They recognize this and believe that before any revisions are made to the current goals, or before any other curriculum alterations, there is need for discussion about whether the curriculum should continue to be based on goals or whether there should be a change to the use of outcome statements.

The task group recommends that:

1. The Undergraduate Curriculum Committee consider whether curriculum goals should continue to be used as the format or whether outcome statements should be the format for the curriculum endpoints, and that this discussion precede any revision of the goal statements.
2. If a decision is made to change to an outcomes format, then a faculty development session should be planned about writing outcome statements and the curriculum consequences of this approach.
3. Curriculum goals or outcome statements be developed to incorporate the ideas above before alterations to curricula are undertaken.

■ Questions and Activities for Critical Analysis of the Great Bear Faculty of Nursing Case

1. Assess the process the group used to arrive at their list of attributes and abilities of graduates. If other activities might have been completed, what are they? In what ways could those other activities be helpful? What is possible within the group's timeframe?
2. Are any items on the list of data sources unnecessary? Why? If important data sources are missing, what are they and why are they important?
3. Are any important ideas missing from the list of attributes and abilities? What are they? Are any of the items on the list of attributes and abilities unnecessary or relatively unimportant? Justify your responses.
4. How could stakeholders have been involved in determining the important attributes and abilities? What procedures would be feasible?
5. What could be the reasons for continuing to use curriculum goals? The reasons for changing to outcome statements?
6. What would be the curriculum consequences of changing the format from goals to outcome statements?
7. Write goal statements and outcome statements that incorporate the attributes and abilities listed in the case.

■ Questions and Activities for Consideration When Developing Goal or Outcome Statements in Readers' Settings

1. Describe a feasible process for the development of curriculum goals or outcome statements.
2. Which individuals or group should have responsibility for drafting the curriculum goals or outcome statements? Justify the choice.
3. If there is a choice about using goals or outcome statements, what criteria should be the basis of the decision?
4. Who needs to be involved in the decision about the format of the statements of the educational destination?

5. If goal statements are used, which components should be included? If outcome statements are used, which components should be included?
6. How can adherence to a consistent format be achieved?
7. Describe the advantages of presenting curriculum and level expectations as a completed package before seeking approval. Describe the advantages of gaining approval for the curriculum goals or curriculum outcome statements before developing level expectations. Which approach would be more effective and why?
8. What is a reasonable time period for completion of this work? Can the work be expedited? If so, how? If time and faculty numbers are severely constrained, how could the process be modified?
9. Propose faculty development activities related to the development of goal or outcome statements.
10. What are the questions that could be asked in the ongoing appraisal as the statements of student expectations are prepared?
11. Suggest scholarship activities that should be considered and undertaken.

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Designing an Evidence-Informed, Context-Relevant, Unified Curriculum

CHAPTER PREVIEW

This chapter begins with information about curriculum design. Included are terminology, program type, structure, delivery, and models. General and health professional education designs, organizing strategies for nursing curricula, and patterns for nursing course sequencing follow. Then, the process of designing an evidence-informed, context-relevant, unified curriculum is described. Although presented in a linear fashion, curriculum design does not occur through a prescribed sequence but rather through iterative discussion, generation of design ideas, and critique. Attending to curriculum implementation and planning curriculum evaluation are briefly addressed as part of design. The relationship of curriculum design to an evidence-informed, context-relevant, unified curriculum is described. A discussion of the three core processes of curriculum work (faculty development, scholarship, and ongoing appraisal related to curriculum design) is followed by a chapter summary. The synthesis section includes a case for analysis and questions to consider when undertaking curriculum design.

QUESTIONS ADDRESSED IN THIS CHAPTER

- What is the process of designing an evidence-informed, context-relevant, unified curriculum?
- What factors contribute to curriculum design decisions?
- What variations in curriculum design are possible?
- How is curriculum design influenced by human, financial, and physical resources, and what are the resource implications of curriculum design?

- What is the value of planning curriculum evaluation as the curriculum is being designed?
- What is the relationship of curriculum design to an evidence-informed, context-relevant, unified curriculum?
- How are the core processes of faculty development, ongoing appraisal, and scholarship integrated into the process of designing the overall curriculum?

Curriculum Design

The term *curriculum design* refers to the configuration of the program of studies. It includes the courses selected, their sequencing, the relationships between and among courses, and associated curriculum policies. The design encapsulates the curriculum foundations and ought to present a picture of conceptual unity.

The process of designing the curriculum, or the curriculum *design process*, refers to the discussions and decision making that lead to the configuration of the program of studies. This process can feel like the heart of curriculum development, and its result is the written curriculum plan. The completed design makes the future curriculum tangible and curriculum developers experience a strong sense of accomplishment, ownership, and anticipation when they are able to say, “This is our curriculum.”

It may be helpful to clarify some of the terminology used when undertaking the design phase of curriculum development. Terms such as *design*, *structure*, and *model* are often used interchangeably in the nursing education literature. To add to the confusion, descriptors such as *block*, *integrated*, *2+2*, *accelerated*, *stand-alone*, and *collaborative* have been referred to as designs, programs, structures, models, or patterns. For conceptual clarity, the following terms and interpretations are used in this text and are more fully described in subsequent sections.

- *Type*: Educational level (e.g., baccalaureate, master’s, doctoral)
- *Structure*: Arrangement as to program length and semester or quarter divisions
- *Delivery*: Modes by which the curriculum is offered
- *Model*: Overall organization of the curriculum that typically describes the arrangement of nursing and required non-nursing support courses (e.g., articulated, generic, basic, or upper division nursing program)

Program Type and Structure

The *program type*, or educational level, has a significant influence on the curriculum design, because the nature and number of courses will be linked to the

expectations for graduating students. The program type is evident in the curriculum goals or curriculum outcome statements, which should be thoroughly understood by curriculum planners.

Program structure refers to the duration of the program and the arrangement of divisions within the academic year. The duration is usually a function of program type, although alternative program lengths can be considered. For example, a prelicensure baccalaureate curriculum is typically 4 years in length, whereas accelerated curricula can be 12 to 24 months (Brandt, Boellaard, & Zorn, 2013). Once established, the program length is a boundary within which the curriculum must be designed. The division of the academic year into quarters, trimesters, semesters, or terms is established by the educational institution. These are the temporal units in which students must achieve year (or level), semester, and course goals or outcomes/competencies.

Program Delivery

Program delivery, another design element, refers to the means by which the curriculum is offered to and accessed by students. Traditionally, this has been through courses provided at the educational institution that awards the academic credential. However, programs are integrating other modes of access to education such as technologically mediated online distance education, blended or hybrid models, partnerships, or a combination of these.

Traditional Delivery

The traditional approach for offering and accessing nursing curricula is through in-class, face-to-face instruction, in which the teacher and students are physically present in the same classroom, lab, or professional practice learning environment, at the same time, for a designated time period. This continues to be a fundamental characteristic of most undergraduate nursing programs.

This time- and place-dependent approach has been evolving to include more flexible scheduling to accommodate students' work and family schedules. For example, nursing classes can be held on one day of the week, in the evenings, or on weekends. Additionally, faculty members may travel to distant locations to offer classes for those unable to attend the credential-granting institution or to share teaching with program partners. Availability of instructors and suitable locations and times, as well as costs associated with time and travel, are some issues related to offering education using traditional but flexible delivery.

Distance Delivery

Distance education is a means to provide an educational offering when students are physically separated from the instructor and/or educational institution. Although

generally understood to be technology-enabled, it need not be. Print-based correspondence courses, for example, still have their merit, particularly in areas of the world where individuals do not commonly own a computer.

Several terms are often used interchangeably or in conjunction with *distance education* to describe the educational process. These terms include *distance learning*, *online education*, *online learning*, *web-based instruction*, *Internet-based instruction*, *Internet-based learning*, *distributed learning*, *alternative delivery*, *flexible delivery*, *m-learning*, and *e-learning*. The term *distance education* is somewhat misleading as it may imply interpersonal and intellectual detachment and physical remoteness among participants engaged in the educational endeavor. However, physical distance, or lack of physical presence, should not automatically evoke images of unconnected, depersonalized students and instructors. Whether participants are located around the globe or close to the educational institution, technology-enabled courses can make social, cognitive, and intellectual links possible while students actively and collectively engage in learning experiences.

Education offered through distance media entails planned experiences designed to support student learning independent from, or in conjunction with, in-class learning (Frith & Clark, 2013; Zawacki-Richter & Naidu, 2016). The key is to create a community of inquiry in which social, cognitive, and teaching presence flourishes (Anderson, 2008).

Flexibility ought to be a core element of distance education. Many variations are possible, although technology is normally used to connect students with faculty members and each other. Courses can be conceptualized and offered with a single technology, or several, to accommodate students' learning styles, personal significant learning environments (Patterson et al., 2017), life roles, and inability to enroll in traditional on-campus programs.

Hybrid or Blended Delivery

Hybrid delivery, also referred to as *blended* delivery, combines “traditional face-to-face ‘seat time’ with online learning activities” (University of Wisconsin Milwaukee Learning Technology Center, 2017). There is a continuum from Web-enhanced to hybrid to fully online courses, but there are no widely accepted cutoff points for these course formats. A general guideline is that a blended course has more than 20% of activities online; if less than 20% it is considered to be web-enhanced rather than hybrid or blended (University of Wisconsin Milwaukee Learning Technology Center, 2017).

Courses or curricula offered via hybrid delivery can “provide moderate-to-high degrees of access and flexibility while offering the potential for moderate-to-high dialogue and low-to-moderate structure” (Millison & Wilemon, as cited in Ball,

Mosca, & Paul, 2013). In other words, the design of the educational offerings can vary. Similarly, the amount of organization, interaction, fluidity of processes, and student choice can differ depending on the course or curriculum goals or curriculum outcomes/competencies.

From a review of research literature, Smythe (2011) asserts that in higher education, the dimensions of blended learning include combinations of:

- Traditional learning with web-based online approaches
- Media and technologies
- Pedagogical approaches, irrespective of the learning technology in use
- Synchronous and asynchronous components

Blended delivery can occur at the course, curriculum, or institutional level (Rietschel & Buckley, 2014). At the course level, meaningful online experiences are combined with face-to-face sessions. At the curriculum level, some courses may be face-to-face, and some may be technology-enabled. Alternatively, all courses might employ a blended approach. An institution as a whole might have courses on a continuum of delivery from traditional, to web-enhanced, to blended, to fully online.

Delivery Through Partnerships

Partnerships are formal arrangements that exist between and among institutions. In the nursing education literature, the terms *partnership*, *collaboration*, *collaborative partnership*, and *consortium* are often used without sufficient definition or differentiation. They do, however, refer to

- formal or informal affiliations or alliances developed by educational institutions with service agencies for professional practice or service-learning experiences, and/or
- arrangements that exist between and among educational institutions for the purpose of providing nursing education.

Academic partnerships are formed when more than one educational institution offers all or part of the same curriculum. These agreements require a high level of trust, cooperation, and commitment to a shared vision. In collaborative partnerships and consortia with a common curriculum, negotiations and a willingness to let go of treasured aspects of individual curricula are necessary to achieve the larger purpose of the partnership. A formal contractual agreement (typically termed *Memorandum of Agreement* or *Memorandum of Understanding*) specifies the responsibilities of all parties in developing, approving, implementing, evaluating, and revising the curriculum, as well as administrative arrangements, student admissions, and financial provisions. Additionally, details about the curriculum design can be specified.

The nature of the formal agreements can have a profound effect on curriculum design. Clauses about design (e.g., where, how, and which courses will be offered), resource sharing, and requirements about faculty credentials could be written to ensure curriculum quality. Details such as course sequencing or the provision of particular courses at specified sites, and the use of distance education in its various forms are sometimes seen as desirable to assure the roles of partners.

If specific design details are included in the partnership agreement, new memoranda or modifications to memoranda will be necessary to reflect curriculum revisions. The more specific the curriculum detail in the signed agreements and the greater the number of institutions involved, the more challenging it can be to modify the curriculum as time passes. Therefore, it is wise to minimize references to precise curriculum details when agreements are first developed.

Three principal forms of partnerships exist between and among educational institutions. These are fee-for-service, collaborative partnerships, and consortium arrangements. There are no precise conceptual, functional, or quantitative demarcations between partnerships and consortia, so each grouping of schools of nursing uses the terminology it deems appropriate.

Fee-for-Service Partnership

In this arrangement, one institution purchases the curriculum or course(s) of another. This is the least complex of the partnership agreements. Elements of the contract could include the nature of the course(s), number of students, delivery mode(s), and the fee, which may be based on enrollment numbers. The provider is unlikely to participate in the purchaser's curriculum development, although this could be possible if stipulated in a formal agreement.

Collaborative Partnership

A collaborative partnership denotes a high degree of involvement between (or among) educational institutions. The collaborating institutions establish agreements that include matters related to the following:

1. Curriculum
 - All aspects of curriculum development, implementation, evaluation, and revision
 - Extent of allowable flexibility in response to local contexts
 - Admissions policies and procedures
 - Progression and appeal policies
 - Delivery modes and delivery sites
 - Sharing of human and physical resources
 - Faculty credentials

- Curriculum approval and accreditation
 - Faculty development related to curriculum work
2. **Scholarship**
 - Partnership-wide scholarship
 - Faculty development related to scholarship, particularly curriculum scholarship
 3. **Governance**
 - Committee structure, decision-making and approval processes within the partnership, reporting requirements
 - Duration of the agreement
 - Conflict resolution mechanisms
 - Procedures for partnership dissolution

A simple partnership involves two partners that support the same purpose. There can also be several partners and the formal agreements between and among them can become complex. For example, a degree-granting university might have separate contracts with two colleges, with all three sharing the same curriculum. There may or may not be contractual arrangements between the colleges.

Consortium

A consortium is a cooperative association of many collaborating partners formed to achieve common purposes, most notably to increase the number or proportion of baccalaureate degree-prepared nurses. Examples are the:

- California Collaborative Model for Nursing Education in which 19 universities are in partnership with 59 community colleges (Close & Orłowski, 2015)
- New Mexico Nursing Education Consortium in which all publically funded schools of nursing in the state have students enrolled in a common curriculum that can lead to a BSN degree, either within 4 years or following graduation with an associate degree in nursing (Giddens, Keller, & Liesveld, 2015).
- Oregon Consortium for Nursing Education, which includes Oregon Health and Science University (OHSU) and 11 community colleges (Oregon Health and Science University [OHSU] School of Nursing, n.d.).

Each consortium organizes its curriculum, teaching resources, and pattern and location of student enrollment, in a manner most suitable to the partners. The variations are reflective of each consortium's goals, local contexts, and the realities and requirements of the institutions and systems that support the consortium.

The most obvious advantage of a university–college collaboration or consortium for baccalaureate education is an increase in the number of bachelor’s-prepared nursing graduates (Giddens et al., 2015). Further, there can be optimal use of resources to develop and share curricula and teaching-learning resources across institutions (Molzahn & Purkis, 2004). Because curriculum development is inherently a faculty development activity (Zawaduk et al., 2014), the widespread involvement in curriculum development strengthens the human capital of each school of nursing. Faculty development about teaching and scholarship is possible across a consortium, with a concomitant enhancement of nurse educators’ perspectives of evidence-informed nursing education practice and nursing practice. With the involvement of faculty members from several or all partner sites in scholarship projects, there is a potential for large sample sizes, often a missing feature of nursing education research. Additionally, collaboration among schools of nursing can lead to cohesion among nursing educators, who collectively can influence government policies and funding, nursing care, and healthcare organizations.

Program Models

The program model is the overall organization of the curriculum. This organization can vary according to the arrangement and numbers of required nursing courses, required non-nursing support courses, and elective courses, as well as program length. All models are designed to facilitate students’ achievement of the intended program goals or outcomes. In essence, the model determines where particular courses (including professional practice courses) can be placed in the curriculum. The name given to the model may include a reference to the type of program and/or the program length. Some current models in nursing are presented alphabetically below.

Accelerated programs (sometimes called *compressed programs*) are a means for university-educated individuals to obtain a bachelor’s degree in nursing in a compressed time period. These nursing programs are built on students’ prior university education and specified prerequisite courses. The curricula are comprised primarily or entirely of nursing theory and practice courses. These intensive programs vary in length from 12 to 24 months, although typically they are approximately 18 months.

Articulated programs have a planned progression from a lower to a higher level of learning, for example, licensed practical nurse to associate degree in nursing (ADN), ADN to BSN or Master of Science in nursing. These programs allow for seamless transfer of academic credit from ADN to university nursing programs (American Association of Colleges of Nursing, 2014).

Basic, generic, or integrated baccalaureate programs are normally 4 years in length with nursing, required non-nursing support, and elective courses

throughout the entire program. However, an integrated program may have a preprofessional year that includes foundation courses in humanities, social, natural, and health sciences, followed by 3 years of nursing, education, as occurs at the University of Saskatchewan College of Nursing (2017). In basic programs, nursing professional practice occurs concurrently with theory courses, although configurations will vary according to context. Concepts are integrated throughout the curriculum in a meaningful way.

Bridging programs are typically designed for internationally educated nurses to bridge any gaps that may exist between the educational programs of their countries of origin and the regulatory requirements in their host jurisdiction. The programs include theory and supervised professional practice, leading to an academic credential and/or eligibility to write a licensure examination.

Collaborative nursing programs, which are typical in Canada, are university–college partnerships in which only one degree is given. All courses are university-level courses. A baccalaureate in nursing is awarded by the university following completion of a 4-year, integrated curriculum. The college awards no academic credential, but may negotiate to have its college name or logo included on the diploma awarded by the university. Curriculum matters are determined by members of the involved institutions and depending on the collaboration, the location of student enrollment can vary. For example:

- Enrollment in either the college or university for the first 2 academic years of the program, with all students enrolled at the university for the final 2 years
- Simultaneous enrollment in both the college and university, with all students taking courses at both sites throughout the 4 years
- Simultaneous delivery of the entire curriculum at the university and each of the college sites, with students being enrolled in only one site

Another program model is the *dual degree partnership in nursing*, with a 1-2-1 sequence, developed in Syracuse, New York. Students complete 1 year of arts and science courses at Le Moyne College, and then enroll for 2 years in the ADN program at St. Joseph's College of Nursing at St. Joseph's Hospital Health Center. These courses are given credit toward the BSN degree. Students are eligible to take the NCLEX-RN[®] after receiving the ADN at the end of the third year. They then complete the fourth year at Le Moyne College and are awarded the BSN degree (Bastable & Markowitz, 2012; Markowitz & Bastable, 2017).

A *dual enrollment* (DE) program allows a student to be enrolled concurrently in an ADN and BSN program. Following completion of prerequisite courses, students enroll in the DE program and complete both ADN and BSN courses. After completion of the ADN curriculum, students are eligible to take the NCLEX-RN[®]. Once the NCLEX-RN[®] is passed, students can enroll for five

more BSN courses to complete the degree. The entire program is completed in 8 semesters: 4 full-time and 4 part-time (Bopp & Einhellig, 2017).

A *parallel degree track program* has been developed by the New Mexico Nursing Education Consortium. In this model, there is a statewide nursing curriculum with parallel degree tracks in the community colleges. Students choose to enroll in either an ADN or BSN program in a community college. The curriculum for both programs is shared and can lead to an ADN after 2 years or a BSN after a further 2 years. The ADN is awarded only to students who have chosen that degree track, and those graduates can later complete an RN-to-BSN program. Students in the BSN program can complete the entire 4-year program in the community college and are awarded their degree by a collaborating university (Giddens et al., 2015).

An *upper division baccalaureate program* generally consists of 2 years of arts, humanities, and science courses. This is followed by 2 years of nursing courses.

In summary, the program model is an important element of design. If a nursing program is being created in an institution where nursing did not formerly exist, then there may be considerable freedom to choose the program model. However, if there is a desire to change an existing model, considerable negotiation may be required, because there can be scheduling, faculty, and budgetary implications for the school of nursing and other departments.

Curriculum Designs from General Education Evident in Nursing Curricula

Curriculum design, as noted previously, refers to the configuration of the program of studies, including the courses selected, sequencing, the relationships between and among courses, and associated curriculum policies. Two typologies of curriculum design in general education are evident in nursing curricula: one based on content and one based on knowledge construction.

Selection and Organization of Content

Curriculum designs based on the selection and organization of content have been described and can be recognized in nursing curricula. Many nursing curricula incorporate a combination of these designs.

In an *academic subject design*, particular subjects are included in each or most years of the curriculum (Henson, 2010). In public schools, an example is mathematics. In nursing, aspects of this design pattern are represented by nursing courses, such as professional nursing, which may recur in the curriculum with increasing complexity.

A *core curriculum design* includes subjects or topics that are required of all students (Henson, 2010). This core is essential to all curricula, although it may be addressed in different ways in various curricula. An example is communication skills, which are addressed in all programs leading to a credential in nursing. The depth, nature, and context of the skills change throughout the undergraduate curriculum and then in graduate curricula. For example, BSN students might begin with learning how to respond to clients with empathy and then progress to communicating therapeutically in crisis situations. In a PhD program, communicating research findings would be emphasized. Because communication is core to the discipline of nursing, the topic is included in all nursing curricula.

In a *fusion design*, subjects are combined to form new content areas. A health promotion course would be an example. Knowledge from nursing, sociology, psychology, and education is combined so that the originating disciplines are not readily identifiable.

A *special topic design* is flexible. Content is drawn from several subjects to address important issues, problems, or areas of interest. As issues emerge, new courses are developed. They can become permanent offerings, or they can be discontinued if no longer timely. In nursing curricula, the topic of international nursing or global health, for example, was often introduced as a special topic course and then became a regular part of the curriculum once it was apparent that the topic was an enduring one.

In *student-centered designs*, courses are provided in response to student interests. In nursing curricula, giving choice about professional practice placement sites is an example of student-centeredness, as is the provision of elective courses.

Ordering or Constructing of Knowledge

There are five patterns of ordering or constructing knowledge (in contrast to content) in a curriculum (Wiles & Bondi, 2011). All can be identified within nursing curricula. The five patterns are described as follows, beginning with the most structured and ending with the most flexible.

In a *building blocks design*, a clearly defined body of knowledge or skills is organized into a pyramid-like arrangement. The base is made up of foundational knowledge, and the middle portion of the pyramid is composed of increasingly specialized material. The apex contains in-depth, specialized knowledge. The sequence is prescribed and deviation is not allowed.

A *branching design* is a variation of the building blocks design. The endpoints of learning are known in advance. The curriculum starts with foundational knowledge, and then there is some choice within prescribed areas beyond the common experiences.

In a *spiral design*, the same knowledge areas are repeatedly revisited at higher levels of complexity. There can be some flexibility, but this is likely limited as curriculum designers decide what knowledge needs to be reexamined and when.

With a *specific tasks or skills design*, specific knowledge and experiences are intended to assist students to achieve predetermined competencies. There can be flexibility in the content and the ordering of content.

In a *process design*, there is a fluid organization of knowledge. The emphasis is on the process to be learned, and content is the medium through which specified processes are addressed.

Nursing curricula typically employ all five means of ordering or constructing knowledge. A building blocks approach is evident in a curriculum where foundational knowledge from humanities and science courses form a base for the first courses in nursing, in which nursing concepts, procedures, and professional ethics are learned. From there, courses address more specialized knowledge and skills relevant to nursing practice in particular contexts. In a parallel fashion, students may first encounter clients experiencing limited psychological stress and physiological alterations, then those with moderate levels of psychological and/or physiological problems, and, finally, clients with complex health and social problems. The basic premise is that knowledge and skill are built in a step-wise fashion and students can learn complex and specialized knowledge only when there is a basis of prior knowledge.

Curricula with course choices (i.e., branching) would reflect a belief that there is more than one path to reach the goals or outcomes. Many programs have a final practicum, and this experience provides an example of both branching and spiraling. A variety of placements for a practicum represents a branching design. Students who repeat a placement they have previously experienced are in a spiral situation; they are returning to the same practice area with more knowledge and experience and should be able to deepen their understanding of the clients and situations they encounter. Plans for psychomotor skills learning in many curricula are reflective of a specific task or skills design. A process design is most evident in the use of strategies such as narrative pedagogy, or flipped classrooms. Professional practice experiences are also examples of a process design: students learn the processes of nursing and interprofessional practice by engaging in the professional activities.

Interprofessional Education

Traditionally, health professional courses have been unidisciplinary. Curricula were planned by members of one health professional discipline for students in that discipline. However, if health professional students are educated in isolation from one another, they may have difficulty communicating and collaborating in

meaningful ways once they are practicing professionals, with possible negative consequences for clients. Therefore, there is increasing impetus to develop shared learning experiences for students of all health professions, with the ultimate goal of improving interprofessional communication and collaboration, patient care and safety, and organizational functioning.

Multidisciplinary, Interdisciplinary, or Transdisciplinary Learning

Shared learning experiences can be multidisciplinary, interdisciplinary, or transdisciplinary. “Multidisciplinary brings two or more disciplines to bear on a problem without integrating disciplinary components, whereas interdisciplinary is marked by a synthesis of disciplinary knowledge and methods that provides a more holistic understanding” (Knight, Lattuca, Kimball, & Reason, 2013, p. 144). Transdisciplinarity is one step beyond interdisciplinarity in that “it goes beyond drawing concepts from the disciplines to create new frameworks that break down (transgress) the traditional boundaries of the disciplines” (Mitchell, as cited in Park & Son, 2010). Some professional boundary blurring occurs as situations are considered within the new frameworks, while mutual trust and respect for discipline-specific expertise are developed.

In interdisciplinary learning, participant collaboration is the interaction mode and students learn to be knowledge *collaborators*. In transdisciplinary learning, students learn to be knowledge *producers*, and the knowledge production occurs through interdisciplinary collaborative learning (Park & Son, 2010) and the subsequent development of shared mental models. Transdisciplinary learning is the goal of interprofessional education.

Transdisciplinary Interprofessional Education

Interprofessional education (IPE) is the provision of “occasions when members (or students) of two or more professions associated with health or social care engage in learning with, from, and about each other” (Freeth et al., as cited in Reeves, Goldman, & Oandasan, 2007, p. 231). The goal is to facilitate students’ development of attitudes, knowledge, skills, and behaviors meant to lead to successful collaboration. The expectation is that the preparation of a collaborative, practice-ready health workforce will result in collaborative professional practice, and that this will result in optimal health services (WHO Study Group on Interprofessional Education and Collaborative Practice, 2010). This expectation is partially supported by research. The conclusions of a synthesis of eight reviews of interprofessional education research studies were that (1) IPE can foster collaborative knowledge, skills, and attitudes, and (2) the evidence that

IPE can help to enhance collaborative practice and improve patient care was limited (Reeves, Palaganas, & Zierler, 2017).

Effective strategies for IPE include shared problem-solving, analysis of patient-focused case studies, acquisition of clinical skills (Barnsteiner, Disch, Hall, Mayer, & Moore, 2007), and examination of ethical dilemmas. These activities can occur in classrooms, in practice, or through simulations. Shared debriefing can focus on clinical reasoning, ethical analysis, and reflections on interactions and learning. The metacognitive reflection is intended to assist students to extend their thinking beyond the healthcare situation and to illuminate the processes of learning, collaboration, and interprofessional collaborative functioning. Shared reflection extends interprofessional learning to transdisciplinary or transprofessional learning.

Conditions Necessary for Interprofessional Education

A number of conditions within an educational institution will support development and maintenance of interprofessional education. It is advisable that:

- An explicit organizational philosophy of IPE be developed
- Partnerships be created between educational institutions and government, professional regulatory colleges, and practice communities
- Accreditation and educational outcomes be used as leverage for change and self-reflection among health professions educators
- A research and evaluation strategy be created to address anticipated challenges
- An organizational structure for IPE be created
- A strategic plan for IPE be developed, reviewed, and revised as appropriate
- Common frameworks and language be adopted, while respecting disciplinary language
- Educational theory be used to inform the development of interprofessional learning opportunities
- Planning for IPE be undertaken by interprofessional working groups
- Interprofessional courses include the word *interprofessional* in the title and be given the same name and credit hour assignment in all programs
- Interprofessional courses be embedded in curricula, and scheduling be coordinated so that students from all programs can attend
- Simulation labs, standardized patient settings, and so on be shared by all disciplines
- Faculty development be a priority
- A collaborative competency learning continuum be developed

- Student engagement be encouraged in all aspects of IPE
- The complexities of communication be planned for and attended to
- Strategies be developed to minimize inertia (Barnsteiner et al., 2007; Grymonpre et al., 2016; Mladenovic & Tilden, 2017)

In planning nursing curricula, nurse educators ought to attend to the possibility of interprofessional education, even though the support for it may initially be limited. Dedicated nursing faculty members will probably find like-minded colleagues in other health profession education programs who:

- Are committed to fostering collaborative interprofessional relationships
- Value the contributions of members from other health professions to health care
- Will share course development, delivery, and evaluation
- Understand (or are willing to develop an understanding of) the goals, designs, and methods of transdisciplinary education in the health professions
- Will take action to achieve the conditions noted above to support the development and maintenance of interprofessional education within the institution

Together, they can build institutional support for both campus-based and healthcare-based interprofessional education and practice. The core competencies for interprofessional practice delineated by organizations such as the Canadian Interprofessional Health Collaborative (2010) or the (U.S.) Interprofessional Education Collaborative Expert Panel (2011) provide frameworks that can form the starting point for the development of an interprofessional curriculum.

Organizing Strategies for Nursing Curriculum Design

A curriculum organizing strategy is the structure or scaffolding upon which courses are identified and built. It gives direction to the nature and sequence of courses and learning experiences, which together must form a coherent, logical, and unified curriculum.

Nursing has always used an organizing strategy for curriculum design, beginning with Nightingale's statements about the person–environment relationship. Since then, numerous organizing strategies have been developed. The one selected should:

- Correspond with the curriculum philosophy
- Respond to the context of the program
- Ensure opportunities for students to achieve curriculum goals or curriculum outcomes
- Be logical and justifiable
- Provide optimal usefulness and consistency

Traditional Organizing Strategies

Medical Model

In the medical model of organizing nursing curricula, popular for more than half of the 1900s, content was organized according to the following components: disease (teaching by body system), terms or vocabulary (precise definitions), concept of nurse (whose function is to do things to the patient and to the environment), and concept of patient (as a repository of disease and recipient of nursing care). In this organizing strategy, courses are ordered in specific sequences. The content to be learned and how it is to be learned are identified. Nursing courses and nursing skills are delineated first. Then, the required non-nursing support courses, critical learning experiences, and evaluation methods to assess student learning are determined.

The traditional hospital clinical areas (maternity, medicine, pediatrics, psychiatry, surgery) are the focus of learning, with the addition of community or public health. Courses are typically named *Medical Nursing*, *Surgical Nursing*, and so forth. Advantages of this organizing strategy include the wide availability of nursing textbooks written according to the medical model, a good fit with hospital organization and faculty members' areas of expertise, and a match with popular perceptions of nursing. However, a risk is that nursing science and nursing perspectives may not be given prominence in the curriculum.

Use of the medical model has declined since the 1980s. However, remnants of this organizing framework are evident in course titles such as *Nursing Care of Psychiatric Patients*. Although classes might not follow the pattern of describing nursing care in relation to disease processes, the overall structure of the curriculum is organized in whole or in part according to the traditional medical specialties.

Simple-to-Complex

In a simple-to-complex organizing strategy, another traditional approach, knowledge is organized so that learning occurs sequentially. Students learn progressively more about a specific concept or process over time. For example, the curriculum might first address nursing care of individuals, then families, then aggregate groups. The advantage rests with the innate logic of incremental learning; students are expected to be responsive first to one person, then to a small group, and then to a community. However, this organization does not reflect the reality of nursing practice, because nurses typically respond to families along with individuals, to individuals within families and groups, and to individuals and small groups within aggregates.

Stages of Illness

Health and its meaning are considered first when employing stages of illness as the organizing strategy. Content addressing acute care nursing is followed

by content about rehabilitative, and then chronic care nursing. Normal life processes such as pregnancy and aging do not fit easily into this approach, nor does health promotion of families and groups. Nonetheless, this strategy can encompass institutional and community-based practice.

Contemporary Organizing Strategies

Nursing Conceptual Framework, Model, or Theory

The curriculum can be organized according to one nursing conceptual framework, model, or theory, for example Orem's (1990) General Theory of Nursing or Watson's (2012) Human Caring Science. Each conceptual framework, model, or theory offers a somewhat different perspective of nursing with its own accompanying vocabulary. With this organizing strategy, the concepts and components of the selected theory or practice framework are predominant in all courses and experiences. The nursing focus is foremost in the curriculum and directs students to view theory and practice with a specific perspective. However, a single nursing conceptual framework, model, or theory may not reflect the views of all faculty members and students, and may not easily fit all nursing practice contexts. Also, the language and critical concepts may be too abstract for some students. Finally, few textbooks and other references are likely to be organized according to the chosen perspective.

Multiple or eclectic nursing conceptual (or theoretical) frameworks can also be adopted. Curriculum designers select concepts and definitions that best fit their values and beliefs about nursing. Several conceptual frameworks, models, or theories within the curriculum (pluralism), might be used, with different ones being given prominence in different courses. Combining parts of two or more theories (eclecticism) is also possible. This would combine what is best understood from several nursing frameworks, models, or theories. Adaptation of elements from multiple perspectives could generate creative curriculum designs. Pluralism or eclecticism might be less constraining than reliance on only one framework. Nevertheless, a multiple-framework approach could distort the body of knowledge from one model, or take away from that which is uniquely nursing. Distortion of original concepts, definitions, characteristics, and attributes of one or more of the original models or theories might result.

Use of nursing frameworks and theories continues in nursing education, albeit often only in selected courses or as a component of a philosophy, and not as a basis for an entire curriculum. Their decreasing prominence as organizing strategies for curricula is related to the fact that they have not been sufficient for all aspects of the nursing curriculum and there has been limited uptake of the frameworks in nursing practice. The language of the theories and frameworks has, at times, presented a barrier to communication between students and practicing nurses.

Competency-Based (Outcomes-Based) Framework

A competency-based (outcomes) approach is another organizing strategy. When curriculum developers focus on outcomes, design proceeds from this point. In this “backward design” method, curriculum designers initially identify the outcomes students will be required to achieve (Boland, 2012). Competencies are deduced for each level of the program and then for courses. Assessments are developed for the competencies. Finally, reusable learning resources and experiences necessary for achieving the competencies are created (Cooper, 2016).

Concept-Based Framework

In the Model of Evidence-Informed, Context-Relevant, Unified Curriculum Development, concepts, abilities, and educational and philosophical approaches are the foundations of the curriculum and all courses and classes. The evidence-informed concepts and abilities are derived from an analysis of the context in which the curriculum is offered and in which graduates will practice nursing. The concepts could be grouped into categories such as *health and illness, professional practice, and person*.

Curriculum goals are formulated from the professional abilities, core concepts, and philosophical approaches. Then, year or level goals are deduced from the curriculum goals. From these, courses are identified and course goals formulated.

As described in a previous chapter, concepts form the bases of courses and individual classes. Concepts introduced early in the curriculum reappear throughout the curriculum, with the expectation that students will develop deeper understandings and more sophisticated use of the concepts in new contexts.

In the nursing education literature, ideas have been presented for employing specific concepts as the basis of one course, for example, social justice as the foundation of a course in community health. However, isolating one concept in one course is not the same as using a concept-based framework for an entire curriculum. In a concept-based curriculum, concepts for the entire curriculum are identified, the curriculum is built around the concepts, and thus, the concepts are evident throughout the curriculum. Therefore, if social justice were a curriculum concept, it would be woven through many courses and not isolated in only one.

Course Sequencing Patterns

Within the organizing strategy used to design the curriculum, courses can be sequenced in *block, concurrent, immersion-residency, or mixed patterns*. A block

pattern specifies theory and professional practice courses in sequence, each separate from the other and becoming the foundation for those that follow. In a concurrent pattern, theory and professional practice courses are scheduled in parallel throughout the curriculum.

A variation of the block pattern is the immersion-residency pattern, developed by the University of Delaware School of Nursing. Students have nursing theory courses and lab-based experiences in the first 3 years of the curriculum. Professional practice experiences are reserved for a full-year immersion residency in the final year of the program (Diefenbeck, Plowfield, & Herman, 2006; Paulson, 2011).

A mixed pattern is also possible, with different parts of the curriculum having different patterns. A program with concurrent theory and practice, followed by a block of either a concentrated practicum without formal classes, or classes without professional practice, are examples of a mixed pattern for course sequencing. In a study of students' preferences in four Canadian 4-year nursing programs with a mixed pattern of professional practice experiences, it was concluded that both patterns lead to learning. A concurrent pattern allows for "a balanced lifestyle, concurrent integration of theory and practice, and critical reflection, whereas the block model is preferred for assimilation, consolidation, and socialization" (Rohatinsky et al., 2017, p. 156). The use of both patterns within a program was recommended.

Designing an Evidence-Informed, Context-Relevant, Unified Nursing Curriculum

Creating an evidence-informed, context-relevant, unified nursing curriculum design involves many processes. These include confirming the overall goal of the design process; organizing, defining, and refining curriculum concepts; defining curriculum parameters; identifying courses; deliberating about delivery approaches, program models, organizing strategies, and course sequencing; mapping the curriculum; planning curriculum evaluation; and attending to program policies and resources. Iterative discussions lead to the generation of design proposals, appraisal, and decision making. Although the processes of designing a curriculum are described in the following sections as separate components, most discussion occurs concurrently and iteratively.

There is no formula for curriculum design, whereby a specific program model and organizing strategy invariably result in a predetermined design. Each design team establishes its own procedures, and through use of creative and logical thinking, produces a design relevant for its context. Invariably, the design group's work will be characterized by ongoing deliberation and negotiation.

As with other aspects of curriculum development, involvement of stakeholders throughout the discussions can contribute to a realistic design and generate community support (Barton, 2017; McIntyre-Hite, 2016).

Confirming the Purpose of the Curriculum Design Process

Nurse educators strive to develop evidence-informed, context-relevant, unified nursing curricula that will build students' professional knowledge and skills so that graduates will provide safe care of a high quality in a changing healthcare environment, thereby contributing to the health and well-being of those they serve. To ensure that all members of the design team have a shared understanding, it is advisable to clarify the aim of the curriculum design process. Specifically, the purpose is to design a curriculum that:

- Is evidence-informed, context-relevant, and unified
- Adheres to the chosen philosophical and educational approaches
- Will be feasible within the context in which the curriculum will be offered
- Has the support of faculty members, the educational institution, students, and stakeholders
- Allows for the continuous and evident presence of the curriculum foundations, that is, core curriculum concepts, key professional abilities, and philosophical and educational approaches
- Provides opportunities for students to achieve the curriculum goals or intended curriculum outcomes
- Meets requirements for approval and accreditation

Defining Curriculum Parameters

Attention to curriculum design (i.e., the configuration of the program of studies) cannot occur in isolation from the context in which the curriculum will be offered. The context and previous curriculum decisions determine the curriculum parameters, that is, the limits within which the curriculum must be designed and operationalized.

Many curriculum parameters will have been identified during collection and analysis of the contextual data, although they might not have been labeled in this way. A review of contextual data can highlight relevant information that curriculum designers should keep in mind. Internal contextual data include information about faculty numbers, infrastructure, institutional policies, partnerships, and the ability of other departments to mount new courses. Critical data from the external context to keep in mind include the health needs of the

population, types of health services available in the community, and standards for program approval and national accreditation.

In addition to contextual influences, the design is affected by all curriculum decisions made to date. These decisions give direction to the design, while also requiring curriculum developers to limit themselves to ideas that are congruent with the philosophical and educational approaches, core curriculum concepts, and key professional abilities. These prior decisions make some designs possible, while ruling out others. It is important for curriculum designers to be clear about the parameters that affect the design so that a realistic, feasible, logical, and unified curriculum can be created.

Facilitating the Design Process

Designing the curriculum, which requires time and considerable intellectual effort, can be facilitated by reviewing current literature, visiting other schools, consulting with colleagues regionally and nationally, and attending nursing education conferences. Surveys of catalogues of highly rated schools (particularly those using similar philosophical approaches), with attention to program designs, could prove beneficial and move the process forward. To solicit input, the design team might develop a template and ask stakeholders to respond to the designated elements. Following formulation of statements about the philosophical approaches, core curriculum concepts, key professional abilities, and curriculum goals or curriculum outcomes, the template could include space for level goals or outcomes, possible courses, credit allocations, sequencing, professional practice experiences, and other items deemed relevant. The collation of this information can provide a basis for discussion about design.

An additional way to depict the developing curriculum visually is in a matrix format with relevant horizontal and vertical headings. The matrix indicates the plan for continuity of concepts. It is a recording of prominent ideas for each nursing course and the basis for detailed course and evaluation planning. Once finalized, the matrix (along with the concept map described later in this chapter) becomes a blueprint against which the implemented curriculum can be compared and assessed. However, the matrix cannot be finalized in isolation from other aspects of the design process. A draft matrix can serve as a focus for feedback and discussion, and then be confirmed after all other aspects of design are discussed. See **Figure 12-1** for a template of a curriculum matrix.

Deliberating About Curriculum Design

It can be worthwhile to review the curriculum work done to date to rekindle agreed-upon perspectives. As in all aspects of curriculum development, similarities

	Level 1	Level 2	Level 3	Level 4
	Goals or Outcomes/Competencies 1. 2. etc.	Goals or Outcomes/Competencies 1. 2. etc.	Goals or Outcomes/Competencies 1. 2. etc.	Goals or Outcomes/Competencies 1. 2. etc.
Nursing Course Titles and Brief Description				
Course Goals or Competencies				
Major Concepts				
Knowledge and/or Professional Practice Focus				
Interprofessional Courses or Experiences				
Required Non-nursing Support Courses				

Figure 12-1. Template for a curriculum matrix.

should be capitalized upon, previous decisions recalled, and differences negotiated. A review of the analysis of the contextual data will refresh members about previously proposed design ideas.

Deliberations about curriculum design encompass integrative discussion about all aspects of design and focused discussion about the specific components of design. Discussion addresses many design components simultaneously, with appraisals of how ideas could fit together or how they might work. The dialogue could address the following questions:

- How might the philosophical approaches be operationalized?
- How should the core curriculum concepts be addressed throughout the curriculum?
- How can the curriculum be designed so students will have opportunities to achieve the curriculum goals or outcomes?
- What design ideas stem from the chosen educational approaches?
- Which curriculum possibilities from the analysis of the contextual data warrant further discussion?
- If there is a choice about the program model, which is preferred? Why?
- What could be the overall organizing strategy for the design?
- Which pattern for sequencing learning experiences matches the agreed-upon ideas about learning?

- What are the learning experiences (theory and professional practice) that students require to achieve curriculum goals or outcomes?
- What are the necessary nursing and required non-nursing support courses?
- Is shared education for health professional students a possibility? Are multidisciplinary, interdisciplinary, or transdisciplinary experiences preferred? How could IPE be initiated, advanced, and/or supported?
- Which courses could be optional for students?
- What configurations of courses are possible to maximize learning?
- What is the rationale for the delivery approach, model, organizing strategy, and configuration chosen?
- How feasible are the ideas? How well do the ideas fit programs with one or more partners?
- What academic policies require consideration as part of the design?

The design team considers all the curriculum decisions that have been made to date, the curriculum parameters, their own experiences, and faculty members' expressed preferences. Then, the team employs creative, divergent, and logical thinking to arrive at a design proposal.

Selecting a Program Model

When curriculum designers have the option of creating a new program model, their deliberations are strongly guided by beliefs about learning and nursing education. They might discuss the following matters:

- The arrangement of nursing courses, required non-nursing support courses, and elective courses that best match the curriculum foundations (philosophical and educational approaches, curriculum goals or outcome statements, core curriculum concepts, and key professional abilities)
- Arrangements that can be ruled out
- The most suitable model that will likely be feasible and acceptable to students, faculty members, stakeholders, and the educational institution

Selecting an Organizing Strategy and a Course-Sequencing Pattern

The choice of an organizing strategy will depend on the philosophical approaches, core curriculum concepts, and curriculum goals or outcome statements. Curriculum designers might ask themselves questions such as the following:

- What are appropriate criteria for choosing an organizing strategy and sequencing pattern?
- Which organizing strategies can be ruled out?

- Which organizing strategies might best fit with the philosophical and educational approaches?
- Is there a natural fit with core curriculum concepts and one of the organizing strategies?
- Can some of the organizing strategies and educational frameworks be combined in a meaningful way? For example, could a concept-based curriculum fit with a competency-based approach?
- Could a model unique to our school be developed?
- Should a block, concurrent, immersion-residency, or mixed pattern of course sequencing be used?

These, and other points of discussion, will occur in a recursive fashion, leading to a conclusion about an organizing strategy and sequencing pattern. Like other aspects of curriculum development, ideas are proposed and explored, and then following a review of previous decisions, modifications are made, new ideas added, and resolution achieved.

Selecting a Delivery Approach

Decisions about delivery (traditional, web-enhanced, blended, fully online) form an important part of the overall discussion, if this has not already been defined as a design parameter. When referring to contextual data about faculty members, institutional support for distance delivery, and available infrastructure, designers might ask questions such as:

- Is the use of only one delivery mode congruent with the philosophical approaches, curriculum goals or outcome statements, and the student population, or should a combination be used?
- Which modes best suit the nature of the curriculum?
- What resources would faculty require?
- What resources would faculty members and students require for web-enhanced, blended, and/or fully online courses?
- How might delivery modes affect the configuration of courses?

Organizing and Defining Curriculum Concepts

The concepts derived from the contextual analysis, and additional concepts present in the statement of philosophical approaches, should be organized in a meaningful way to form a framework for further curriculum design. This first requires synthetic thinking to combine and (re)name similar concepts. Then, they can be grouped into three to five categories that are consistent with curriculum ideas that have been developed so far. This work may have been largely completed when curriculum concepts were derived from conceptual data and

then defined. However, if concepts from the philosophical and educational approaches were not integrated and defined, this needs to be completed.

Consensus is essential about the concepts, their definitions (as explained in a previous chapter), and categorization of concepts. Additionally, agreement is needed about how the concepts will be used in the curriculum (Giddens, Wright, & Gray, 2012). A common understanding of the concepts by curriculum developers and all faculty members implementing the curriculum is crucial. This understanding will facilitate the design process because curriculum designers and those reading the draft design will view the ideas with a similar perspective. Moreover, a shared understanding will ensure that use of the concepts in the curriculum is consistent and unambiguous to students. This consistency contributes to curriculum unity and to students' certainty about the meaning of the concepts.

Identifying Courses

Discussion about courses to include in the curriculum requires attention to many ideas concurrently:

- Level goals or competencies
- The concepts and the depth of concepts to be addressed
- The knowledge context in which the concepts will be addressed
- Sequencing
- Continuity (i.e., logical relationship or progression from one unit to another)

The balance among process, concepts, and substantive content can be a source of much deliberation, possibly reflecting differing values in the group.

Identifying appropriate courses begins with an examination of the curriculum goals or outcomes, followed by discussion about prerequisite knowledge and experiences (Boland, 2012; Doll, 1996; Gagné, Briggs, & Wager, 1992; Glatthorn, Boschee, Whitehead, & Boschee, 2016). Recognition of courses that are not suitable occurs as part of the discussion and helps to define which ideas are relevant. The integration of goals or competencies, concepts, substantive knowledge, prerequisite knowledge, and professional practice experiences form the basis of discussion about nursing and non-nursing courses.

Typically, the curriculum goals or outcome/competencies for the graduating year or final semester of the program are the same as the curriculum goals or curriculum outcomes. Working back from these, level (year) or semester goals or competencies are identified, and then analyzed to derive goals or competencies for the nursing courses. In this way, the link between individual units of learning (courses) and the curriculum outcomes is evident and can be tracked. Further refinement is required for individual courses.

The curriculum goals encompass the key professional abilities and the core curriculum concepts that have been derived from the analysis of contextual data. Therefore, during the delineation of prerequisite professional abilities and subconcepts, the interrelationships among the professional abilities, and among the concepts, are revealed. Ultimately, this process results in a logical progression from the learning expectations and experiences in the first courses to those in subsequent courses, and then to the expectations at graduation.

Nursing Courses

Nursing courses are typically identified first. The interface between level goals or outcomes/competencies and the organization of identified concepts gives rise to decisions about the nature, number, and configuration of nursing courses. These decisions rest upon the program model, structure, organizing strategy, course-sequencing pattern, and all previous decisions about the curriculum.

As ideas for courses are being proposed, it is important to examine all the curriculum possibilities that were proposed when contextual data were analyzed. Among the possibilities may be ideas for courses, or several possibilities might be combined to form a course. The value of the time spent in analyzing the contextual data and brainstorming about curriculum possibilities becomes readily apparent when nursing courses are being identified.

The following questions could shape the discussion:

- Which of the curriculum possibilities that were proposed during the analysis of the contextual data fit best with philosophical approaches and program goals or outcomes?
- Are there curriculum possibilities that logically combine to form meaningful courses?
- Which ideas about curriculum possibilities warrant further development?
- How can core curriculum concepts be integrated with increasing depth throughout the curriculum?
- How could concepts be grouped into courses?
- How many nursing courses are possible within the program structure?
- Which nursing courses could be included?
- Are there courses in other academic units that would be suitable rather than developing nursing courses?
- How will the overall focus of each course contribute to the educational endpoint of the curriculum?
- What is a reasonable sequence for these courses?
- What could be the goals or competencies for the proposed courses?

In defining the general substance of each course, curriculum designers may struggle with the tension between substantive knowledge for nursing practice

and adherence to a conceptual approach. Although course details will be defined later, at this time it is important to be clear about the predominant concepts and general focus of each course. Brief course descriptions and course goals or outcomes/competencies should be drafted. These will give all faculty members an understanding of the intent of all nursing courses.

Nursing courses titles are important. Generic titles, such as *Nursing Care of Adults* or *Clinical Practicum*, do not provide sufficient information about the concepts or professional abilities that will be addressed. As much as possible, nursing course titles can be created to match the organization of the major curriculum concepts. The use of nomenclature aligned with the major curriculum concepts conveys the intellectual dimension of nursing and gives conceptual and visual unity to the curriculum.

Each course title should convey the main conceptual, process, and/or contextual focus of the course in accordance with the overall curriculum design. For example, the course title, *Health Promotion and Caring: Families and Communities*, includes the concepts and processes of health promotion and caring, and specifies families and communities as the context. Similarly, the title, *Professional Practice: Families and Communities*, makes evident the process of the course (professional practice) and the context in which students will engage in the process. Collectively, course titles ought to present a picture of a unified curriculum. In **Table 12-1** is a partial list of nursing course titles for a curriculum whose metaconcepts are Health Promotion and Caring, and that has adopted

Year 1:	Foundational Concepts of Professional Nursing Health Promotion and Caring for Self, Colleagues', and Clients' Health Holistic Health Assessment
Year 2:	Health Promotion and Caring: Families and Communities Professional Practice: Families and Communities Health Promotion and Caring: Supporting Health Professional Practice: Supporting Health Ways of Knowing: Research
Year 3:	Health in Global Contexts Health Promotion and Caring: Clients with Health Challenges Professional Practice: Clients with Health Challenges Health Promotion and Caring in Rural Contexts Ways of Knowing: Data Analysis
Year 4:	Professional Ethical and Legal Obligations: A Critical Appraisal Advanced Concepts for Professional Practice Professional Practice: Clients with Complex Health Challenges

*Metaconcepts: Caring, health promotion. Other curriculum concepts: Holism, health, ways of knowing, culture, context, professional practice
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the terminology of *professional practice* for all lab, simulation, and client-based learning experiences. Curriculum concepts are evident in the course titles.

Required Non-nursing Support Courses

Consideration should be given to required non-nursing courses that contribute to students' knowledge and understanding of nursing. These courses are typically called *support courses*. However, it is important to remember that these courses do not merely support the nursing curriculum; they are an integral and essential part of it.

Substantive knowledge from liberal arts and psychosocial and health sciences are necessary for the development of open-minded, educated, and informed nurses. Students' interaction with an array of concepts, processes, and worldviews expands the depth and scope of their learning and helps them think critically from a broader, more comprehensive knowledge base. Therefore, deliberations about required non-nursing support courses, prerequisites, the number of electives and whether electives are chosen from a recommended list or freely selected, form part of the dialogue about design. These decisions will hinge on the institutional philosophy, the philosophical and educational approaches, and the intended outcomes of the nursing curriculum. Modification of existing required non-nursing support courses, or development of new ones, could be discussed and then negotiated with the relevant departments. Conclusions about required non-nursing support courses are reached through consideration of their nature, contribution to students' achievement of curriculum goals or outcomes, and fit in the curriculum.

Interprofessional Courses

Courses shared across health science disciplines can also form part of the curriculum. Because it is important for nursing students to respect the goals and perspectives of other disciplines, and to learn to work collaboratively with members of many health disciplines, they require opportunities to learn and interact in multidisciplinary teams and practice settings. Faculty members committed to interprofessional education and practice need to design and schedule courses in concert with colleagues from other disciplines, bearing in mind each discipline's curriculum, philosophies, and roles. It is important that intellectual cross-pollination among students be a constant feature of courses through discussion, shared projects, and shared professional practice learning.

Developing Curriculum Maps

Curriculum mapping is a process for recording essential curriculum-related data, such as course goals or outcomes, concepts, content, skills, teaching-learning

processes, assessment strategies, and others. The amount of detail in the maps depends on the preferences of curriculum developers. The information is typically recorded in a table format, such as the curriculum matrix proposed in Figure 12-1. Curriculum maps can be developed prospectively (i.e., before implementation) to provide a visual representation of the intended curriculum. They may also be created retrospectively (i.e., after implementation) to depict what is actually happening in the curriculum.

Curriculum maps provide a shorthand view of the curriculum and the curriculum logic for curriculum participants and reviewers. They make it possible to identify gaps, redundancies, logical progression, inconsistencies, misalignments, and so on in the curriculum as a whole and in individual courses.

The maps can serve as a basis for internal curriculum evaluation and subsequent curriculum revision. A comparison of the prospective and retrospective maps allows curriculum developers to assess the consistency between the design and the implementation (i.e., implementation fidelity), one aspect of curriculum evaluation. Any differences become a basis for review and further planning, either at the course or curriculum level.

Mapping Curriculum Concepts

Once agreement is reached about the overall course design, concepts can be mapped across the curriculum. This requires locating the courses in which the concepts will be addressed, the depth to which the concept will be considered, and expectations of what students will do with the concept. The following are descriptions of the depth of concepts and expectations of students:

- *Introduction*: The concept is introduced. Students are expected to explain the concept and its importance to nursing practice in a basic way.
- *Beginning*: More depth is added to the meaning of the concept. Students are expected to propose how it is applied in nursing practice. They should identify and use the concept in nursing practice, possibly with guidance.
- *Developing*: Complexity is added to the meaning of the concept. This complexity can arise from expanded theoretical explanations and/or contextual applications. Students are expected to apply the concept readily in assignments and nursing practice.
- *Advanced*: Sophisticated interpretations or applications of the concept are evident. Students are expected to analyze the concept and its use in nursing practice.
- *Integrated*: The concept forms part of the “gestalt” of class discussions, students’ nursing practice, and assignments. Students are expected to use the concept and recognize its presence easily and accurately (Iwasiw, 2012, p. 1).

Adoption of this typology allows for mapping of the concepts across the curriculum with a two-way matrix. On one axis, nursing courses are listed and on the other axis are the curriculum concepts. Then the level of the concept in each course is recorded in the cells. In this way, the increasing depth of the concepts becomes readily evident. There is no expectation that all concepts will be considered in all nursing courses. However, in final practicum or capstone courses, students should be working with the concepts at an integrated level. An example of a partial curriculum map of concepts and their levels is presented in **Table 12-2**.

Mapping Other Aspects of the Curriculum

Other curriculum maps can be developed. For example, educational strategies, written assignments (Hale, 2008), assessment methods, and/or exemplars used to illustrate concepts might be mapped. Such planning would ensure that educational approaches are consistent, assignments are reflective of course goals or competencies, the timing of assignments is reasonable for students, and suitable exemplars are used to illuminate the concepts. In addition, sufficient variety could be planned across the curriculum. Also, in a content-focused curriculum, content can be mapped (Landry et al., 2011), and in an outcomes-focused curriculum, competencies can be mapped (Perlin, 2011).

Table 12-2: Example of a Partial Curriculum Map of Concepts and Concept Levels

	YEAR ONE	YEAR TWO		YEAR THREE		YEAR FOUR	
Nursing Courses → Concepts ↓	Health Promotion and Caring for Self, Colleagues, and Clients	Introduction to Health Promotion and Caring: Families and Community	Ways of Knowing: Research	Health in Global Contexts	Professional Practice: Clients with Health Challenges	Future Directions for Nursing and Health Care	Professional Practice: Clients with Complex Health Challenges
<i>PERSONS</i>							
Clients: Individuals, families, groups, communities	Intro/Begin	Dev		Dev/Adv	Adv	Int	Int
Self	Intro/Begin	Dev		Dev/Adv	Adv	Int	Int
Diversity	Intro/Begin	Dev		Dev/Adv	Adv	Int	Int
Personal meaning	Intro	Beg/Dev	Dev	Dev/Adv	Adv	Int	Int

Legend: Intro = introductory; Begin = beginning; Dev = developing; Adv = Advanced; Int = integrated

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Attending to Implementation Matters

As design ideas are presented and discussed, thoughts naturally turn to how the ideas can be implemented. Curriculum developers ask themselves if the design proposals are feasible within the school and community contexts. Additionally, they consider the logistical arrangements that are required for the design to be implemented. Consideration of the feasibility and practicalities of ideas is an important element of creating a realistic curriculum. No matter how elegant a curriculum design is, it has no value if it cannot be realized. Therefore, matters related to curriculum implementation form an essential and ongoing part of the deliberations about design.

Determining Policies and Guidelines

A policy is a firm course of action that must be adhered to in every situation. The function of academic policies is to support and guide the achievement of the program and institutional mission and outcomes (Applegate, 1998) with consistency and fairness. They help students and faculty understand their rights and responsibilities in a transparent way while protecting the integrity of the academic institution (“Academic policies,” n.d.).

Institution-wide educational policies apply to all academic constituencies. They address matters such as a transfer from other institutions (Purcell, 2006), students’ academic rights and responsibilities, students’ involvement in institutional governance, scholastic discipline, student support, enrollment status, graduation requirements, nondiscrimination, and human rights.

Discipline-specific policies apply only to the involved program. The latter must be consistent with those of the larger institution, and with the philosophical approaches of the curriculum. Reviewing current policies, possibly modifying them, and perhaps developing new policies is part of the curriculum design process. Regular review of curriculum policies is important (Ellis, 2016) and curriculum designers contribute to this aspect of curriculum quality assurance as they consider policies for a reconceptualized curriculum.

Policies specific to nursing would include requirements necessary for admission and progression in the program. Policies might also address matters such as attendance at professional practice experiences, laboratories, and/or class, definition and consequences of unsafe professional practice, confidentiality, immunization requirements, language proficiency standards, and dress code.

Dols et al. (2017) have detailed a process for policy development in nursing practice that can be adapted for nursing education. The process design team could:

- Informally determine faculty members’ support for the policy idea
- Identify current resources relevant to the policy topic, including institutional policies

- Develop the policy and any necessary protocol, ensuring that it logically flows with the curriculum's philosophical approaches and existing policies
- Present the policy for approval currently with the request for curriculum design approval by faculty

When devising policies, curriculum designers need to differentiate between policies and less formal guidelines for action. Guidelines, or guiding principles, present an appropriate course of action for a specific situation, although there may be some context-dependent flexibility (e.g., dress code for professional practice). Policies and guidelines are important to articulate, especially when multiple educational institutions are involved in offering all or parts of a curriculum.

Considering Human and Financial Implications

Every curriculum has human and financial implications; therefore, it is essential that the school leader be kept informed of the emerging design. A successful design depends on the availability of adequate resources for implementation, and the school leader is in the best position to know if those resources will be present.

A reconceptualized curriculum design might mean significantly changed teaching assignments for some faculty members. The school leader needs to be fully apprised of the emerging design so that teaching assignments and faculty development can be planned. If the new curriculum includes more nursing courses than previously, more professional practice time, or new opportunities for international placements, there will be increased teaching costs. If financial resources in the school cannot support the proposed design, then the school leader knows how and with whom to negotiate for additional funding. The financial impact of new or revised curricula on all educational institutions involved in offering the curriculum must be discussed and negotiated in advance of any changes being made. Modifications to the design will be necessary if adequate financial resources are not forthcoming.

Alternately, a curriculum redesign may mean that some faculty members will no longer be required. A change from supervised professional practice to more independent practice, for example, could result in reduced numbers of instructors. The school leader may need to inform long-standing, part-time faculty members that their employment will be decreased in amount or cease entirely. Similarly, proactive planning, with close attention to collective agreements requirements, is critical if it is anticipated that the full-time nontenured faculty complement will be reduced. Concomitant with decreased faculty costs could be a decreased budget for the school. If so, strategic planning will be necessary to retain the school's budget.

It is essential that possible financial implications for students be taken into account when designing a curriculum. An increased reliance on distance delivery could make it possible for geographically dispersed students to enroll in the nursing program. Yet, if those students must then travel a considerable distance

for professional practice experience, the associated costs could preclude their enrollment. Similarly, on-campus students may find travel to new practice sites difficult. It is important that the anticipated costs to students are considered and that accurate information is provided to prospective applicants.

Deciding on the Design

When deciding on a curriculum design, the design team can construct several options, with different configurations of courses, and judge the advantages and disadvantages of each. Ultimately, one design will be proposed that is optimally useful, responsive to current and future social contexts, flexible enough to allow for ongoing refinement, and congruent with the curriculum foundations.

Like other aspects of curriculum development, it is important that the design team's work be reviewed and approved by the total faculty group. The level or semester goals or competencies, configuration of courses, draft course goals or competencies, brief course descriptions, and matrix of concepts are presented to the total faculty group. The templates and matrices can facilitate the group's understanding. It is important that the faculty group is satisfied that the design represents an evidence-informed, context-relevant, unified curriculum.

Creating Course Templates

Creating templates for course syllabi and guidelines for student learning activities facilitates subsequent course development. These models provide a cognitive scaffold as curriculum work proceeds. Use of the same template in all courses adds to the unified nature of the curriculum. A template for course syllabi is described in another chapter. Templates can also be created to map the details of courses (Hagler, White, & Morris, 2011).

Summary of Design Processes

There is no formula for developing an overall curriculum design. Curriculum developers will create processes that are useful to them. However, in all cases, the processes are iterative, because firm decisions can be made only when an overall design is created. Activities such as defining and mapping concepts, proposing course titles, and sequencing occur in a concurrent and recursive fashion, reflective of logical and creative thinking. The core curriculum concepts, key professional abilities, philosophical and educational approaches, and curriculum goals or outcome statements are the touchstones for assessing a proposed design. With persistent attention to these, and to implementation matters, curriculum developers can be confident that they are creating a feasible, evidence-informed, context-relevant, unified curriculum.

Planning Curriculum Evaluation

Concurrent with the curriculum design process is creation of a plan for curriculum evaluation. Curriculum evaluation ought to be planned along with the curriculum design process, because curriculum foundations are uppermost in faculty members' minds at this time. Therefore, it is relatively easy to think about curriculum evaluation processes that would be consistent with them. Additionally, faculty members' focus on the foundations and the curriculum design leads to ideas about the content of the evaluation, that is, what to evaluate, as well as how to evaluate.

Planning curriculum evaluation is often overlooked because of the urgency to complete the design. Yet, if curriculum evaluation is considered, faculty members can be sure that it will indeed be possible to evaluate the curriculum components. Attention to curriculum evaluation is one form of ongoing appraisal of the design. For example, faculty members can ask themselves how they might determine students' achievement of the curriculum goals or intended outcomes, or how they could assess the presence of the philosophical approaches in the enacted curriculum. If the responses to such questions are robust, they can feel confident about the design; if not, then some revisions may be necessary so that sound evaluation data can be obtained in the future.

Complete planning of curriculum evaluation will likely not occur until after implementation begins. However, it is worthwhile to consider and record ideas about evaluation as the curriculum is being designed.

Relationship of Curriculum Design to an Evidence-Informed, Context-Relevant, Unified Curriculum

The curriculum foundations, that is, core curriculum concepts, key professional abilities, and the philosophical and educational approaches, are developed from data about the context in which the curriculum will be offered and graduates will practice. From these, the curriculum goals or outcome statements are formulated. Thus, the evidence-informed, context-relevant nature of the curriculum foundations is assured.

The unified nature of the design is expressed in the expectations of students throughout the curriculum. First, the curriculum goals or outcomes are developed and from these, the level goals or outcomes/competencies are derived. Then, course expectations are derived from level expectations. Thus, there is a logical and visible progression and alignment in what students are expected to achieve. Additionally, the nature and sequence of courses that will allow students to achieve the curriculum expectations reflect unity between curriculum goals or outcome statements and courses.

Moreover, the designation of concepts for courses throughout the curriculum, with increasing depth, indicates that courses are not separate from one another but rather are connected by the increasing level of student expectations in relation to their understanding and use of the concepts. Course titles that consistently reflect the curriculum's conceptual bases are important in the visual unity of the curriculum. Further, the creation of course templates for use during course development assists in the development of course materials that are unified in appearance and conceptual orientation. Finally, attention to the processes and content of curriculum evaluation heightens the unity between the design and the future evaluation.

Core Processes of Curriculum Work

Faculty Development

The overall goal of faculty development in relation to curriculum design is to expand members' knowledge and appreciation of curriculum design. As with all aspects of faculty development, the precise activities will be dependent on faculty needs.

Faculty development can include a brief review of the goals of the curriculum design process and the parameters that constrain it. Then, attention can be given to the processes of designing an evidence-informed, context-relevant, unified curriculum. This might include reviewing the curriculum work completed to date and an explanation of the connections between that work and designing the curriculum.

In a workshop setting, a draft curriculum matrix might be introduced for small groups to consider and modify. In this way, the faculty development activity would contribute directly to the design process. Additionally, a matrix of courses and concepts could be introduced and faculty asked to complete the cells, delineating the level at which concepts could be addressed in each course. This would help them appreciate how concepts are built across the curriculum and addressed in courses.

Ongoing Appraisal

While designing the curriculum, curriculum developers repeatedly ask themselves questions such as:

- Is the organization of the concepts reasonable?
- Are the definitions of the concepts clear and acceptable? Are they understandable? Is there a reasonable progression in the depth of concepts?

- Does the design represent a context-relevant curriculum?
- Is the design congruent with the philosophical and educational approaches?
- Will the design allow for the continuous and evident presence of the core curriculum concepts and key professional abilities? Is the unity visible?
- Are there opportunities for students to achieve the curriculum goals or intended outcomes?
- Does the design seem logical?
- Are the draft course descriptions convincing?
- Is the design feasible within the school of nursing and the external context?
- Have the logistics of implementation been adequately considered?
- Does the design support the institutional mission?
- Is anything missing?
- Can faculty members and other stakeholders commit to this curriculum?
- Is this curriculum design of the quality expected by the school and institution?
- Is this design of the quality that will likely be acceptable to external reviewers?
- How can curriculum evaluation be planned to be consistent with the curriculum tenets?

Scholarship

Faculty members undertaking curriculum design might consider scholarship about the processes they are experiencing, analyzing reasons for the challenges faced, and describing how those challenges were resolved. Publications about student and stakeholder involvement in curriculum design would be a valuable addition to the literature. A comparison of design processes in several schools of nursing could be instructive to schools undertaking curriculum development.

Further, increased sharing of curriculum designs would be a benefit to nursing faculty members everywhere who are struggling with designing curricula in the face of budget constraints and expanding and intensifying expectations by external organizations associated with higher education and health care. Research about curriculum design might include studies of the processes used in several health professional programs with the intent of identifying common processes that could be relevant to the development of IPE.

CHAPTER SUMMARY

The curriculum design is the configuration of the program of studies. The design must be congruent with the institution and school's mission and purpose, and with faculty values and beliefs. It should be directed and oriented to student learning, and reflect the curriculum concepts, goals or intended outcomes, and context of nursing practice. Curriculum developers need a clear sense of purpose and commitment to completing the task of design in a timely fashion. Because of human resource and financial implications, it is necessary that the school leader be apprised of the emerging design.

The chapter includes descriptions of elements important in curriculum design such as the program type, structure, and delivery approaches. Information is provided about educational designs, strategies to organize knowledge, and IPE. The process of designing an evidence-informed, context-relevant, unified curriculum is detailed, beginning with confirming the goal of the design process and identifying curriculum parameters. Attention is given to identifying courses and mapping the curriculum. Policy development is addressed, as are human and financial implications of curriculum design. Consideration of curriculum evaluation is included. The relationship of curriculum design to an evidence-informed, context-relevant, unified curriculum is explained. Finally, the core processes of faculty work in relation to designing the curriculum are described.

SYNTHESIS ACTIVITIES

Copper Horizons University College of Nursing is undertaking the design of a new curriculum, and information about this process is presented for review, analysis, and discussion. Questions are suggested to stimulate critique. Following the case, questions and activities about designing curricula in readers' settings are offered.

■ Copper Horizons University College of Nursing

Copper Horizons University is a public university situated in a large metropolis. It began as a technical school named *Copper Horizons*. The name comes from a comment of the first principal of the technical school, who remarked when the land was first purchased: "When I look around, I see the copper beeches, purple in summer, and a haze of copper horizons

in the misty autumn sunsets.” The Board of Governors appreciated the poetic bent of the principal’s observation and voted to name the school *Copper Horizons*. They also took steps to ensure that there would always be copper beeches on the property. When it became a university, the institution’s motto was devised: *Copper Horizons, where your educational vistas are endless*.

Copper Horizons University offers a full-range of undergraduate and graduate programs on campus, many online, and some programs through hybrid delivery (i.e., some of the courses online and some on campus). Undergraduate on-campus courses are offered in day and evening sessions throughout the year. Because of time-tabling considerations, it is usual for full-time, on-campus students to enroll in some evening classes.

The present undergraduate nursing program is comprised of 2 years of foundational arts and science courses, followed by 2 years of nursing courses. Following considerable negotiation within the university, the college has made a formal request to offer a 4-year integrated curriculum. Nursing faculty members believe that such a curriculum will lead to students’ stronger integration of theory from all courses, and enhanced professional socialization, communication skills, and commitment to the tenets of the curriculum philosophy. They like the idea of students having 4 years “to mature in nursing.”

The undergraduate program chair, Dr. Abrisham Yazdani, is excited about the prospect of a 4-year curriculum because it was what she experienced as an undergraduate in her homeland. She recalls feeling hesitant about professional practice in her first year, building her knowledge and skills and sense of being a nurse throughout the program, and then graduating as a confident, evidence-informed nurse 4 years later. It was the 4-year immersion in the ethos of evidence-informed practice that led her to immigrate to North America so she could enroll in a master’s and then a PhD program.

Because the undergraduate curriculum was ready for updating and possibly complete reconceptualization, the faculty did not wait for university approval about a 4-year program to begin the process of curriculum development. They knew that the steps up to the design process would be the same whether they were planning an upper division BSN program or a 4-year integrated one. They wanted to be ready to design the curriculum once they learned of the university decision. Therefore, they gathered internal and external contextual data.

From the analysis of the contextual data, five categories of curriculum concepts were identified with a total of 27 concepts. The categories, with examples of concepts are listed below.

- Nursing and health care (e.g., ethics, healthcare system, evidence-informed practice)
- Physiological (e.g., oxygenation, digestion)
- Social (e.g., equity, justice)
- Interpersonal (e.g., empathy, empowerment)
- Leadership and team functioning (e.g., delegation, collaboration)

Faculty members recognize that the categories and concepts are not mutually exclusive. They consider this to be reasonable because all relate to nursing practice, which is an integrative activity. Moreover, they recognize that a focus on any one concept will necessitate use of other concepts in classes and professional practice experiences.

The philosophical approaches of the curriculum emphasize humanism, nursing's social contract, egalitarian relationships, evidence-informed practice, and empowerment. The educational approaches selected are consistent with brain-based learning, experiential learning, and competency-based education. The outcome statements address collaboration with professionals and clients in the provision of evidence-informed, client-centered care, effective communication, ethical and cultural competence, and advocacy to enhance social justice.

Dr. Yazdani opens the first meeting of the design committee with the question, “What kind of curriculum design will ignite students’ learning?”

■ Questions and Activities for Critical Analysis of the Copper Horizons University College of Nursing Case

1. What rationale would convince university administrators that a change from an upper-division nursing program to a 4 year integrated program would be advantageous? With whom should consultation or negotiation occur before asking for university approval?
2. Appraise the process that the faculty has completed as they have prepared for the design phase of curriculum development.
3. How will the curriculum foundations influence the curriculum design?
4. What might be some parameters for the design?

5. How might members of the design committee respond to Dr. Yazdani's question?
6. How should the design committee proceed with its work?
7. How can nursing faculty members plan experiences that will allow students to achieve the intended curriculum outcomes? How could these experiences be mapped?
8. Should interprofessional education be included in this curriculum? If so, should members of other health disciplines be involved in the design of the nursing curriculum? If so, why and how? If not, why not?
9. Although the information in the case is limited, develop a possible design for this 4-year curriculum.

■ **Questions and Activities for Consideration When Designing an Evidence-Informed, Context-Relevant, Unified Curriculum in Readers' Settings**

1. Which program structure is most appropriate for the type of program being developed? Why?
2. Select the program model that best reflects faculty beliefs about learning. Explain why this is the best. If this is not the program model currently in use, what should be done?
3. Should a partnership be considered to extend access to the program? Why or why not? If yes, who could the partners be?
4. Identify delivery method(s) supported by the educational institution and by faculty members. How will the supported delivery method(s) affect the curriculum design?
5. Who should be a part of the curriculum design team? How can the work be accomplished if faculty resources are limited?
6. Determine the organizing strategy that best assures students' logical progression to, and achievement of, curriculum goals or intended outcomes.
7. Develop a curriculum map to reflect the developing ideas about curriculum design.
8. Create a process for defining curriculum concepts expeditiously. How can consensus about the definitions be achieved?
9. Recommend nursing, support, and elective courses that will best facilitate achievement of the curriculum goals or intended

outcomes. Should there be interdisciplinary, multidisciplinary, and/or transdisciplinary courses? Describe the process for developing interprofessional courses or experiences and identify colleagues who could be involved.

10. Develop two or more possible configurations of courses that should be considered.
11. How can courses be titled to ensure conceptual and visual unity?
12. Assess the influence of existing institutional policies on the curriculum design.
13. Consider whether curriculum policies need to be developed or modified.
14. What negotiations should take place with other academic units to operationalize the envisioned curriculum?
15. Make recommendations about the resources required to support the curriculum design process.
16. Identify the resource implications of the curriculum design.
17. Draft a tentative plan for curriculum evaluation.
18. Plan faculty development activities related to curriculum design.
19. Suggest questions for ongoing appraisal of the emerging curriculum design.
20. Propose scholarship activities that could be undertaken.

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Creating Courses for an Evidence-Informed, Context-Relevant, Unified Curriculum

CHAPTER PREVIEW

Following completion of the curriculum design, attention turns to the creation of individual courses. In this chapter, descriptions of course components are offered, including a synopsis of strategies to ignite learning. Information about design parameters and approaches to course design are presented. The process of creating evidence-informed, context-relevant, unified courses is detailed and ideas about creating individual concept-based classes are offered. Matters about course implementation and evaluation are addressed. The relationship between course design and an evidence-informed, context-relevant, unified curriculum is explained. Possibilities for faculty development, ongoing appraisal, and scholarship associated with creating courses are proposed. The chapter concludes with a summary and synthesis activities.

QUESTIONS ADDRESSED IN THIS CHAPTER

- What are the essential components of a course?
- What are the parameters that influence course design?
- What approaches are useful in course design?
- How can conceptually based courses be created?
- What is the value of planning course evaluation concurrently with designing courses?
- What is the relationship between course design and an evidence-informed, context-relevant, unified curriculum?
- In what ways are the core processes of faculty development, ongoing appraisal, and scholarship related to creating courses?

Course Design

An academic course is a recognized unit of learning within an overall curriculum. It is created with components that outline the purpose of the course, what students are to accomplish, and what will transpire in the course. The intent of creating courses is to achieve engaging learning experiences for students while ensuring unity and coherence within each course and among courses. Course design begins as soon as a curriculum design has been approved and truly never ends, because courses are refined throughout the life of the curriculum. In the sections that follow, the design of a course is differentiated from the design process.

The *design* of a course (course design) refers to its configuration, encompassing all components (title, purpose, and description; goals/objectives or competencies; strategies to ignite learning; concepts and substantive content; classes; opportunities for students to demonstrate learning; and evaluation of student achievement), as well as the relationships between and among them. The process of designing courses, or the *course design process*, refers to the discussions and decision making that lead to the configuration of a course. This process personalizes the evolving curriculum by giving faculty members a sense of ownership about the courses they create and may teach.

The course design process is cyclical, that is, after implementation, courses are evaluated and possibly modified. The starting points of each course design are year, level, and semester goals or competencies, brief course descriptions, and the concepts mapped for each course during curriculum design. The agreed-upon philosophical and educational approaches are enacted within courses. Collectively, the courses prepare students to achieve the curriculum goals or intended outcomes.

Course Design Components

The terminology used to describe course components varies among nursing programs. Nonetheless, all course components are present in all academic courses, whether they are theory, professional practice, or laboratory, and whether offered through traditional, distance, or hybrid delivery. Ideas about each component influence ideas about all other components in the iterative design process. In other words, decisions about each component can lead to reexamination and possible modification of other components within and among courses. The course components generally included in course syllabi are listed in **Figure 13-1**. Each component is subsequently described separately for the sake of clarity and illustrated as it pertains to one specific course.

- Course Title, Purpose, and Descriptions (Brief/Calendar and Expanded)
- Course Goals or Course Competencies
- Course Concepts and Content
- Strategies to Ignite Learning
- Individual Classes
 - Guidelines for Student Learning Activities
 - *Overview and goals, preparatory, in-class, and follow-up activities*
- Opportunities for Students to Demonstrate Learning and for Faculty to Evaluate Student Achievement
- Student development and interaction
 - As a professional nurse
 - As an interprofessional team member
 - When working with faculty members and peers
- Textbooks and other resources

Figure 13-1. Course components relevant for inclusion in course syllabi.

Course Title, Purpose, and Description

The course title should convey the main conceptual, process, and/or contextual focus of the course in accordance with the overall curriculum design. The title will immediately create expectations in faculty members, students, and professional practice stakeholders about the intent of the course, and this intent is described in the purpose statement.

A statement of purpose makes evident why the course is part of the curriculum and how it contributes to students' achievement of curriculum goals or intended outcomes. Although the purpose may be readily apparent to curriculum designers, the reason for the existence of the course in the curriculum might not be obvious to students or others, such as external reviewers. Therefore, explicit statements about the course purpose and how it contributes to students' development as professional nurses, make evident the value of the course in their progress toward career ambitions.

Each course requires a brief description that is published in the institutional catalogue or calendar. Class or professional practice hours, course credits, and pre-, co-, or antirequisites are generally stated as necessary. This description

would have been drafted during the overall curriculum design and is the basis of an expanded course description. A sample calendar description follows in **Figure 13-2**.

An expanded course description in a course syllabus provides more detail for students. It provides information about the scope of the course and specifically identifies concepts that will be addressed. The expanded description can be written in the second person to personalize the ideas so they will have more impact for each student. A sample expanded course description is presented in **Figure 13-3**.

Course Goals or Course Competencies

Course goals or competency statements are also included in the syllabus. The goals or competencies describe the abilities expected of students at the end of

Professional Ethical and Legal Obligations: A Critical Appraisal

This course will critically review ethical theories, the legal and ethical aspects of nurses' roles, and nursing's commitment to healthy public policy, social justice, and advocacy.

Antirequisite(s): The former Nursing 2254A/B, 2204A/B

Prerequisite(s): Registration in Year 4 of the Western-Fanshawe Collaborative BScN or Compressed Time Frame BScN program

Extra Information: 3 lecture hours, winter term, 0.5 credit

Figure 13-2. Calendar description of *Professional, Ethical, and Legal Obligations: A Critical Appraisal 2017–2018*.

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This course is organized according to the College of Nurses of Ontario (CNO) *Conceptual Framework for Organizing Competencies* (CNO, 2014). In this course, learners will critically examine professional practice issues specifically focused on professionalism, nursing regulation, practice standards, and ethical and legal aspects of nursing. This course also examines the evolving roles within nursing and addresses professional responsibility and accountability to healthy public policy, social justice, advocacy, and patient safety. This course integrates multiple ways of knowing with emphasis on emancipatory knowing.

Figure 13-3. Expanded course description in syllabus for *Professional, Ethical, and Legal Obligations: A Critical Appraisal 2017–2018*.

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the course and are written using the same format as the curriculum and level goals or competencies.

Learning, a process that leads to the acquisition or development of new knowledge, understandings, and abilities, is the ultimate purpose for which courses are designed. The nature of students' anticipated learning achievement is expressed in the course goal or competency statements. Preliminary course goals or competencies, derived from curriculum and level goals or competencies, are formulated when courses are identified and configured as part of curriculum design. It is important that these be refined so they are specific and feasible for each course.

Important concepts should be evident in the course goal or competency statements. The number of goals or competencies may exceed the number written for each level because the course expectations are written with greater specificity. Expectations for all courses in the same level need to collectively "add up" to the semester goals or competencies. However, each course need not address every semester goal or competency. In **Figure 13-4** is an example of course goals.

Course Concepts and Content

The course concepts and their depth are delineated in the concept mapping activities of curriculum design, as described in an earlier chapter. Each course also has a substantive subject matter focus and this content focus is typically of most immediate interest to students. Within all courses, the concepts and scope of content are conveyed in the form of titles or topics for each session, along with required readings. Students may initially focus on the substantive content, but it is the course concepts that determine the relevant information to be addressed.

The substantive information (the subject matter consisting of facts, concepts, hypotheses, methods, etc.) is selected to illuminate the curriculum concepts and provide an avenue for students to develop knowledge and the thinking and attitudinal processes of nursing practice. Because *all* content cannot be addressed, the course topics must be judiciously selected. Students require content as one of the building blocks that shapes their thinking and affective qualities; therefore, substantive content remains an important aspect of concept-based courses. Examples of major concepts in an undergraduate course on legal and ethical obligations are presented in **Figure 13-5**.

In a concept-based theory course, professional practice exemplars are selected to illuminate the concepts and to direct students to essential substantive content. Therefore, when determining course content, it behooves faculty members to consider the concepts to be addressed and the required substantive

Course Goals

Students will:

1. Examine the leadership and professional culture of the nursing profession.
2. Reflect on historical and contemporary issues and trends in nursing and explore the influence of social, political, and personal power structures in assuming professional roles.
3. Develop in-depth understanding of health professional legislation and nursing regulation including professional requirements as outlined in the College of Nurses of Ontario (CNO) *Professional Standards & Standards of Practice for Registered Nurses*; CNO *Ethical Values*, and the Canadian Nurses Association *Code of Ethics for Registered Nurses*.
4. Critically examine selected moral, ethical, and legal issues influencing nurses' ability and capacity to provide ethical, safe, knowledge-based quality health care from a health promotion and caring perspective in a variety of settings and contexts, and with a diverse client population across the life span.
5. Develop an understanding of the fundamental elements of patient safety and nursing's role in contributing to a culture of patient safety.
6. Engage in learning activities with colleagues that promote debate, collaboration, consultation, cohesion, critical thinking, caring and reflection.
7. Incorporate scholarship and critical reflection skills into one's own learning and nursing practice.
8. Apply a reflective, inquisitive, self-evaluative, responsible, and accountable attitude to professional practice and commit to lifelong learning.

Figure 13-4. Course goals for *Professional, Ethical, and Legal Obligations: A Critical Appraisal 2017–2018*.

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facts or theories. Additionally, they must decide the best fit between these as they develop the schedule of class topics. In this planning, attention is given to exemplars for which there is evidence about nursing practice so that students will learn about evidence-informed nursing practice in a way that is seamless, and not as a separate “add-on” to other ideas.

1. Clients	8. Relational Practice
2. Health and Healthcare Policy	9. Critical Reflection
3. Social Justice	10. Advocacy
4. Professionalism: Accountability, Self-regulation	11. Social Determinants of Health
5. Ethical Practice	12. Political Influences
6. Communication	13. Patient Safety
7. Collaboration	

Figure 13-5. Examples of concepts addressed in *Professional, Ethical, and Legal Obligations: A Critical Appraisal, 2017–2018*.

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In professional practice courses, content is comprised of the following:

- Concepts, knowledge, and professional abilities
- Thinking processes
- Values, attitudes, and professional comportment
- Client situations
- Interactions with clients and health professionals
- Insights and understandings developed during the experience

Being in the situation, applying previously held and new knowledge and abilities, seeking learning opportunities, reflecting on actions, and formulating new understandings are the intent of professional practice courses. A weekly topical schedule may be impractical. However, faculty members can identify particular concepts and professional abilities as the focus of experiences. It is also possible for concepts to be the sole or most prominent feature of professional practice experiences when students are primarily responsible for learning and not client care (Nielsen, 2016).

Faculty members' deliberate attention to curriculum concepts in professional practice courses will contribute to bridging the theory–practice gap and make evident the unity of the curriculum, as well as assist students to:

- Understand the relevance and importance of the curriculum concepts for practice in specific contexts.
- Apply the concepts in practice.
- Identify the concepts in the situations they encounter and make conceptual connections to previously experienced situations and previous learning.

- Analyze factors that influence the way in which the concepts are expressed.
- Plan interventions that will positively affect clients' experience of the concepts.
- Make generalizations about the concepts and consider their use in future care situations.
- Examine beliefs, values, and attitudes about the expression of the concepts by clients, colleagues, and other professionals.

Strategies to Ignite Learning

“The mind is not a vessel to be filled, but a fire to be ignited” (Plutarch, n.d.). This quotation encapsulates the intent of student-centered teaching, that is, teaching that has student learning and not teacher activities at its core. The teaching responsibilities in such situations are to:

- Plan classes and professional practice experiences that will appeal to students, be meaningful and memorable, and propel them to “devote physical and psychological energy” (Astin, as cited in Popkess & McDaniel, 2011) to a learning endeavor.
- Facilitate learning activities that will require students to work with, appreciate, and integrate knowledge, and not merely absorb or recall it.
- Encourage students' development of their own understandings, attitudes, insights, and connections to previous knowledge and experiences, and to anticipated experiences.

Teaching-learning strategies are specific actions planned by a faculty member to ignite students' learning. These are termed *teaching-learning strategies*, rather than merely *teaching strategies*, to emphasize that learning is the purpose of the activities. Moreover, through planning for students' learning and through interaction with them, faculty members expand their own understanding and insights, and thus are learners themselves.

Contemporary teaching-learning strategies promote active learner engagement and motivation through students' active roles in learning. Examples of strategies that require active engagement by students are the following:

- Professional practice experiences
- Simulated professional practice
- Virtual reality experiences
- Cooperative and collaborative projects, possibly using cloud computing spaces, social media, or online forums
- Database searching
- Service learning

Other active learning strategies might involve the use of games, visual art, literature, film, music, narrative dialogue, humor and story-telling, problem- or context-based techniques, and purposeful reflection (Crookes, Crookes, & Walsh, 2013; Lowenstein, 2017). In general, these strategies have cognitive constructivism as the underlying theory of learning.

Strategies to ignite learning for professional practice courses are influenced by the size and level of the student group and the learning opportunities available in the setting. Direct client care and interaction, pre- and post-conferences, on-the-spot consultations, and questioning are commonly employed, as are observational experiences, peer teaching, preceptoring, interprofessional rounds, and reflective journaling. Psychomotor learning processes also receive attention in professional practice courses, in concert with the cognitive and affective learning processes.

Currently, there is a paradigm shift in higher education from teacher-centered to student-centered teaching (Stanley & Dougherty, 2010). As a consequence, the literature is replete with strategies to engage students in active learning. However, it is beyond the scope of this text to examine them all. **Table 13-1** provides a summary of selected strategies to ignite learning.

Strategies	Key Features
Consensus boards (charts)	Working in groups of four, each student takes one quadrant of a chart to write his or her own understanding of the main ideas of a topic. The students then reach consensus on the top three ideas and write these in the center of the chart (Hsu & Malkin, 2011).
Flipped (inverted) classroom	Instead of taking classroom time to introduce concepts, the instructor prepares a vod-cast (video podcast), video lecture, or screencast that students view in advance of the class. Traditional classroom activities have “homework” status, and class time is spent in interactive learning activities (Betihavas, Bridgman, Kornhaber, & Cross, 2016; Milman, 2012; Missildine, Fountain, Summers, & Gosselin, 2013; Njie-Carr et al., 2017; Patanwala, Erstad, & Murphy, 2017).
Graffiti boards	Several students write their response to an instructor’s prompt on the chalkboard. The class then discusses similarities, differences, and further ideas (O’Connor, 2013). Alternatively, all students write their responses on flip charts for everyone to see (Hsu & Malkin, 2011).
Inquiry-based critical self-reflection	Semi-structured and guided exercises that pose challenges and are somewhat ambiguous are used to help students develop self-regulated learning behaviors and learn content. Questioning, interpretation, investigation, and guidance help students to “systematically criticize, justify, solve and appraise the right answers” (Rusche & Jason, 2011, p. 341). Students prepare written reflection questions in response to readings and pose questions about the readings. These questions form part of class discussion.

(continued)

Table 13-1: Summary of Selected Strategies to Ignite Learning (<i>continued</i>)	
Strategies	Key Features
Mobile devices (M-learning)	Mobile devices (e.g., computer, iPad, iPod) are ubiquitous and are acknowledged as a legitimate means to access, consume, interact with, or create information. Their use is incorporated into classroom and other learning environments in a planned way so students seek and evaluate information and hone search skills (Clark, 2016; Smith, 2012). M-learning occurs synchronously and in the moment as new information is sought to support or assist with required performance (Clark, 2016).
Peer teaching, reciprocal learning	Students assume responsibility for teaching other students. They can be at the same or different levels in the program. Students work in pairs to instruct or guide a peer for a specified purpose (Goldenberg & Iwasiw, 1992; Iwasiw & Goldenberg, 1993). This can be used with lab, professional practice, and theory courses.
Social media	Social media are a means to engage others electronically, supported by Internet sites or software. Through the use of Facebook [®] , Google+ [®] , Twitter [®] , or similar applications, students can exchange information related to nursing courses. Groups can be formed within some applications for collaborative student work. The creation of blogs and e-portfolios could form part of course work through access to publicly available software (Schmitt, Sims-Giddens, & Booth, 2012).
Student-created dramas	Students interview individuals having a particular experience and write a reflective paper. Then, student teams prepare a script based on the interviews and present their dramas to peers (SmithBattle, 2012).
Team-based learning	Students form learning teams for the length of a course, which is divided into modules. There are specified preclass activities, individual and team testing in each class with immediate feedback, and activities to apply content during the remainder of the class (Mennenga, 2013).
Unfolding case studies	An unfolding case study (simulated or paper-based) presents a client situation in a way that promotes the development of students' clinical reasoning. Students respond to a practice situation in the absence of full information, as occurs in nursing practice. Further information is progressively revealed, prior decisions reviewed, and further problem solving undertaken (Day, 2011; Reese, 2011).
Quick writes	Students are asked to respond in writing to a class concept, film, narrative, and so on. They immediately reflect on their thoughts, feelings, and understandings (Hsu & Malkin, 2011).
Virtual worlds	A virtual world is "a synchronous, persistent network of people, represented by avatars, facilitated by computers" (Bell, as cited in De Gagne, Oh, Kang, Vorderstrasse, & Johnson, 2013, p. 392). Students enter the virtual world through their computers and interact with the characters, or respond to actions in the simulated world. The virtual world "combines the collaborative properties of [a] virtual community" (De Gagne et al., 2013, p. 392) with the graphics of an online game.

Outlined in **Table 13-2** are characteristics of many strategies to ignite learning that a novice nurse educator might find helpful. In this table, *group size* indicates the student numbers for which the strategy is suitable. *Student engagement* is the extent to which students participate actively in the learning process. *Learning curve* is a term that refers to the rate at which learning about

Table 13-2: Characteristics of Strategies to Ignite Learning					
Strategies	Group Size	Student Engagement	Learning Curve	¹ Relevant Cognitive Processes	² Relevant Affective Processes
Algorithms	All	Active	Moderate	Analyze, evaluate	Respond, value, organize
Audio-conferencing	Small	Passive	Minimal	Understand, apply, analyze, evaluate	Receive, respond, value, organize
Buzz groups	All	Active	Minimal	Apply, analyze, evaluate	Receive, respond, value, organize
Case studies, unfolding case studies	All	Active	Steep	Apply, analyze, evaluate, create	Receive, respond, value, organize
Clinical observation	Small	Active	Moderate	Understand, analyze, evaluate	Receive, respond, value, organize, internalize
Computer-assisted instruction	Large	Active	Moderate	Understand, apply, analyze	Respond, value, organize
Consensus boards	All	Active	Minimal	Analyze, evaluate, create	Respond, value, organize
Concept mapping	Small	Active	Moderate	Analyze, create	Value, organize
Debate/Argumentation/Structured controversy/Dilemmas (Phillips, 2016)	All	Active	Minimal	Analyze, evaluate	Respond, value, organize
Debriefing	Small	Active	Moderate	Understand, analyze, evaluate, create	Respond, value, organize, internalize
Direct client care	Small	Active	Steep	Apply, analyze, evaluate, create	All processes
Discussion	All	Active	Minimal	All processes	Receive, respond
Film/video	All	Passive	Minimal	Understand, analyze, evaluate	Receive, respond
Flipped classroom	All	Active	Moderate	Apply, analyze, evaluate, create	Receive, respond, value, organize
Games/Gamification/Quests	All	Active	Minimal	Apply, analyze, evaluate	Receive, respond, value
Graffiti	All	Active	Minimal	Understand, apply, analyze, evaluate, create	Receive, respond, value
High-fidelity simulations	Small	Active	Steep	Apply, analyze, evaluate, create	Receive, respond, organize
Humor	All	Active	Minimal	Remember	Receive, respond, value

(continued)

Strategies	Group Size	Student Engagement	Learning Curve	¹ Relevant Cognitive Processes	² Relevant Affective Processes
Imagery/Mindfulness (Phillips, 2016)	Small	Active	Minimal	Remember, understand	Receive, respond, value, organize, internalize
Inquiry-based critical self-reflection	All	Active	Moderate	All processes	Receive, respond, value, organize
Laboratory practice	Small	Active	Moderate	Apply, analyze, evaluate	Respond, value, organize
Lecture	Large	Passive	Minimal	Remember, understand	Receive, respond
Live patient simulations	Small	Active	Moderate	Apply, analyze, evaluate, create	Respond, value, organize, internalize
M-learning (mobile devices)	All	Active	Moderate	Understand, apply, analyze, evaluate	Receive, respond, value, organize
Metaphor	All	Active	Moderate	Analyze, evaluate, create	Respond, value, organize, internalize
Narrative dialogue/ Story-telling	Small	Active	Minimal	Analyze, evaluate, create	All processes
Online forums	Small	Active	Steep	Understand, apply, analyze	All processes
Oral examinations	Small	Active	Steep	All processes	All processes
Peer teaching	Small	Active	Steep	Understand, apply	All processes
Podcast, vodcasts	Large	Passive	Minimal	Understand	Receive, respond, value, organize
Portfolio/E-portfolio (Phillips, 2016)	Small	Active	Moderate	All processes	All processes
Preceptorships	Small	Active	Minimal	All processes	All processes
Pre-/post-conferences	Small	Active	Minimal	All processes	All processes
Problem-/context-based learning	Small	Active	Steep	Understand, apply, analyze, evaluate, create	All processes
Questioning	All	Active	Minimal	All processes	Receive, respond, value, organize
Quick write/1-minute paper	All	Active	Minimal	All processes	All processes
Reflective journaling	Small	Active	Steep	All processes	All processes
Response systems (e.g., clickers)	Large	Active	Minimal	Remember, understand, apply, analyze, evaluate	Receive, respond, value

Table 13-2: Characteristics of Strategies to Ignite Learning (continued)

Strategies	Group Size	Student Engagement	Learning Curve	¹ Relevant Cognitive Processes	² Relevant Affective Processes
Role-play with prebriefing and debriefing	Small	Active	Moderate	Analyze, evaluate	All processes
Social media (e.g., wiki, blog, twitter)	Large	Active	Moderate	Analyze, evaluate, create	All processes
Student-created dramas	All	Active	Steep	Understand, apply, analyze, create	All processes
Student presentations	All	Active	Steep	Create	Receive, respond, value, organize
Team-based learning	All	Active	Moderate	Apply, analyze, evaluate, create	All processes
Think-pair-share	Large	Active	Minimal	Apply, evaluate	All processes
Video-conferencing	Small	Active	Steep	All processes	Receive, respond, value, organize
Written assignments	All	Active	Moderate	All processes	All processes

¹Cognitive Taxonomy as described by Anderson, L. W., Krathwohl, D. R., Airasian, P. W., Cruikshank, K. A., Mayer, R. E., Pintrich, P. R., . . . Wittrock, M. C. (Eds.). (2001). *A taxonomy for learning, teaching, and assessing: A revision of Bloom's taxonomy of educational objectives*. New York, NY: Longman.

²Affective Processes as described by Atkinson, S. P. (2013). *Taxonomy circles: Visualizing the possibilities of intended learning outcomes*. BPP Working Papers. London, England: BPP University College.

the strategy is necessary for students to feel comfortable about participating in, and learning from, the strategy. The columns *Relevant Cognitive Processes* and *Relevant Affective Processes* refer to the levels of the cognitive and affective taxonomies that the strategies most directly address.

Although some strategies, such as high-fidelity simulation, can require students to use a wide array of cognitive and psychomotor processes, the complexity of the strategies makes them impractical if learning goals or competencies are directed toward the lower levels of the cognitive or psychomotor taxonomies. Therefore, judicious selection of strategies is important. Further, use of a variety of teaching-learning strategies throughout a course demonstrates attention to brain-based learning guidelines and respect for diversity in students' learning styles.

It is also important to consider strategies that will ignite the affective learning processes. Though difficult for faculty members to assess unless patient safety or compromised ethics become a concern, affective learning is nonetheless an essential part of learning to be a nurse. The development of respect, empathy, caring, and emotional intelligence are important aspects of student learning (Andrusyszyn, 1989) and strategies to assist students with these predispositions are important.

Use of evidence-informed strategies in classrooms and practice settings adds to the academic rigor of the curriculum. For example, the outcomes and efficacy of strategies such as problem-based learning, simulation, or service-learning have

been documented. Anecdotal and research reports about a host of strategies are available in nursing education and higher education literature, and these can provide ideas to course developers.

Individual Classes

Each course has a specified number and duration of formal sessions when faculty members and students interact. These sessions can be conducted in classrooms, professional practice settings, labs, or through cyberspace. In classroom courses, a topic is typically identified for each session. Although the structure of courses offered through distance or hybrid delivery methods may vary, the courses generally retain the idea of a “class” in which a conceptually meaningful unit of content is addressed weekly. If classes are clustered over a few days to compress course completion, several conceptually meaningful units are grouped and addressed in increasing complexity. For professional practice or laboratory courses, the “class” is each practice session, although professional practice courses would generally focus on integrating and not necessarily adding new concepts.

Guidelines for Student Learning Activities

Guidelines for student learning activities can be developed for each class, and, if created, they become part of the course syllabus. These describe the class overview and goals, as well as preparatory, in-class, and follow-up activities that students are expected to complete. The preparatory activities can include reading, engaging with other learning materials (e.g., websites, podcasts), interviews with clients, visits to community agencies, writing a vignette from a professional practice experience, completing a reflection, and so forth. The intent is for students to attend class ready to engage with the course concepts and substantive content, and not merely to receive information. The in-class activities typically include opportunities to process information and experiences, and work toward achievement of course expectations through interaction with theory, instructors, peers, clinicians, and/or clients.

The amount of detail in the guideline varies, and consideration must be given to the course level and learner maturity. Some faculty members prefer a general description (e.g., discussion, review), so that there is room for more specific planning as the class approaches, or so there is maximum opportunity for the instructor to respond to student engagement and understanding. Others provide more precise details (e.g., view a video entitled . . .). The learning activities are meant to be fluid and flexible rather than rigid and prescriptive. The plasticity allows instructors offering multiple sections of the same course to have some liberty to operationalize the subject matter within shared parameters. The follow-up activities provide suggestions for students to reflect on their learning, apply new knowledge to client situations, and develop deeper understandings.

The key feature of the guidelines is that they require active student engagement. Thus, they reflect a belief that learning is optimized when students are responsible for acquiring knowledge, participating in the development of understandings, analysis, synthesis, and shaping knowledge within a personal and social context. In **Figure 13-6** is an example of class guidelines for a fourth-year bachelor of science in nursing course entitled *Applied Concepts for Professional Practice*.

Professional, Ethical and Legal Obligations in Nursing: A Critical Appraisal Week 4: Patient Safety

Overview

At the core of nursing's mandate is the provision of safe, competent, and ethical care. When clients come into contact with the healthcare system, they have an expectation that they will receive quality care and that they will not be harmed. The World Health Organization (n.d.) defines patient safety as "the absence of preventable harm to a client during the process of health care." In 2004, Baker et al. published the first study of adverse events in Canadian hospitals. They found that approximately 7.5% of hospital admissions resulted in an adverse event and 36% of those were preventable. Nurses play an important role in identifying and preventing harm to clients and in doing so contribute to a culture of safety.

Baker, G. R., Norton, P. G., Flintoft, V., Blais, R., Brown, A., Cox, J., . . . Tamblyn, R. (2004). The Canadian adverse events study: The incidence of adverse events among hospital patients in Canada. *Canadian Medical Association Journal (CMAJ)*, 170, 1678–1686.

World Health Organization. (n.d.). Patient safety. Retrieved from <http://www.who.int/patientsafety/about/en/>

Goals

Learners will have the opportunity to:

- Critically analyze nursing's role in patient safety and a culture of safety.
- Identify key organizations and resources that support patient safety.
- Analyze key legislation, which promotes patient safety such as the *Quality of Care Information and Protection Act (QCIPA)* and the *Excellent Care for All Act (ECFAA)*.
- Apply course concepts and knowledge of patient safety to case studies.

Figure 13-6. Example of a guideline for student learning activities for *Professional, Ethical, and Legal Obligations in Nursing: A Critical Appraisal, 2017–2018*.

In Preparation

Locate and bookmark:

Canadian Patient Safety Institute. (2011). Canadian disclosure guidelines. Retrieved from <http://www.patientsafetyinstitute.ca/en/toolsResources/disclosure/Documents/CPSI%20Canadian%20Disclosure%20Guidelines.pdf>. NOTE: Read pages 6–17 only.

Read:

Canadian Nurses Association. (2009). Position statement: Patient safety. Retrieved from http://www.cna-aiic.ca/~media/cna/page-content/pdf-fr/ps102_patient_safety_e.pdf?la=en

Canadian Nurses Protective Society. (2008). Reporting and disclosure of adverse events. Retrieved from http://www.cnps.ca/upload-files/pdf_english/adverse_events.pdf

Gandhi, T. K., Berwick, D. M., & Shojania, K. G. (2016). Patient safety at the crossroads. *Journal of American Medical Association*, 315, 1829–1830. doi: 10.1001/jama.2016.1759

Consider the following questions:

- What is nursing's role in ensuring patient safety?
- What is nursing's role in reporting and disclosing an adverse event?
- What factors contribute to a culture of safety?

Complete the following activities:

- Review *The Safety Competencies* of the Canadian Patient Safety Institute. Retrieved from <http://www.patientsafetyinstitute.ca/English/toolsResources/safetyCompetencies/Pages/default.aspx>
- Review information on the *Excellent Care for All Act* on the Ontario Ministry of Health and Long-Term Care website. Retrieved from <http://health.gov.on.ca/en/pro/programs/ecfa/legislation/act.aspx>

In Class

Exploration of the class concept(s) may be guided by the following:

- Large group discussion
- Participation in role playing
- Small group discussion of a case of conflicting values regarding client care
- Review and discussion of multi-media (podcasts, video) examples
- Discussion of the importance of QCIPA to support nurses in protecting patients.
- Review of the *Excellent Care for All Act*. How does this legislation support a culture of safety?

In Reflection

What is your role as a novice nurse in promoting a culture of patient safety?

Figure 13-6. Example of a guideline for student learning activities for *Professional, Ethical, and Legal Obligations in Nursing: A Critical Appraisal, 2017–2018 (continued)*

Opportunities for Students to Demonstrate Learning and for Faculty Members to Evaluate Student Achievement

Students are required to demonstrate achievement of course goals or competencies so faculty members can be confident that they are ready to progress in the curriculum and ultimately, to graduate. Therefore, opportunities for students to demonstrate learning and for faculty members to evaluate student achievement are viewed as a single course component. This view is taken because the student activity of demonstrating learning and the faculty activity of evaluating the products of learning are intertwined.

The phrase *opportunity to demonstrate learning* is used in this text for what are typically called *assignments*, *course requirements*, or simply *evaluation of student work*. The terminology connotes a more positive, student-oriented perspective and conveys the idea that students have a responsibility to provide evidence that they are achieving course expectations.

The opportunities for students to demonstrate learning can include a host of activities. In theory courses, the activities might be undertaken by individuals or groups of students in face-to-face or online environments. The opportunities might be:

- True-false, multiple-choice, multiple-response, short-answer, and essay tests and examinations; term papers and other written assignments (Oermann & Gaberson, 2014)
- Class presentations and other oral reports
- Oral examinations

In laboratory or professional practice courses, students generally demonstrate their achievement individually. Their performance might be observed and evaluated as they participate in:

- Objective structured clinical examinations (OSCE)
- Direct client care (which is observed by a faculty member or preceptor)
- Simulated care scenarios with technology or standardized patients

In addition to performing in real or simulated professional settings, students could complete process recordings, care plans, case studies, teaching plans, portfolios, and/or self-evaluations to demonstrate their achievement (Oermann & Gaberson, 2014; Phillips, 2016).

Once students fulfill their responsibility and present their evidence of learning, the faculty member's reciprocal obligation is to assess and evaluate the completed work fairly. This means that the processes, standards, and timeframes need to be clear and known to students and faculty members. In theory courses,

faculty members can develop and use rubrics for assessment of written work and share them with students. The rubrics state the criteria against which the work is being assessed, and the allocation of marks for different aspects of the project. This information contributes to greater consistency in the assessment of student work between and among students and faculty members, particularly in courses with multiple sections.

A grading framework that uses detailed rubrics for assignments and student activities is *specifications grading* (Nilson, 2014). This framework requires significant preparatory work by the faculty member to determine what cluster of assignments and activities constitute a specific grade. Students then decide what they are prepared to do to achieve a desired grade. If a student's goal is an "A" but the quality of the work submitted does not meet the specifications for an "A" and is at a "B" level, the student can rewrite the assignment to possibly achieve an "A," or accept the assigned grade.

In evaluation of professional practice, students are generally required to reflect on their performance and complete a written self-evaluation. This may be done using a document specifically designed for this purpose. It may also be completed on a record of student experience to which both student and instructor contribute. If such a collaborative documentation tool is used, both students and instructors stay acutely aware of strengths, limitations, and areas for improvement in practice. Students' reflections and self-evaluations, and descriptions of acceptable performance, contribute to the perceived fairness of evaluation procedures.

Another element of fairness is authentic assessment. Mueller (2016) defines authentic assessment as "a form of assessment in which students are asked to perform real-world tasks that demonstrate meaningful application of essential knowledge and skills" ("Definitions," para. 1). It is also referred to as

- performance assessment, that is, assessment of the performance of a meaningful task;
- alternative assessment, as compared to traditional assessment, the latter of which includes such measures as forced choice or multiple-choice tests;
- direct assessment, which is an assessment that offers direct evidence such as demonstrating a task or critiquing a piece of research.

(Mueller, 2016)

Because the combination of knowledge, skills, and attitudes forms part of the course goals or competencies, their assessment contributes to the unity of the course. Elements of authentic assessment include but are not limited to:

- Alignment of learning goals or competencies, classroom instruction, and assessment techniques

- Fidelity of the task or problem to professional practice, including complexity, physical and social context, and necessity for students to use integrative thinking
- Requirement for a product or performance that is reflective of real-life demands and that could be presented to others
- Meaningfulness of the task and product to students
- Clear criteria and an accompanying rubric that are known to students, or created with them
- Provision of feedback about performance, including assessment by self, peers, and faculty members (Gulikers, Bastiaens, & Kirschner, 2004)

Evaluation of students' performance in real or simulated professional practice situations is authentic assessment. Authentic assessment in theory classes is also possible (e.g., analysis of client cases, preparation of health teaching materials). Some traditional assessment strategies may also have aspects of authenticity. For example, although the task of completing a multiple-choice examination might not reflect professional practice, the thinking necessary in professional practice can be tested if high-level questions are constructed. Moreover, students often consider multiple-choice examinations to be important and meaningful practice and preparation for NCLEX-RN[®] examinations.

In addition to verifying learning (summative evaluation) and providing feedback (formative evaluation) about course learning through assessment, faculty members can plan procedures that provide a foundation for lifelong learning (Boud & Falchikov, 2006). Specifically, the aforementioned authors propose that the assessment task ought to prepare students for “the tasks of making complex judgements about their own work and that of others and for making decisions in the uncertain and unpredictable circumstances in which they will find themselves in the future” (p. 402). This means that students should be involved in establishing criteria for evaluating success, in assessing their performance and that of others, and in working in groups on a task, similar to what they will experience after graduation. An approach such as this would require consistency through several courses to achieve the goal of helping students to become accurate self-assessors able to identify their own learning needs in complex situations.

Decisions about opportunities for students to demonstrate learning and faculty members to evaluate student achievement will be influenced by many factors, including philosophical and educational approaches, course goals or competencies, purpose of the evaluation (formative or summative), content, course level, learning domain, class size, educational delivery medium, reliability, validity, utility, evaluation frequency, and availability of resources. The opportunities that are developed for students to demonstrate their learning ought to be carefully aligned with the educational and philosophical approaches of the

curriculum and the course goals or intended competencies. Students' completion of the activities inherently involves learning, and hence a dual purpose is served: students learn and they demonstrate their achievement.

This course component requires thoughtful attention because the consequences are significant. Faulty evaluation can result in the loss of a competent student from the profession or risk the graduation of an individual whose nursing practice may be incompetent in the future.

Student Development and Interaction

Student development and interaction form part of the course design. Ideas about these are included in the course syllabus to prompt students' appreciation of how the course will be relevant to their growth as professional nurses and members of interprofessional teams. Their development and interaction as learners with faculty members, peers, and other colleagues can be specified in relation to course processes used to facilitate integration of knowledge with practice experiences. As well, the ways in which participants will learn together are described.

Presented in Figures 13-1 through 13-6 were the calendar description, expanded course description, goals, and concepts for the course *Professional, Ethical, and Legal Obligations: A Critical Appraisal 2017–2018*. They are part of a course syllabus. In **Figure 13-7** components of the syllabus that outline how the course will contribute to the students' development as nurses and members of an interprofessional team are described along with the ways faculty members and students will learn together. A listing of required and recommended textbooks is also typically included in a syllabus and the reason for this is self-explanatory.

How this course will contribute to your development and practice as a professional nurse:

This course provides opportunities to explore nursing as a profession, including professional rights and responsibilities, along with legal and ethical parameters. The course promotes learners' understanding of the purpose and function of professional nursing's regulatory organizations and associations, particularly in relation to ethical and legal elements of professional practice and the maintenance and improvement of the standards of care. Knowledge of course concepts is integrated through interactive learning activities, including class lecture/discussion, guest speakers, and analysis of case studies, among other learning strategies.

Figure 13-7. Remainder of course syllabus for *Professional, Ethical, and Legal Obligations: A Critical Appraisal 2017–2018*.

These learning activities are designed to engage learners in critical reflection of professionalization, professionalism, and the professional practice of nursing. Opportunities will be provided for learners to reflect on their professional growth as beginning practitioners and to share their own nursing practice experiences with others.

How this course will contribute to your development and practice as an interprofessional team member:

This course will provide students with insights as to how nurses enact their professional, legal, and ethical obligations within an interprofessional environment. Learners will explore how professional standards guide their interactions with other members of the interprofessional team.

How we will work together:

In this course, learning and teaching are a shared responsibility. The instructor's role is to guide, facilitate, and support learning. As a learner, it is expected that you will be prepared to engage actively in weekly dialogue and reflective, critical thought. The course and accompanying learning activities are designed to foster discussion, debate, and critical examination of concepts relevant to professional, legal, and ethical aspects of nursing practice. Weekly attendance is expected since small group and class discussions will facilitate learning, and your active participation will support not only your own, but also your colleagues' learning. In order to create an interactive learning environment, learners will be asked to share within groups, and at times with the larger class, their understanding of course material, their experiences, and to engage in reflection on their learning.

Textbooks and other resources:

Required:

Keatings, M., & Smith, O. (2010). *Ethical and legal issues in Canadian nursing* (3rd ed.). Toronto, ON: Mosby Elsevier.

Recommended:

American Psychological Association. (2010). *Publication manual of the American Psychological Association* (6th ed., revised). Washington, DC: American Psychological Association.

Figure 13-7. Remainder of course syllabus for *Professional, Ethical, and Legal Obligations: A Critical Appraisal 2017–2018 (continued)*

Weekly Schedule			
DATE	TOPIC	CONCEPTS	COURSE GOALS
Week 1	Course overview, professionalism, regulation and the profession	1, 2, 4, 5, 7, 8, 9	1, 2
Week 2	The legal context for practice	1, 2, 6, 7, 9, 13	3, 6, 7
Week 3	Legislation	1, 2, 4, 7, 10, 12, 13	3, 6, 7
Week 4	Patient safety	1, 2, 4–7, 10, 13	3, 4, 5, 6, 7
Week 5	READING WEEK		
Week 6	Ethical Practice	1, 3–10	4
Week 7	MIDTERM EXAM		
Week 8	Ontario regulated health professions legislative framework—Part I: Regulation, scope of practice, standards	1, 2, 4, 5, 6, 12	3, 6, 7
Week 9	Ontario regulated health professions legislative framework—Part II: Working with others	1, 2, 4, 5, 6, 7, 10, 12	1
Week 10	Establishing, maintaining, and navigating boundaries in the therapeutic relationship (sexual/physical/emotional abuse of clients and fitness to practice)	1, 4, 5, 7–10	3, 6, 7
Week 11	Incivility, violence, and abuse in the workplace and the transition of new graduate nurses	2, 3, 4–7, 10, 12	6, 7
Week 12	Continuing competence and lifelong learning	2, 4, 5, 7, 9	3, 6, 7
Week 13	Course wrap-up, Jurisprudence Exam	4, 9	All

Figure 13-7. Remainder of course syllabus for *Professional, Ethical, and Legal Obligations: A Critical Appraisal 2017–2018* (continued)

Opportunities to Demonstrate Learning

1. Midterm Exam—20% (Week 7)

The midterm exam will be conducted during class time in Week 6 and will cover course content, its application, and readings from weeks 1 through 5 inclusive.

2. Group Case Study Assignment—30% (due Week 9)

The purposes of this assignment are for you to explore, critically analyze, and respond to a current ethical and legal issue facing the profession in today's healthcare context. This assignment will reflect your ability to work as a group and to apply course theory and concepts to professional nursing practice. A case scenario and instructions will be posted on the course site on a prespecified date. Groups of 3–4 student colleagues (sign up on course website) will work as a team to engage with the case material and answer accompanying questions. Health professional literature as well as standards and guidelines from nursing's regulatory body and professional association will inform and support the case analysis.

3. Lifelong Learning Plan—10% (in-class assignment Week 12)

The purposes of this assignment are for you to familiarize yourself with the process of meeting the Quality Assurance requirements for the College of Nurses of Ontario.

You will use a template similar to the CNO Self-Assessment and Learning Plan forms and complete these, using the SMART goal method as part of the assignment. This assignment will be completed during class in Week 11 and submitted.

4. Final Exam—40% (final exam period)

The final exam will be based on course content, readings, and guest speakers' content. The final exam will focus primarily on application of topics learned in this course. Date, time, and location of the exam TBA.

Summary of Opportunities to Demonstrate Learning

1. Midterm exam	20%	Week 7
2. Group Case Study	30%	Week 9
3. Development of a Life-Long Learning Plan	10%	Week 12
4. Final Exam	40%	TBA by Office of the Registrar

Figure 13-7. Remainder of course syllabus for *Professional, Ethical, and Legal Obligations: A Critical Appraisal 2017–2018 (continued)*

Policies

All policies related to assignments are in the Undergraduate BScN Programs Manual on the Western website at owl.uwo.ca and on the Fanshawe College website in the program manual located in the Virtual Home Room at www.fanshaweonline.ca. Please read the policies on Accommodation for Medical Illness—Undergraduate Students and Student Medical Certificate.

Figure 13-7. Remainder of course syllabus for *Professional, Ethical, and Legal Obligations: A Critical Appraisal 2017–2018* (continued)

Course Design Approaches

The approach to course design is strongly influenced by faculty members' abilities, interests, and comfort level, as well as the background knowledge, life experiences, and capabilities of students. Often, faculty members use a familiar approach without giving careful thought to what is consistent with the curriculum foundations. If it seems that some courses are not being designed in accordance with the agreed-upon philosophical and educational approaches, then broader discussion may be needed about the amount of flexibility that is acceptable in each course. However, alignment with curriculum foundations must be evident in each course.

Irrespective of the approach, course designers strive to ensure the following:

- Written course materials and verbal explanations are clear, unambiguous, and complete.
- Important ideas receive prominence in course materials.
- Course websites are readily understandable and intuitive.
- Class norms (e.g., preparation for class, attendance, extensions on assignments) and policies are specified or negotiated.
- Class and evaluation activities are varied to account for differences in learning styles (Bowe, 2000; Higbee, 2009).

Extending from the idea of making courses intellectually and physically accessible is the belief that courses should be developed with attention to student diversity and cultural pluralism. “Normalizing the culture of some students ignores the critically relevant knowledge of students who have experiences and understanding informed by their own, typically omitted culture” (Ross, 2017, p. 174). Therefore, deliberate effort ought to be made to ensure that language, texts, readings, examples, and learning experiences avoid ethnocentric, gender-limited, and class-limited perspectives. Additionally, authors with varied backgrounds and viewpoints should be represented in course readings (Saunders & Kardia, n.d.).

The intent is to make the course as inclusive as possible so all students feel welcome and accepted in an environment conducive to learning.

Traditional Approaches

In traditional approaches to course design, planning proceeds in a logical, step-wise fashion, starting with objectives. The aim is to design a course and lessons that will lead students to achieve specific objectives and learn specific content in a readily identified and prescribed way. The traditional, behaviorist course design is structured, supports knowledge as being absolute, and is teacher-centered. Faculty members have responsibility for identifying the nature, purpose, and objectives of the course, as well as content, teaching-learning strategies, and evaluation methods. Students are the recipients of knowledge and decisions.

With this approach, a course description is written first. Then, course goals/objectives or competencies are formulated according to taxonomies that address cognitive, psychomotor, and affective learning domains. The course goals/objectives or competencies state what students will be able to think, feel, or do. They are drawn from program and level objectives, the course description, and content necessary for desired behaviors to occur. In addition, unit or module objectives are specified, with the units being defined by content groupings. “Courses are constructed around the content deemed necessary to produce the desired target behaviors” (Bevis, 1982, p. 195). Teaching strategies, media, and evaluation methods are then selected.

Gagné, Briggs, and Wager (1992) propose a more detailed approach, whereby following the specification of intended curriculum outcomes, an instructional analysis is completed to identify the skills involved in reaching those outcomes. This entails a task analysis to delineate the steps or skills in the behavior and an information-processing analysis to identify the mental processes required to enact each outcome. From these, objectives are prepared. Next, criterion-referenced evaluation procedures are created and instructional strategies and media are selected.

Lesson planning is an important element of traditional approaches. For each lesson, objectives are delineated, and appropriate instructional events are defined. Written lesson plans specify activities that the teacher will carry out. See **Table 13-3** for an example of a traditional lesson plan.

The following criteria for judging the quality of a lesson plan have been suggested:

- The link between what students should know, understand, and be able to do is evident and coherent.
- Activities in the lesson are motivating and designed to suit students with different learning styles.

Table 13-3: Traditional Lesson Plan for a 2-Hour Class					
<i>Teaching Purpose:</i> Ensure students acquire necessary information for health promotion with families					
Learning Objectives	Content	Teaching-Learning Strategies	Time	Resources	Evaluation Methods
Identify 3 goals of health promotion	Health promotion goals	Lecture/discussion	10 min	Smartboard PowerPoint slides	Question and answer (pretesting)
Describe how the Health Belief Model can be used to influence behavior	Health Belief Model	Lecture/discussion	25 min	PowerPoint slides	Question and answer
Assess health promotion needs of families	Assessment of family health and learning readiness	Case study analysis in small groups and large-group discussion	35 min	Case and case questions on course website Flip charts	Question and answer
Recall guidelines for health promotion	Provincial guidelines for health promotion	Brainstorming Large-group discussion	20 min	Student access to Internet	Question and answer
Propose pertinent health promotion measures		Small-group discussion	30 min	Student laptops	Group e-submission of health promotion plan at end of class

- The lesson supports the intent of the curriculum and is worthy of the time given to it. (Erickson, 2007)

These criteria are applicable for all classes, whether or not traditional lesson plans are used.

Contemporary Approaches

With a more contemporary or conceptual approach to course design, courses are planned so the focus of learning is on inquiry and the active pursuit of experiences that contribute to learning. These learning-centered course designs incorporate the instructor's recognition and acceptance of the values, beliefs, knowledge, and experience that students bring. Courses are designed in accordance with the premises that learning and contextual knowledge:

- Evolve from processes such as discussion, dialogue, debate, and other heuristics that promote active engagement and sharing of knowledge
- Occur in an environment that advances trust and critique between and among students and instructors

This learning-centered approach to course design is based on adherence to values of human freedom and self-reflection, and an epistemology of transactional constructivism. Therefore, course procedures are designed to emphasize students' information processing and construction of understandings and meanings through transactions with others (Sutinen, 2008). Process-oriented courses promote integrative learning, deemphasize specific content, and reduce reliance on the lecture method. Attention is given to how students, faculty members, and clients, together, bring life experiences to knowledge and learning. Understanding develops through thoughtful deliberation and critical analysis of information, dialogue about its meaning, and reflection on its fit with personal beliefs and values.

Faculty members and students share course design, jointly creating the climate and cultural reality in which collaboration flourishes. Together, they determine course goals or intended competencies, establish appropriate methods for students to achieve them, and agree on the evaluation procedures. Students become active constructors of knowledge and meaning (Seaton-Sykes, 2003), and shape their learning through participation in course design and activities. They gain a sense of ownership for the course and become autonomous learners, consistent with adult learning principles (Conklin, 2013). The faculty member is an expert learner, metastrategist, and facilitator (Bevis, 2000) who empowers others, fosters creativity, stimulates intellectual inquiry, and maintains rigor. Importantly, the faculty member retains authority while trusting that students, individually and collectively, will make wise decisions about course matters (Conklin, 2013).

Central to contemporary course design is conceptualizing learning activities for classes, and then the associated guidelines for students. As stated previously, guidelines enable students to process information and work toward achievement of course goals or intended competencies through interaction with course content, peers, and instructors. They specify activities that students undertake, with the intent that learning occurs, and they can be developed as a part of course design. Development of the guidelines (which can occur collaboratively with students) and students' subsequent completion of learning activities prior to each session reflect the idea of a flipped or inverted classroom. In other words, student preparation in advance is necessary so they can work with the content in class, in contrast to merely receiving it. The collaborative development of the guidelines for the classes increases students' investment in the course.

The success of this approach to course design is highly dependent on the interpersonal dynamics between and among faculty members and students. Student inclusion in course design or some aspects of it signals a shift to heutagogic learning, with which instructors must be comfortable. The heutagogic approach is student-centered, active, and one in which the student is a key driver of the

learning process (Blaschke, 2012; Green & Schlairet, 2017). Student maturity is necessary, because many decisions are required at the beginning of a course and the decisions need to align with academic standards. For students to engage in the process of designing a course together, or some aspects of it, faculty members ought to be welcoming, convey respect for all class members, be relaxed about self, encourage students as they offer ideas and perspectives (Higbee, 2009), and convey belief in students' potential (Read, Vessey, Amar, & Cullinan, 2013). Moreover, authentic communication among all participants is essential.

Combined Approaches

In a combined approach, there is a mixture of contemporary and traditional approaches. In small classes, a contemporary approach may be possible because faculty member–student collaboration could occur in all aspects of course design. In large undergraduate courses, however, some predetermined structure is required because of class size, agreements with healthcare agencies, timelines, and policies of educational institutions. Faculty members who support constructivism and adult learning principles might rely upon an approach to course design that combines traditional and contemporary perspectives.

For the most part, faculty members design the course structure (i.e., define the description, goals or competencies, concepts and general scope of content, and opportunities to demonstrate learning) in a way that appears to mirror traditional approaches. Nonetheless, there can be opportunities for student choice within specified limits (Iwasiw, 1987). For example, students may choose from a number of broadly defined options to demonstrate learning, determine the weighting of assignments, and collectively decide due dates, and/or negotiate ground rules for class and professional practice sessions.

While courses are designed with a predetermined structure, their intent is to support process learning. A contemporary approach becomes apparent in the strategies to ignite learning. For example, the use of peer teaching (Iwasiw & Goldenberg, 1993), learning teams, unfolding case studies, simulation through role-play (Goldenberg, Andrusyszyn, & Iwasiw, 2005), games-based learning (Davidson & Candy, 2016), quest-based learning (Dikkers, 2016), narrative pedagogy, and case- or problem-based learning, among others, requires students to be active participants in learning and knowledge construction. With these strategies, students are in charge of their learning.

Additionally, faculty members can develop guidelines that emphasize process learning in course sessions and make these available to students. The guidelines are learning-centered, specify class preparation activities, make evident the information-processing skills expected, and allow fluidity in the conduct of classes. Thus, in a combined approach to course design, there is a predetermined

structure, including plans for each session. However, within that structure the following are provided:

- Opportunities for students' participation in course decisions
- Expectations of students' active involvement in learning activities
- Fluidity in class processes

Processes to Create Evidence-Informed, Context-Relevant, Unified Courses

Like all aspects of curriculum development, creating a course is an iterative process with decisions about each course component affecting deliberations about other components. The process involves writing, modifying, critiquing, and revising before plans are finalized. The intent is to devise a course that adheres to curriculum philosophical and educational approaches, facilitates students' achievement of course expectations, and is effective within the school's context. There should be unity within each course and among courses, so that the relationships among the course components and courses comprising the curriculum are apparent.

Course titles, brief descriptions, placement in the program, draft goals or competencies, major curriculum concepts, philosophical and educational approaches, and so forth are determined as part of the curriculum design process. These, along with ideas about curriculum possibilities (content and learning experiences) generated during the analysis of contextual data, and the level goals or competencies, are reviewed as intensive course design begins.

Typically, courses are designed in the order in which they are to be implemented. During the design process, courses should be compared to the curriculum matrix or maps to maintain adherence to the original curriculum plan. Reasons for deviations should be explained and agreement reached about their acceptability because variations from the curriculum plan might necessitate changes in subsequent courses (Heinrich, Karner, Gaglione, & Lambert, 2002).

Course design is not an activity undertaken in isolation. Ongoing consultation is required among course designers to ensure the following:

- The curriculum intent and integrity are maintained.
- Concurrent courses are complementary.
- Sequenced courses build in depth and complexity without redundancy or gaps.
- Curriculum goals or intended outcomes can be achieved.
- Student and faculty workloads are reasonable.

The process begins with a review of parameters that influence the course design. Then, creation of the course components begins. Use of curriculum templates can be helpful as discussion proceeds. Although attention is given to the components individually, ideas arise about all of them simultaneously. This concurrent thinking leads to a unified course. The iterative process concludes when course developers are satisfied with their ongoing appraisal of the course design. The final step is preparation of information for students.

Reviewing Course Parameters

Course parameters are boundaries within which courses can be created. The parameters limit the range faculty members have in creating courses, yet compel them to exercise creativity and ingenuity in designing courses that are motivating and promote positive learning experiences. Reviewing these parameters and how they will affect the course design is a necessary beginning.

Curriculum Foundations and Goals or Outcome Statements

The overriding parameters for all courses are the curriculum foundations: philosophical and educational approaches, core curriculum concepts, and key professional abilities. These are evident in curriculum goals and partially present in curriculum outcome statements. From the curriculum goals or curriculum outcome statements, level goals or intended competency statements are derived, and from these, course expectations are defined. If the curriculum is being organized according to specific theories, concepts, or frameworks, these must be evident in course components. Importantly, the philosophical approaches influence all aspects of course design and define the desired learning climate.

Course Level, Structure, and Delivery

The course level, that is, the semester and year in the curriculum, gives course designers information about students' prior learning, which determines the depth and scope possible in the course to be designed. Course structure (i.e., course length; number, frequency, and duration of class sessions) also has a direct bearing on the learning to be achieved, the extent of the subject matter, and evaluation of learning. Course delivery approaches establish how students access and engage in the course.

Student Characteristics

Student numbers, and their attitudes toward learning, technology, participation, and evaluation, are important to know. These characteristics, plus students'

cultural and generational diversity, maturity, motivation, interests, and other commitments, have a bearing on course design.

Physical Environment

Desk arrangements, temperature, windows, ventilation, and lighting affect attention, fatigue, and interactions. Availability of Internet access in classrooms and access to an online course site can also influence course design. The details about a classroom cannot always be known in advance of creating a course, and indeed, the finalized design will influence the classroom space that is required. Moreover, for professional practice courses and interprofessional courses, the physical setting and the presence of other healthcare students can affect learning opportunities.

Human and Material Resources

The numbers of faculty members and graduate teaching assistants, and their experience, have a bearing on the decisions made about individual courses. Importantly, clients and personnel in healthcare and community agencies influence professional practice courses. Library and computer resources and technical equipment in classrooms, among other material resources, require consideration.

Policies and Contractual Agreements

Finally, educational institutions have policies or regulations that must be respected in course design. For example, there may be requirements about the timing of evaluation and examinations. For professional practice courses, contractual arrangements with healthcare or community agencies regulate learning experiences.

Limitations and Administrative Issues

It is prudent to review the limitations and administrative issues identified during analysis of contextual data. These may provide insights relevant for course design. To reinforce the parameters in the minds of those designing courses, they might ask:

- What are the institutional requirements related to course design?
- Which core curriculum concepts and major professional abilities will be addressed in this course?
- What are the implications of the philosophical approaches for course design?
- What are the educational approaches chosen for the curriculum?
- What is the desired learning climate for this course?

- Which delivery method(s) will be employed? Could multiple methods be used? Is the infrastructure sufficient to support the preferred method(s)?
- What resources to support teaching and learning will be available for the course?
- Will graduate student assistants be available to provide support for the course?
- What knowledge and experiences do students bring to this course?
- How many students are likely to be enrolled?
- What are the students' characteristics? Will they:
 - Be directly from secondary institutions?
 - Have previous diplomas, degrees, or some postsecondary education?
 - Be adults with strong values about lifelong learning and continuing their education?
 - Have responsibilities associated with multiple life roles, in addition to academic responsibilities?
 - Have special needs that require accommodations?
 - Be diverse or homogenous?

Choosing an Approach for Course Design

The choice of an approach for course design could be guided by the alignment between a traditional, contemporary, or combined approach and:

- Philosophical and educational approaches of the curriculum
- Faculty and student preferences
- Feasibility
- Institutional requirements

Confirming the Course Title, Purpose, and Description

Confirming or modifying the draft course title and description established by the curriculum design team may seem as though it should be the first step in course design. However, the final confirmation of these components is not possible until all other aspects of course design start to crystallize. Nonetheless, the course title and description are the starting point for discussion. Course designers need to be clear about the:

- Conceptual, process, and substantive foci of the course
- Reason the course is in the curriculum
- Learning that students will have already achieved

Faculty members can determine whether the draft title adequately reflects the course intent or whether it needs to be modified, remembering that course titles are important in visually conveying the conceptual bases and the unity of the curriculum.

Once a title is tentatively decided upon, a preliminary course description is written, based on the draft prepared during curriculum design. The description may undergo many revisions during course design. The initial description represents the ideas that faculty members first discuss as possibilities for the course. However, the course description is not finalized until all other design components are completed. In general, the following questions are raised as the description is discussed and written:

- What is the purpose of the course in the curriculum?
- Which curriculum possibilities, identified during the analysis of the contextual data, should be considered? What other learning experiences could be suitable?
- What would be the nature of interactions in these learning experiences?
- How can the course concepts be addressed? What could be the scope of exemplars, substantive content, and/or the nature of practice experiences?
- How should students participate in this course?
- If there is choice about delivery modes, which one(s) would be most fitting, when students' and faculty members' total workload is taken into account?

Additionally, the course purpose needs to be drafted and finalized. A clear and concise narrative about how the course will contribute to students' development as professional nurses influences the value that students will attach to the course.

Formulating Course Goals or Competency Statements

The level goals or intended level competencies, derived from the evidence-informed, context-relevant curriculum goals or from the outcome statements, are the basis on which course goals or intended competencies are developed. The level expectations are examined to identify those pertinent to the course. Then, course expectations are written to include concepts, processes, and contexts particular to each course. Formulation of course expectations centers on the following queries:

- Which of the level goals or intended competencies should be addressed in this course?
- Which curriculum concepts and professional abilities should be most evident in the course goals or intended competencies?

- What is the context in which achievement of the goals or intended competencies will be evident?
- How can the level goals or intended competencies be modified for the course, ensuring that the language of the curriculum is retained?

Determining Exemplars to Match Concepts

Matching exemplars to course concepts requires logical and imaginative thinking. First, discussion occurs about the concepts to be emphasized as designated in the curriculum matrix, and how they are evident in professional practice situations particular to the practice context of the course. Subsequent to this, faculty members consider the professional practice situations that are most relevant for students to understand in order to meet the course expectations. Then, they deliberate about which concepts are best illuminated through which practice situations and the scope of substantive content that could be addressed in these situations. As they determine the exemplars to match concepts, faculty members might pose the following questions:

- Which curriculum concepts are to be included in this course?
- What practice situations are relevant for the course?
- Which practice situations would best illuminate particular concepts?
- Are the possible exemplars suitable for students to practice the thinking processes expressed in the course goals or competencies?
- What is a reasonable depth and scope of content at this stage of the nursing curriculum?
- What is the available evidence for the concepts and substantive content that should become part of the content?
- Which curriculum possibilities, identified during analysis of the contextual data, would be suitable in this course?
- How can the course topics be sequenced to emphasize philosophical approaches and facilitate students' achievement of the course goals or intended competencies?

Deciding on Classes

Classes are created through the placement of the conceptual and substantive content into meaningful and logically sequenced units. This involves determining the best match between concepts and exemplars. Course designers consider:

- Concepts, professional abilities, and professional comporment that should be emphasized through the content

- Possible organization and sequence of concepts and content to match the number of class sessions
- Possible class titles to ensure that they:
 - Reflect the curriculum foundations
 - Convey unity within the course and curriculum

Selecting Strategies to Ignite Learning

Selection of strategies to ignite learning is of vital concern to course designers because these define, in part, what faculty members will do. This process could begin with a review of curriculum possibilities identified during analysis of the contextual data. These may be directly suitable for the course, or suitable with modification. As faculty members ponder the wide range of strategies and techniques available to them, they give thought to strategies that:

- Are consistent with the agreed-upon philosophical and educational approaches
- Will best facilitate students' achievement of course expectations
- Are feasible within the course parameters
- Are suitable for the delivery method(s)
- Best suit students' learning needs and styles
- Would be most useful for the course
- Have sufficient research or anecdotal evidence to support their use

Finally, when decisions have been made, faculty members give thought to how they can best prepare to use strategies that are new to them.

Creating Guidelines for Student Learning Activities

Formulating student learning activities for each class calls upon the creativity of course designers. Decisions about strategies to ignite learning will be foundational to the creation of the guidelines that will help students maximize their learning in each class. Some questions faculty might ask as they create the guidelines include:

- What types of student engagement with content will promote achievement of course goals or competencies?
- Which curriculum possibilities, identified during analysis of the contextual data, would be suitable in this course?
- What is a reasonable amount of work to expect of students in preparation for classes?
- Which preparatory, in-class, and post-class activities can facilitate students' achievement of course goals or intended competencies?

- What readings and other resources will enhance student learning?
- What types of practice experiences will enable students to achieve course expectations?
- How well do the proposed learning activities match the educational and philosophical approaches?
- How best can learning be scaffolded within the learning activities?
- What is the likelihood that the proposed learning activities will allow students to achieve the expectations at the desired depth?

Planning Opportunities for Students to Demonstrate Learning and for Faculty Members to Evaluate Student Achievement

When considering how students might demonstrate learning in the course, faculty members simultaneously give thought to how they will evaluate the evidence of learning. They are cognizant that both the evidence they are asking for, and the way they evaluate it, must be consistent with the curriculum foundations. Decisions about the nature and frequency of evaluation, student choice, and whether to provide marking criteria and rubrics to students, are among the decisions reached when designing courses. Questions include:

- In what ways could students demonstrate achievement of course competencies?
- Which evaluation methods are consistent with the philosophical and educational approaches, and course goals or competencies?
- What are the advantages and disadvantages for students and faculty members with respect to the ideas proposed?
- How well do the proposed evaluation ideas represent authentic assessment?
- How and when might formative and summative evaluation be used?
- How will evidence of learning be weighted? Will students have the option of determining their own weightings of course work?
- Should there be options from which students select the ways in which they demonstrate learning? If so, how can this be planned?
- Will student self-evaluation be included?
- How can the learning evidence that students present be evaluated consistently and fairly? Should specific criteria or marking rubrics be developed? What are the benefits and drawbacks of sharing the rubrics with students?

- What will be reasonable due dates for students to submit their work? Could the dates be negotiated with the class? How might it be possible to ensure that due dates for all courses are reasonably distributed?
- Will the workload be reasonable for students and instructors?

Attending to Implementation Matters

As course design ideas are presented, discussion includes ideas of implementation: *How can this idea best be implemented? How would that work?* Course designers ask themselves what is possible and feasible within the course, and what is reasonable within the context of all other courses within the curriculum level and overall curriculum. Furthermore, they consider the logistical arrangements that are required for the course design to be implemented. The latter requires ongoing consultation with faculty members who are designing other courses. Consideration is also given to the preparation that faculty members might require to implement the courses as designed.

Preparing the Course Syllabus

Once decisions about course design have been finalized, a full syllabus is prepared, according to a template previously determined for the curriculum. The syllabus can be content-focused (Palmer, Wheeler, & Aneece, 2016), or structured as a form of contract (Scheckel, 2016) between the student and the instructor wherein the “ground rules and guidelines for engagement” (Luparell & Conner, 2016, p. 234) are inserted. Generally, the syllabus is made available to students in advance of the first class in paper form or posted on a course website. Although the terminology and precise nature and scope of syllabi can vary, they typically include an expanded course description; course goals or competencies; class topics and schedule; the teaching-learning process and expectations; information about opportunities for students to demonstrate their learning; due dates of work to be submitted; required texts; and possibly, guidelines for individual classes. Other information, such as participation guidelines for the course, the need for Internet access, policies about plagiarism and late assignments, may be added.

Palmer et al. (2016) argue that “content focused syllabi have become increasingly authoritative and rule-infested to the detriment of student learning” (p. 37). They advocate for a learner-focused, engaging syllabus that is transparent, clear, inviting, focused on active learning and success, and written in an inviting tone. Of the 127 students who completed their survey about course

syllabi, Palmer et al. (2016) found “that syllabi should not be authoritarian, policy laden, contractual documents they have come to be, both in principle and practice, but instead invitations to rich and meaningful, and supportive learning experiences” (p. 46). The structure and tone of the syllabus can reinforce the unified nature of the course. Regardless of the type of syllabus, it should be inviting and generate student interest and motivation.

Creating Individual Classes

The overall course design provides the framework for individual classes. Each class must contribute to the course purpose, with student learning activities particularized. When planning classes, instructors might ask the following questions:

- What title would best reflect the relationship of this class to the course and the curriculum foundations?
- How can the class be designed to clearly relate to course goals or intended competencies?
- What should students achieve in this class?
- What learning activities can be planned so that the desired balance of concepts and substantive content is achieved? How can the two be integrated?
- What is the evidence pertinent to the substantive content?
- What are useful learning activities? How can the faculty member facilitate learning in the activities?
- What is a reasonable sequence and time allotment for the activities?

If a traditional approach to course design is employed, lesson plans can be developed to organize each class. If a combined approach is used, class guidelines for students can be beneficial. With either approach, class planning generally involves determining the following:

- Class purpose
- Scope of concepts and substantive content
- Appropriate exemplars
- Strategies to ignite learning
- Sequence and timing of class activities

Many faculty members strive to obtain feedback about each class. Therefore, they plan a few minutes at the end of each session to ask questions such as:

- What did you like about this class?
- What worked well for you?
- What might we have done differently, and how?

This information allows for refinement of the class if it is going to be offered again. Additionally, if a pattern of responses emerges in reaction to the predominant strategies to ignite learning, the nature of interactions, or other aspects of the classes, it is possible to take this into account for later classes.

Planning Course Evaluation

Educational institutions have formalized course evaluation and a standardized questionnaire may be used in all programs. Typically, the questionnaire does not fully address matters that are of concern to nursing faculty members, such as the effectiveness of educational approaches in assisting students to link theory to professional practice. Therefore, it is recommended that faculty members identify and record the key course elements that should be evaluated as they are designing courses. These ideas can form the basis of individual course evaluations and will contribute to the development of an overall curriculum evaluation plan.

Relationship of Course Design to an Evidence-Informed, Context-Relevant, Unified Curriculum

Nursing courses and individual classes are the culmination of the development of an evidence-informed, context-relevant, unified curriculum. Concepts that were identified from analysis of contextual data are the focus of the courses. Core concepts and key professional abilities, deduced from contextual data, along with philosophical approaches, are expressed in the curriculum goals and partially in the outcome statements. Level goals or competency statements are then derived, followed by course goals or intended competencies. Therefore, the conceptual foci and course goals or intended competencies are evidence-informed and context-relevant. Moreover, because all course goals or intended competencies within a curriculum level are directed toward achievement of the level expectations, there is unity among the courses. This unified nature of the curriculum is also evident in the course titles, use of common templates for course syllabi and guidelines for learning, and adherence to the curriculum's educational and philosophical approaches.

The evidence-informed nature of courses is strengthened by plans to use evidence-informed strategies to ignite learning, and the inclusion of evidence for nursing practice as content. The logical consistency between the goals or competencies and the ways in which students demonstrate learning also contributes to the unified nature of each course. Finally, when individual classes are titled in accordance

with the course concepts and are planned to align with course expectations and educational and philosophical approaches, there is unity within each course.

Core Processes of Curriculum Work

Faculty Development

Faculty development is directed toward facilitating members' knowledge and expertise in designing courses and classes. Depending on faculty members' needs, and after an initial review session on the parameters involved, faculty development activities can include discussion about some or all course components.

Discussion about the approach to course design is appropriate. This would help team members appreciate whether a traditional, contemporary, or combined approach is most relevant to the curriculum foundations and institutional requirements. Mentorship for those less familiar with course and class design could be beneficial. Likely, some thought will have to be given to drafting course and class designs. Attention to the creation of concept-based classes would be wise. Sharing, critiquing, and discussing issues related to course design can be facilitated by experienced faculty members. Also valuable might be sharing exemplars, peer learning about strategies to ignite learning, and microteaching sessions to practice any new strategies proposed for courses. These could be followed by reflection and dialogue among members.

Ongoing Appraisal

As course design proceeds, faculty members engage in ongoing appraisal. Before finalizing the course design, they critique it in an holistic fashion, asking themselves questions such as:

- Does this course seem to fulfill its purpose in the curriculum?
- Is this course feasible within the design parameters?
- Is the course consistent with the curriculum foundations?
- How strongly are the course expectations deduced from, and aligned with, the level goals or intended competencies?
- Is there an appropriate balance between concepts important for nursing practice and substantive content?
- Will course processes and content lead students to achieve course goals or intended competencies?
- Are the class preparatory activities of sufficient depth and interest?
- Does the syllabus reflect the curricular intent in a way that will be meaningful to others? Is the language consistent with curriculum tenets?

- Will the teaching-learning strategies ignite learning?
- Do the course components fit together in a unified and logical fashion?
- Are this course and its individual classes of the quality expected in the school of nursing?
- Has student diversity been taken into account?
- Are the opportunities for students to demonstrate learning aligned with the course goals or intended competencies? Are they reasonable? Are they consistent with authentic assessment?
- Will the workload for students be feasible when considered in conjunction with other courses in the semester?
- Does this course result in a reasonable workload for faculty members?
- Have the necessary implementation matters been addressed?
- Has consideration of matters relevant for course evaluation been sufficient? Are there other ideas to contemplate?
- Is this curriculum work of the quality that will likely be acceptable to external reviewers?

Scholarship

Because the process of designing concept-based courses is relatively new in nursing education, expository articles about the experiences of faculty groups and the provision of examples of courses would be important additions to the nursing education literature. Faculty members undertaking course design might consider scholarship about the processes they are experiencing, analyzing reasons for the challenges faced, and describing how those challenges were resolved. A study that examines the development of concept-based courses by faculty members and stakeholders in more than one institution would be illuminating, particularly if it resulted in recommendations about how others could proceed smoothly. Another idea might be to prepare a manuscript about the development and conduct of a concept-based class. Specific information such as this could serve as a model for faculty members beginning this initiative.

Another possible scholarship project is the creation of a textbook. Many nursing textbooks continue to be based on a medical model and do not match conceptually based courses. Therefore, faculty members who create, implement, and evaluate innovative courses could undertake the writing of a text suitable for their courses.

CHAPTER SUMMARY

In this chapter, course components (title, purpose, and description; goals or intended competencies; strategies to ignite learning; concepts and content; classes;

opportunities for students to demonstrate learning and faculty members to evaluate student achievement) are described and course design parameters are detailed. Several approaches to creating courses are included. Attention is given to the process of course design, and ideas are presented for the creation of individual concept-based classes. The intent is that courses incorporate the curriculum foundations in a consistent manner. Course implementation and evaluation are briefly described. The relationship between the course design and an evidence-informed, context-relevant, unified curriculum is explained. Ideas about the core processes of faculty development, ongoing appraisal, and scholarship related to creating courses are proposed. The chapter concludes with a summary and synthesis activities.

SYNTHESIS ACTIVITIES

The Tourmaline University Faculty of Nursing case is about an undergraduate program in a research-intensive university whose faculty have implemented the first 3 years of a new 4-year concept-based curriculum. The final year will be implemented next. Questions that follow the case provide a basis for analysis of the deliberations taking place about the Year 4 courses. Subsequently, questions and activities are suggested that might assist readers when creating courses in their own settings.

■ Tourmaline University Faculty of Nursing

There are 25 full-time faculty members at Tourmaline University Faculty of Nursing who teach across undergraduate and graduate programs. They teach mostly in theory courses, but several faculty members also teach in professional practice courses. There are also 50 part-time faculty members who are advanced practice nurse (APN) clinicians jointly appointed by the university and hospital or community agency. These individuals dedicate 60% of their time to professional practice and 40% to teaching professional practice courses. All jointly appointed faculty are prepared at the graduate level and facilitate student learning for the majority of professional practice courses. As part of their preparation, they complete a series of modules on teaching and learning, roles and relationships, and evaluation of learning. They have a designated full-time faculty member who acts as their mentor for academic matters.

Full- and part-time faculty members have been closely involved in designing the new curriculum and are invested in upholding the program's exemplary standing among other university nursing programs in the region. They have a collective interest in the quality and success of the graduates. They strongly believe in building on students' confidence, knowledge, and

skills, by immersing them into courses that have robust theoretical grounding accompanied by rich professional practice experiences.

The purpose of the evidence-informed, context-relevant, concept-based curriculum is to prepare graduates to transition successfully to professional practice upon graduation. The curriculum is grounded in elements of humanism, critical social theory, feminism, and phenomenology. The first 3 years have been implemented and feedback from faculty members, students, and professional practice leaders has been exceptionally positive.

The Year 4 course design team consists of four faculty members, and eight jointly appointed APN clinician faculty. They are leading the development of three theory-based courses and three practice-based courses. Drs. April Zuri and Susan Nigella are world-renowned experts in leadership development and are assigned the task of developing a course to be offered in the first of two semesters with the following working title: *Nursing Leadership in the 21st Century*. The following draft course description was prepared by the curriculum design team: *An intensive examination of leadership development in the nursing profession and its criticality in health care*.

Two APN clinicians, Michael Merkle and Charlotte Kuiper, have agreed to work with April and Susan on course development. After some rigorous group brainstorming, they have conceptualized the leadership course as being offered using an inverted/flipped classroom strategy, combined with online discussion.

Among the concepts determined for this senior-level theory course are transformational leadership, organizational change, ethical and legal accountabilities, interprofessional dynamics, and life-long learning. The development team are deliberating about how to introduce a specifications grading (Nilson, 2014) approach for evaluation. They also envision preparing vodcasts with nurse leaders, as well as providing students with opportunities to interview nurse leaders locally and globally, and then to share their reflections with classmates. The team is considering inviting a graduate student to be part of the course development process as the curriculum designers suggested that graduate students ought to have the opportunity to immerse themselves into what may be their future career direction. Finally, Drs. Zuri and Nigella believe there is the possibility of writing a manuscript for publication about their approach to this leadership course.

■ Questions and Activities for Critical Analysis of the Tourmaline University Faculty of Nursing Case

1. Propose curriculum outcomes relevant to leadership in nursing.
2. Consider the brief course description and whether it projects clarity to the reader.

3. Propose three course competencies.
4. What might the expanded course description be?
5. Consider strategies that would ignite and sustain student learning.
6. Is specifications grading a reasonable approach to use? Why or why not?
7. Develop a learner-focused draft syllabus of this course, including an expanded description, competencies, class titles, strategies to develop learning, and opportunities to demonstrate learning.
8. Create the guidelines for student learning activities for one class.
9. What steps need to be planned in order to create a small research project about course design and subsequently submit a manuscript for publication?

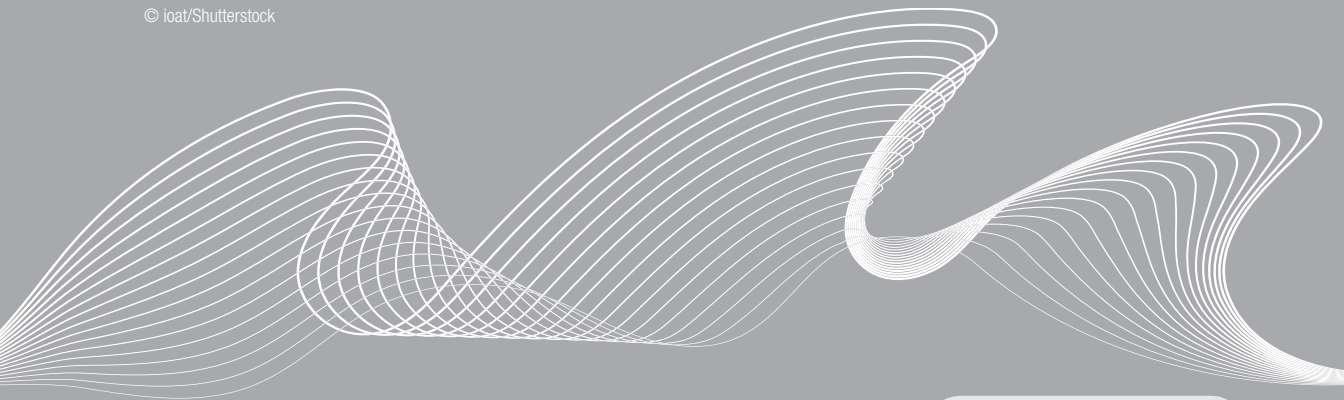
■ Questions and Activities for Consideration When Creating Courses in Readers' Settings

1. Identify the parameters of course design. How will these influence decisions about course creation?
2. Which approach(es) to course design would be appropriate and why?
3. Consider the merits of creating course templates to facilitate discussion and decision making.
4. What should be the purpose, description, and competencies of the courses?
5. How can the scope of content for the courses be determined?
6. How can course concepts and content be matched?
7. Describe strategies to ignite learning that would match the educational and philosophical approaches of the curriculum.
8. Design opportunities for students to demonstrate learning that are aligned with course competencies.
9. Propose a strategy to ensure that a final course design matches the previously determined curriculum map(s).
10. Plan faculty development activities related to creating courses.
11. Suggest questions that could be asked in the ongoing appraisal of courses as they are being created.
12. Propose scholarship activities that could be undertaken.

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**Implementation and
Evaluation of an
Evidence-Informed,
Context-Relevant,
Unified Curriculum**

Ensuring Readiness for and Fidelity of Curriculum Implementation

CHAPTER PREVIEW

Implementation of an evidence-informed, context-relevant, unified curriculum requires planning and effort throughout the curriculum development process so that the curriculum will be actualized as conceived. Ensuring that the curriculum is ready to be introduced, and that it will be enacted as planned (fidelity of implementation), requires logistical planning as well as preparation of faculty members, students, and staff of healthcare and community agencies. These matters are discussed in this chapter. An important part of readiness is planning for the introduction of a redesigned curriculum while phasing out an existing one. The relationship of readiness and fidelity of implementation to an evidence-informed, context-relevant, unified curriculum is described. The core components of curriculum work (i.e., faculty development, ongoing appraisal, and scholarship) are presented. The chapter concludes with a case for analysis, and questions for readers to consider as they prepare to introduce a redesigned curriculum in their own settings.

QUESTIONS ADDRESSED IN THIS CHAPTER

- What is the meaning of *readiness* in relation to curriculum implementation?
- What is *fidelity of implementation*?
- How is fidelity of implementation integrated into planning for curriculum implementation?

- In what ways do faculty members, students, and stakeholders contribute to readiness for implementation and ultimately to fidelity of implementation?
- What are the logistical aspects of preparing for closure of an existing curriculum and implementation of a redesigned curriculum?
- How are readiness and fidelity of implementation related to an evidence-informed, context-relevant, unified curriculum?
- How do the core processes of faculty development, ongoing appraisal, and scholarship relate to readiness for, and fidelity of, curriculum implementation?

Readiness for Curriculum Implementation

Readiness for curriculum implementation connotes a state of preparedness to introduce the curriculum and fully enact its tenets. Readiness encompasses:

- Willingness of faculty members, students, and stakeholders to engage in the processes inherent in the redesigned curriculum
- Sufficient intellectual and behavioral preparation, and ongoing support, to put willingness into action
- Adequacy of external conditions and resources to make the planned enactment of the curriculum possible

Readiness builds as the curriculum is being developed and attention is given to the educative and procedural aspects of preparation. It is maintained through ongoing support for pedagogy and student engagement true to the curriculum tenets.

Fidelity of Curriculum Implementation

The term *fidelity of implementation (FOI)*, in relation to educational processes, refers to “the extent to which the critical components of an intended educational program, curriculum, or instructional practice are present when that program, curriculum, or practice is enacted” (Stains & Vickrey, 2017). The critical components are structural and instructional.

The *structural critical components* are the “expected elements related to the design and organization of the program, curriculum, or practice” (Stains & Vickrey, 2017, p. 4). These structural components are:

- Procedural (what to do): Descriptions of how the curriculum is to be implemented, with a focus on procedures and organization
- Educative (what to know): Designers’ expectations of the knowledge instructors must possess to implement the curriculum as designed

The *instructional critical components* are the participants' expected behavior during implementation. These instructional components are:

- Pedagogical (how faculty members behave): Expected instructor behaviors during implementation, and instructor behavior with students
- Student engagement (how students behave): Expectations related to student interaction with instructors, peers, and instructional materials

Clear descriptions of the critical components are necessary so all curriculum participants can understand the curriculum and what is expected of them. Without adequate descriptions, FOI can be compromised. FOI can also be negatively affected by conceptions of teaching that do not match the new approach, a teaching context that does not support the approach, student resistance (Stains & Vickery, 2017), the complexity of the educational process or intervention (Carroll et al., 2017), lack of administrator support, insufficient faculty development and support, and time constraints (Turri et al., 2016).

Fulfillment of the structural critical components is essential to readiness for curriculum implementation, along with assurance of adequate resources and any necessary ongoing support. To ensure readiness and the expectation of FOI, faculty members include descriptions of the educational and philosophical approaches as part of the curriculum design, forecast the conditions and processes that must be in place for the curriculum to be operationalized as conceived, and then make the arrangements for these to be realized. They also participate in faculty development (the educative component) so they will be ready to enact the pedagogical critical component in a reconceptualized curriculum.

Although the procedural and educative components are conceptually different, they may be operationalized simultaneously. For example, deciding details of professional placements for students is procedural; however, the discussion entails educative aspects, such as discussions with agency personnel about the roles of faculty members and staff nurses in relation to student learning.

Planning for the Procedural Component of Fidelity of Implementation

Implementation of a redesigned curriculum should not be a surprise to the education and healthcare community because relevant stakeholders have been included in data gathering, participated in curriculum development, and served on advisory committees. All who have been involved in, and will be affected by, the curriculum redesign ought to be thoroughly prepared for its implementation. Informing others of evolving plans, and involving them

in implementation planning, best occurs simultaneously with curriculum development. In this way:

- Curriculum plans are feasible.
- Stakeholders are ready for a redesigned, context-relevant, evidence-informed curriculum.
- Practical steps are taken to ensure structural and instructional critical components of FOI.
- It is possible to implement the curriculum as conceived.

Involvement of individuals within and beyond the school of nursing in the creation of a reconceptualized curriculum results in a sense of curriculum ownership and a desire to ensure its successful implementation. Those involved can become regular and effective ambassadors of the reconceptualized curriculum, keeping others apprised of forthcoming changes and the rationale for the changes. They also help to shape the path for a smooth transition from one curriculum to another. Therefore, the procedural component of FOI involves individuals and suitable arrangements within the school of nursing, the educational institution, and the community.

The School of Nursing and the Educational Institution

Faculty Members

Having sufficient numbers of qualified faculty members to teach courses is of paramount importance to the procedural component of FOI. Nursing school leaders need to plan whom to retain, recruit, and appoint. Characteristics of suitable faculty members include expertise, teaching skills, practice competence, effective interpersonal relationships, other attributes of effective teachers, and willingness to accept and operationalize the tenets of the curriculum.

Some faculty members will probably be required to teach simultaneously in the redesigned curriculum and the one being phased out, and they may feel overstretched as they strive for excellence in both. It would be wise for the school leader to consider teaching assignments carefully to ensure that expectations are realistic.

Conversely, some professors may be faced with the prospect of a reduced teaching assignment, or even with no obvious teaching responsibilities for a semester or an academic year, as the redesigned curriculum is being introduced. Similarly, some contract faculty members may not be required at all, and this could lead to feelings of ill will. Therefore, the school leader will need to strategize carefully to maintain teaching loads that are consistent with collective agreements, workload agreements, and fairness in order to ensure that the redesigned curriculum operates within a climate of collegiality.

In the event that additional faculty members will be required, hiring becomes necessary. Inevitably, this would require planning and organizing orientation and development sessions that would involve experienced colleagues to conduct these activities.

Support Staff

Administrative, secretarial, and clerical services are necessary to implement the curriculum successfully. Personnel such as administrative assistants, secretaries, academic counselors, staff to manage student practice placements, and information technology support staff is required in alignment with the redesigned curriculum.

Clinical Instructors

Clinical instructors have an interest in their rights and obligations in relation to student professional practice. These include:

- Matters related to student relationships with practice placement agencies
- The school's and their own professional liability if students make errors in practice
- Issues of privacy and confidentiality in a world of electronic devices and social media
- Contractual obligations to the school with regard to student supervision and evaluation
- Requirements for students and faculty members to have their own professional liability insurance (Rodger et al., 2008)

Information about matters such as these need to be clear and known to all involved.

School documents such as the academic calendar and student handbook represent an agreement between students and the educational institution. These documents have legal implications as they guide students' and faculty members' behavior.

Leaders Within the Educational Institution

As curriculum development proceeds, consultation with senior administrators and chairpersons of relevant institution-wide committees is ongoing. Keeping these people apprised of the developing curriculum will expedite approval. In addition, negotiations about required non-nursing support courses and course scheduling have to be concluded before the curriculum is finalized.

Similarly, arrangements for such aspects as financial resources, student services, library resources, and technological support (i.e., procedural elements of

FOI) are necessary before curriculum approval is requested. Assurance about these matters is secured by engaging administrators and directors of relevant services in discussion early in the curriculum development process. In this way, they can alert the leader of the school of nursing, or the curriculum leader, about any anticipated problems, and attend to financial and personnel implications within their units.

Transition from an Existing to a Redesigned Curriculum

The process of phasing out the existing curriculum and introducing the redesigned one requires careful attention. It is common for experiences in a changed curriculum to be sequenced differently from the previous curriculum. Accordingly, students in both curricula may require access to the same labs, simulations, and/or practice sites at the same time. This curriculum overlap must be taken into account so neither group feels disadvantaged and practice sites are not overwhelmed by student numbers.

Attending thoughtfully to the sensitivities of students in the existing and in the redesigned curriculum is important. References by professors to the “old” and “new” curriculum can engender negative feelings. Students in the existing curriculum might feel that their program is outdated and that faculty members’ interests are with the reconceptualized curriculum. Special attention ought to be given to this group so they do not harbor resentment. In contrast, the first students admitted to the redesigned curriculum often feel that they are “guinea pigs,” an experimental group on which new educational approaches are being tested. This perception may be reinforced by the fact that some curricular refinements will likely occur for the second class that is admitted.

Students from both curricula will be sharing perceptions about the current and redesigned curriculum. To help them develop a positive perspective and possibly ease the transition, it can be prudent to engage student leaders in the curriculum change. Faculty members need to consistently demonstrate confidence in both curricula and convey their belief that all students are receiving an education that will lead to quality nursing practice.

Further, faculty members would be wise to think about how much overlap from the redesigned curriculum into the existing one is permissible. Understandably, as members become immersed in altered philosophical and educational approaches, and emphasize different concepts, they might introduce these into the current curriculum. They may be influenced by changed curriculum goals or outcome statements, and thus, they can unintentionally modify their expectations of students in the curriculum that is being phased out. It is worthwhile to discuss this overlap and come to agreement about alterations (if any) that will occur so that a suitable balance is achieved between introducing students to new perspectives and maintaining the integrity of the existing curriculum.

Scheduling of Courses, Classrooms, Labs, and Professional Practice Placement Experiences

A student timetable that includes nursing and required non-nursing support courses, and laboratory and professional practice time, needs to be developed for each semester. Some aspects of the plan require negotiation with other departments in the educational institution. Schedules and space requirements ought to be determined far enough in advance of the semester in which they are necessary so that institutional deadlines for classroom and laboratory requests can be met.

Similarly, healthcare and community agencies have deadlines for placement requests and the school of nursing is obliged to adhere to these. Scheduling for student placements likely requires joint planning with personnel from other programs and educational institutions. Students in other nursing programs (e.g., practical nursing or nurse practitioner), medicine, physical therapy, occupational therapy, psychology, and social work also need practice experiences. Therefore, it is vital that placement schedules for all these groups be coordinated within each healthcare and community agency where learning experiences occur so that all students have suitable experiences and agencies are not unduly burdened.

Healthcare and Community Agencies

Healthcare and Community Agency Personnel

Involvement and support of stakeholders outside the educational institution are foundational to a curriculum with a practice component. Steering committee members serve as ambassadors for the new curriculum to nursing professional practice and community agencies. However, support from these and other nursing leaders, while essential, may not be sufficient to ensure successful implementation in placement sites.

Personnel with whom students will be directly working in professional practice placements require information about the curriculum redesign. Information sharing can be accomplished, in part, through formal presentations and the provision of written materials. More detailed, small-group meetings are also necessary to orient nursing and other staff to new learning goals or intended learning outcomes, the activities students will pursue, scheduling, and any plans related to student placement in the redesigned curriculum, particularly when there is an overlap with students in the existing curriculum. Faculty members, whose work intersects with nursing personnel, have an important role in this latter activity. Answering questions and allaying any apprehensions that might surface about the curriculum will be helpful in reducing misconceptions and subsequent misaligned expectations.

Meetings between faculty members and agency staff are also necessary to complete the arrangements and discuss details of the learning experiences, such as:

- Intended learning goals or outcomes for students
- Numbers and levels of students
- Students' schedules, roles, responsibilities, and accountability
- Faculty members' and clinical instructors' roles
- Agency staff expectations of students
- Agency staff roles in relation to student learning
- The maximum student-to-faculty ratio (O'Connor, 2001)
- Patients' or clients' rights with respect to care by students
- Access to patient or client records
- Necessity of specifying the full names of all students and instructors prior to the experience (O'Connor, 2001)
- Orientation of clinical instructors and students to agency policies and procedures
- Effect of clinical instructor absence on student experience
- Use of electronic devices
- Other details important to individual experiences

Because professional practice placements require negotiation, it is wise to create a plan for placements that covers several years. A tentative plan that takes into account the phasing out of one curriculum and the introduction of a redesigned curriculum allows members of healthcare and community agencies to assess the impact on their services and staff, and thus, the plan's feasibility within agencies. It is possible that modifications to the proposed plan will be necessary, and these can be determined within the context of readiness and fidelity of implementation.

These discussions confirm the appropriateness of prior decisions about agencies and units to be used for clinical placements. The choices are linked to expected student learning, nature of available learning experiences, clients, compatibility of school and agency philosophies, practice model in use, staffing and staff receptiveness, and resources and support for students (Gaberson & Oermann, 2010; Goldenberg & Iwasiw, 1988; Howlin, Halligan, & O'Toole, 2014; Molesworth, 2017; Peters, Halcomb, & McInnes, 2013; Rodger et al., 2008).

Discussions of the nature already noted contribute to both the procedural and educative components of FOI. If all participants are clear about what is to happen, how it will happen, and what is expected of them, then participants are ready for successful curriculum implementation and there is an enhanced likelihood that the curriculum will be implemented as planned.

Formal Agreements with Healthcare and Community Agencies

Nursing programs require formal agreements with agencies in which students have professional practice experiences. Educational administrators negotiate these affiliation or contractual agreements in concert with legal counsel. Signed copies of the agreements are retained in the school of nursing, the educational institution's legal department, and the agencies providing learning experiences.

If new placements are required for a redesigned curriculum, it is important to develop productive working relationships with agency personnel. During early meetings, the nature and intended outcomes of the nursing curriculum and practice experience can be explored and clarified. Individuals involved in the meetings can explain the requirements of the setting and their expectations for students and faculty members, who are essentially guests in their setting.

These first meetings provide the basis for establishing a letter of agreement or a formal contract, both of which are later negotiated by administrative and legal personnel from both settings. The formal agreement will include the purpose of the agreement; the rights, obligations, and responsibilities of the educational and healthcare agency; and administrative matters such as changes to, termination of, or continuation of the agreement.

Requirements such as criminal background checks (Farnsworth & Springer, 2006), current immunization, and cardiopulmonary resuscitation and first-aid certification for students and faculty members entering the agency might form part of the overall agreement, or might be included in an addendum for health science professional programs. Such provisions then become part of the policies of the school of nursing.

Contracts and agreements with community and healthcare agencies may stipulate that the educational institution must have insurance for student practice. The insurance policies should be made known to faculty members and students, and address matters such as harm to clients, liability, student injuries, and equipment loss or breakage.

Completion of contractual arrangements with healthcare and community agencies fulfills the requirement that satisfactory arrangements are in place for the professional practice aspects of the curriculum to be enacted. These arrangements are part of the procedural component of FOI.

Planning for the Educative Component of Fidelity of Implementation

The educative component of the structural critical component of FOI is a description of curriculum designers' expectations of what instructors must know to implement the curriculum (Stains & Vickrey, 2017). During discussions about

procedural preparations, the educative component is often addressed simultaneously, as described in the previous section. Our view is that this component applies not only to faculty members, but also to students, who must understand what is expected of them, and to members of healthcare and community agencies who interact with students in learning situations.

Faculty Members

Curriculum designers' expectations of what faculty members must know to implement the curriculum are addressed through ongoing faculty development during curriculum development, as described in some of the previous chapters. It is wise to identify core teaching skills that are consistent with the philosophical and educational approaches chosen for the curriculum, and to provide opportunities for faculty members to practice the skills. Small-group learning and practice with peer feedback can lessen the discomfort of learning to use the new approaches. These microteaching sessions are best led by a trusted, non-judgmental colleague who can demonstrate the desired skills and coach others.

In a concept-based curriculum, faculty members can find it helpful to witness how a concept-based class is conducted: examination of a concept, creation of links to prior knowledge, analysis of a detailed exemplar, consideration of situations that lack all the attributes of the concept, and formulation of generalizations (Erickson, Lanning, & French, 2017). A large-group session could be planned, with one member leading the "class" of a small group of colleagues. Then, the observers, "students," and "instructor" might discuss the conduct of the class, sharing observations, questions, insights, doubts, and additional suggestions. If such a session is undertaken before course creation begins, professors will have a solid basis for planning individual classes.

Additionally, faculty development could be directed at methods to assess student learning that reflect of the curriculum foundations. Ideas could be presented and discussed, with attention given to how the ideas are aligned with the intent of the curriculum. It would be important to allow time for faculty members to consider how new ideas could be applied in their courses. If a particular method has been chosen for use throughout the curriculum, such as the use of reflective professional practice reports, faculty members may need practice in responding to the reflections.

Students

Current students ought to be informed about ongoing curriculum development because they are naturally interested in the planned curriculum changes and what the changes will mean for them. If there are to be modifications in the curriculum in which they are enrolled, they require an orientation to the changes

and explanations about how the alterations will influence their preparation for professional practice.

Members of Healthcare and Community Agencies

Members of healthcare and community agencies who will interact with students also need an understanding of the curriculum and their expected role in it, as described previously. Attention to this occurs during the planning discussions when clinical placements are arranged. Discussion ought to occur not only with managers, but also with the individuals who will be involved with students. Agency members' knowledge of how they should interact with students is important so that the professional practice aspects of the curriculum can be implemented as envisioned.

Figure 14-1 is a summary of the structural critical components of fidelity of curriculum implementation. These require attention so that the nursing curriculum is ready to be enacted.

Procedural Component (What to Do)	Educative Component (What to Know)
Ensure adequate number of faculty members Assign courses and teaching Acquire necessary physical and material resources Ensure suitable support staff Arrange for necessary student services Plan professional practice placements: <ul style="list-style-type: none"> • Determine sites and scheduling • Have detailed discussions with agency personnel re: nature of the experience, roles of agency staff, clinical instructors, and students • Clarify legal matters • Conclude formal agreements Schedule classes and professional practice experiences Arrange for classroom and lab space Plan for simultaneous phasing out of existing curriculum while introducing redesigned curriculum	Faculty members: <ul style="list-style-type: none"> • Overall curriculum plan • Curriculum tenets • Strategies to ignite and assess learning consistent with philosophical and educational approaches • Expected interaction styles Current students: <ul style="list-style-type: none"> • Nature of curriculum changes • Effects of changes on them (if any) Personnel of healthcare and community agencies: <ul style="list-style-type: none"> • Overall curriculum plan • Curriculum philosophical and educational approaches • Nature of student professional experience • Roles in relation to student learning • Scheduling of student experiences

Figure 14-1. Structural critical components of fidelity of curriculum implementation.

Planning for the Instructional Components of Fidelity of Implementation

Readiness for curriculum implementation is more than planning to start the curriculum. It also involves planning and establishing processes to ensure that the implementation continues in the manner envisioned. In other words, the

pedagogical and student engagement components require ongoing attention during the life of the curriculum to prevent curriculum drift.

Faculty Members

Specific plans can be developed to ensure ongoing faculty development and support during curriculum implementation. Typically, faculty members experience doubts and questions when they actualize the plans, and these can become the basis of development sessions. As faculty members become familiar with the curriculum tenets and methods, new questions will arise, and these will require attention in individual or small-group mentoring sessions, or larger group settings.

Informal faculty development sessions can be planned to discuss issues related to implementation. For example, biweekly or monthly “lunch and learn” meetings can be scheduled. During these sessions, peer discussion and problem solving could provide a basis for deeper understanding and adherence to curriculum tenets.

For faculty members who have not been involved in the curriculum development process, such as part-time professional practice instructors, planned development is vital. If the curriculum is to achieve and maintain FOI, it is essential that all members with a responsibility for facilitating and evaluating student learning be fully immersed in its tenets and practices. Pedagogy ought to be consistent throughout the curriculum.

Fidelity and sustainability of teaching interventions have been positively related to ongoing, meaningful professional development (Penuel, Fishman, Yamaguchi, & Gallagher, 2007), professional development customized for participants, contextualized coaching, and modifications to the teaching intervention to suit local contexts (Harn, Parisi, & Stoolmiller, 2013). Noteworthy is a study of FOI of research-based instructional strategies in engineering science courses. Study findings were that the more complex the intervention (e.g., service-learning), the lower the fidelity, that is, the implementation of all components of the strategy (Borrego, Cutler, Prince, Henderson, & Froyd, 2013). These findings have relevance for nursing curriculum implementation. Specifically, ongoing faculty development is necessary for new educational approaches and discussion about allowable flexibility in implementation. The more complex the educational approach, the more sustained support is necessary. Such support enhances faculty members’ ability to maintain the expectations of the pedagogical component of FOI.

Students

Students entering a reconceptualized curriculum need an orientation to the curriculum, including the educational and philosophical approaches and the

nature of the expected student engagement. This allows them to understand the rationale for practices within the curriculum; what they can expect in interactions with professors, peers, clients, and agency personnel; and the means by which they can fully engage with the learning material and experiences to maximize their learning. Such an orientation can be reinforced by inclusion in all course syllabi of information about:

- Educational approaches in the course
- How students are expected to participate
- Evaluation approaches and standards

An orientation to what is expected of students, and continuing consistency in the expectations for them, sets the stage for achieving the FOI component of student engagement. The involvement and endorsement of students in curriculum design may also help other students to accept the expectations.

Members of Healthcare and Community Agencies

Follow-up meetings at placement sites to review and discuss student experiences after implementation of the redesigned curriculum are important. Such meetings will promote ongoing successful implementation. These meetings can address:

- What is working well
- Concerns expressed by agency staff and/or students
- Appropriate actions to resolve concerns and capitalize on successes
- Ways in which the instructor might enhance student–staff working relationships
- Other matters related to student learning that arise

Further to facilitating learning experiences for students, these meetings provide opportunities to:

- Demonstrate the educational institution’s interest in the views of practice partners
- Express appreciation for practice partners’ involvement in student learning
- Bring to light learning experiences not previously considered
- Build commitment to student learning

Regular meetings of this nature contribute to healthy relationships with healthcare and community agencies. Importantly, they provide opportunities to emphasize the nature and importance of agency staff members’ contributions to student learning and to reinforce ideas about the curriculum with agency personnel, thereby contributing to the pedagogical component of FOI.

Figure 14-2 is a summary of the instructional critical component of fidelity of curriculum implementation. These require ongoing attention during curriculum enactment.

Pedagogical Component (How Faculty Members and Others Behave)	Student Engagement Component (How Students Behave)
Faculty members: <ul style="list-style-type: none"> • Ongoing faculty development about educational and interactional approaches • Support for adherence to new approaches • Group problem solving re: challenges of implementation Personnel of healthcare and community agencies: <ul style="list-style-type: none"> • Opportunities for discussion with faculty members about nature of the curriculum, and challenges and successes when working with students • Ongoing support and reinforcement from faculty members for contributions to student learning 	Orientation to the curriculum Consistent adherence to educational and philosophical approaches during: <ul style="list-style-type: none"> • Class, lab, simulation, and professional practice experiences • Interactions with peers, clients, agency personnel, and faculty members

Figure 14-2. Instructional components of fidelity of curriculum implementation.

Relationship of Ensuring Readiness for, and Fidelity of Implementation to, an Evidence-Informed, Context-Relevant, Unified Curriculum

Whereas course creation constitutes the culmination of the development of an evidence-informed, context-relevant, unified curriculum, it is curriculum implementation that is the embodiment of the ideas agreed to during the development process. All matters that influence readiness for implementation, and thus, fidelity of implementation, affect the integrity of the curriculum. Planning for, and creating circumstances that will support FOI will lead to the enactment of the evidence-informed, context-relevant, unified curriculum as it was designed.

Core Processes of Curriculum Work

Faculty Development

Faculty development activities in relation to planning for fidelity of implementation are described in the sections on planning for the educative and instructional components of FOI. Development activities should not be delayed until implementation is imminent, because it can take time to learn to enact new philosophical and educational approaches and integrate them fully into individuals' repertoires of action. Moreover, ongoing support is needed as new approaches are implemented.

Ongoing Appraisal

As attention is naturally given to implementation simultaneously with curriculum development, and immediately prior to implementation, faculty members appraise readiness to deliver the curriculum as conceived. Their questions might be:

- How clear are faculty members about the planned educational approaches? What will faculty members do? What will students do? What needs further clarification or elaboration? What further faculty development is needed?
- What are the plans for ongoing support of pedagogical practices in the curriculum? How can the plans be improved?
- Have the necessary steps been taken to negotiate for the needed professional practice placements? If the desired placement sites cannot accommodate the projections for professional practice, what are the alternatives?
- How clear are faculty members and agency personnel about the nature of the desired learning experiences and the roles of students, faculty members, and agency staff?
- Do the plans for ongoing communication with healthcare and community agencies seem reasonable and sufficient?
- Are plans sufficient to help students participate fully in the curriculum? What else might be necessary?
- To what extent will the plans support FOI? How can the implementation plans be improved?
- Are the necessary technological resources available?
- Are the required classroom and laboratory spaces available? If not, what are the contingency plans?
- Are there logistical arrangements that have been missed?
- Do faculty members feel ready to implement the curriculum as conceived? If not, what are the matters that need further attention?

Scholarship

Scholarship activities could include a qualitative study about faculty members' and stakeholders' sense of readiness to implement a redesigned curriculum. A similar study could be conducted with healthcare and community agency personnel. Matters that might be addressed are their level of knowledge about the educational and philosophical approaches, comfort with enacting the new approaches, and confidence in the curriculum plans. Factors contributing to readiness and ideas to enhance readiness and fidelity of implementation could emerge.

As the curriculum is being implemented, it would be worthwhile to note the logistical arrangements that work well, do not work, or were inadvertently omitted. Information of this nature would contribute to curriculum evaluation and refinement, and could form the basis of an article that would add to the literature about curriculum development in nursing education.

CHAPTER SUMMARY

Readiness for curriculum implementation includes willingness by individuals to enact the curriculum as planned and the existence of external conditions that make the enactment possible. Fidelity of implementation is the extent to which the curriculum is implemented as planned. Ensuring readiness and planning for FOI are essential to fulfill the intentions of curriculum designers who have created an evidence-informed, context-relevant, unified curriculum. This preparation requires focused attention concurrently with curriculum development. Similarly, consideration of how the phasing out of an existing curriculum and the introduction of a redesigned one must be part of planning for implementation. The relationship of readiness and FOI to an evidence-informed, context-relevant, unified curriculum is described. Ideas related to the core components of curriculum work, that is, faculty development, ongoing appraisal, and scholarship are presented.

SYNTHESIS ACTIVITIES

Planning for implementation of a reconceptualized nursing curriculum at Great Sea University College of Nursing is described and followed by questions and activities related to the case. Then, questions and activities are presented to stimulate thinking when readers are planning curriculum implementation in their settings.

■ Great Sea University College of Nursing

Great Sea University College of Nursing offers an upper-division BSN program. The need for significant curriculum changes became apparent during preparation for accreditation. Faculty members decided that a new curriculum, and not merely a revision, was needed and that they would not wait for the accreditation review to begin curriculum development. They expected recommendations from the accreditors and thought that these would be helpful to inform their curriculum redesign.

Dean Katsuko Yamaguchi requested that the undergraduate chair, Dr. Ioanna Callas, convene a task force to initiate curriculum planning.

Dr. Callas then asked one faculty member from each semester of the curriculum to work with her on an overall plan for curriculum development. The group created a critical path and task groups were formed.

In time, a new concept-based curriculum was designed. The re-conceptualized curriculum includes more simulations and less on-site professional practice time than in the existing curriculum. Moreover, new community placements are required and discussions about these are underway. Because of an alteration in the order of courses from the present curriculum, there will be one semester when students from the current and redesigned curricula will require similar professional practice placements. Prenursing courses remain largely unchanged and successful negotiations have been completed with the departments involved.

There is adequate classroom space in the College of Nursing for the required nursing courses. However, lab space for the planned simulations is not sufficient and the university will not provide funding for building additional labs. The possibility of evening classes for simulations has been proposed. Timetabling and room booking arrangements for all nursing courses are underway with the relevant university office.

Although the redesigned curriculum was approved within the College of Nursing, there is considerable hesitation about it. In particular, some faculty members are unsure about how to teach in a concept-based curriculum; others are concerned about the diminished hours of “real” practice; and a third group wonders who will design and conduct the simulations. Managing students from two curricula in the same professional placement areas is another worry to many. Members of healthcare agencies who were part of curriculum development have expressed misgivings about how the reduced professional practice time will be received by their colleagues.

The first nursing courses will be implemented 6 months from now. However, in view of the many reservations expressed, Drs. Yamaguchi and Callas are concerned about faculty members’ readiness for implementation, and the fidelity with which the curriculum will be implemented.

■ Questions and Activities for Critical Analysis of the Great Sea University College of Nursing Case

1. Assess the readiness of the Great Sea University College of Nursing to implement the new curriculum 6 months from now.
2. What procedural and educative components of the critical structural components need attention before implementation? How can they be attended to, and by whom?

3. Consider the faculty development that might be necessary in relation to concept-based teaching and simulation. How can it be conducted and by whom? Create a feasible 6-month plan for faculty development.
4. Create a feasible plan to support the pedagogical component of fidelity of implementation.
5. How can the student engagement component of fidelity of implementation be addressed?
6. Propose ideas for discussion with the community agencies where the College of Nursing is seeking new professional practice placements.
7. Plan a meeting with healthcare staff to explain why on-site professional practice hours have been reduced. Anticipate staff reactions and formulate suitable responses.
8. How can the need for two classes to use the same professional practice placements at the same time be managed?
9. Hypothesize about the strength of the fidelity of implementation once the curriculum is implemented. Justify your ideas.
10. Describe how fidelity of implementation can be developed and supported in situations where:
 - a. Few faculty members have been part of curriculum development.
 - b. Faculty numbers and time are limited.
 - c. Both (a) and (b) exist.

■ **Questions and Activities for Consideration When Ensuring Readiness for Curriculum Implementation in Readers' Settings**

1. Describe the critical planning steps for successful curriculum implementation. How can the structural components of fidelity of implementation be addressed?
2. How can stakeholders be informed of the developing curriculum and implementation plans?
3. Who will be responsible for exploring learning opportunities in new practice sites? For initiating contract discussions? What assistance can be offered to nursing staff so they will be ready for students' learning experiences?

4. Examine the human, physical, and financial resources necessary to ensure fidelity of curriculum implementation. If all necessary resources are not available, what could be done to procure them or to modify the curriculum to match the resources?
5. Who will be responsible for apprising administrative personnel of the scheduling needs within the redesigned curriculum?
6. Propose strategies that might alleviate student concerns about being “guinea pigs” in a redesigned curriculum or being in a curriculum that is being phased out.
7. What are the plans for phasing out the existing curriculum?
8. Which ongoing faculty development activities could be planned to address the pedagogical component of fidelity of implementation?
9. How can students be prepared to engage in the curriculum as envisioned?
10. Identify other matters that require thoughtful consideration to ensure readiness for and fidelity of curriculum implementation.
11. Suggest questions that might contribute to ongoing appraisal of readiness for, and fidelity of curriculum implementation?
12. Describe feasible scholarship projects related to readiness for and fidelity of curriculum implementation.

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Planning Curriculum Evaluation

CHAPTER PREVIEW

Nursing faculty members and administrators are responsible for formative and summative evaluation of the curriculum for the overall purpose of quality improvement. To ensure that evaluation is aligned with the curriculum intent, planning for curriculum evaluation begins simultaneously with curriculum design. This chapter begins with definitions of *evaluation*, *curriculum evaluation*, and *program evaluation*. Then, the purposes of internal and external curriculum evaluations are described. The curriculum evaluation process is detailed, beginning with the definitions, purposes, questions, and audiences, and ending with reflection on the process. Evaluation models and their value to nursing curricula are overviewed. Specific information is provided about planning evaluation of curriculum components, including curriculum goals or curriculum outcome statements, design, concepts, courses, strategies to ignite learning, and strategies to assess student achievement. Evaluation questions are suggested for each component. In addition, consideration is given to evaluation of actual curriculum outcomes and fidelity of implementation. The benefits of participating in curriculum evaluation planning are outlined. A brief discussion of faculty development, ongoing appraisal, and scholarship related to curriculum evaluation is followed by an explanation of the relationship of curriculum evaluation to an evidence-informed, context-relevant, unified curriculum. A chapter summary precedes the synthesis activities.

QUESTIONS ADDRESSED IN THIS CHAPTER

- What is *evaluation* generally, and what are *curriculum evaluation* and *program evaluation* more specifically?
- Why is it important to integrate evaluation planning into curriculum development?
- What are the purposes of internal and external curriculum evaluation?
- What processes are employed in curriculum evaluation?
- What are the benefits of reflecting on the curriculum evaluation process?
- What models might be used to guide curriculum evaluation?
- How can individual curriculum components and actual curriculum outcomes be evaluated?
- Why might fidelity of curriculum implementation be explicitly assessed?
- What is the relationship of curriculum evaluation to an evidence-informed, context-relevant, unified curriculum?
- How are the core processes of faculty development, ongoing appraisal, and scholarship related to planning curriculum evaluation?

Definitions of Curriculum Evaluation and Program Evaluation

Definitions of *evaluation* differ in their emphases. For example, one gives prominence to the processes involved:

. . . an applied inquiry process for collecting and synthesizing evidence that culminates in conclusions about the state of affairs, value, merit, worth, significance, or quality of program, product, person, policy, proposal, or plan. Conclusions made encompass an empirical aspect (that something is the case) and a normative aspect (judgment about the value of something). (Fournier, 2005, p. 140)

Another definition emphasizes the criteria used as a basis for judgments. Evaluation is “the identification, clarification, and application of defensible criteria to determine an evaluation object’s value (worth or merit) in relation to those criteria” (Fitzpatrick, Sanders, & Worthen, 2011, p. 7).

The two definitions together make evident important characteristics of evaluation:

- Establishment of reasonable criteria or standards
- Systematic data gathering

- Data synthesis and interpretation
- Rendering of a conclusion about value, merit, or worth

More specifically, *curriculum evaluation* is:

The assessment and judging of the merit and worth of the broad processes, elements, and resultant outcomes encompassed within an educational curriculum. Curriculum evaluation may include curriculum planning and design processes . . . curriculum implementation . . . and assessing the effectiveness of the implemented curriculum in creating desired student change. (Sullivan, 2009)

Although this definition does not explicitly refer to criteria against which to judge aspects of the curriculum, this idea is implicit in the phrase, *assessing the effectiveness*.

Curriculum Evaluation

Curriculum evaluation is an organized and thoughtful appraisal of

- elements central to the course of studies undertaken by students, and
- graduates' abilities.

It is composed of identification of the evaluation purposes and questions, establishment of standards, systematic data gathering, application of the standards, and formulation of judgments about the “value, quality, utility, effectiveness, or significance” (Fournier, 2005, p.140) of the curriculum. The aspects to evaluate include the philosophical approaches, goals or outcome statements, design, courses, educational approaches, and strategies to evaluate students' achievement. Also assessed are actual curriculum outcomes, implementation fidelity, resources to support the curriculum, learning climate, and policies. A comprehensive curriculum evaluation will provide a “summation of the written, the supported, the taught, the tested, and the learned curriculum” (Glatthorn, Boschee, Whitehead, & Boschee, 2016, p. 407), and the latter includes the hidden curriculum and the one that is experienced (Parkay, Hass, & Anctil, 2010, p. 357).

Curriculum evaluation is inherently utilization-focused evaluation, that is, “evaluation done for and with specific intended primary users for specific intended uses” (Patton, 2008, p. 37). Therefore, the evaluation questions and processes address matters that are significant to the users, most notably faculty members and students. The knowledge generated, and the appraisal or judgment (evaluation) attached to the data, are context-specific and applicable for a particular point in time (Alkin & Taut, 2003). Further, curriculum evaluation is dependent on participatory and collaborative approaches. Curriculum

developers, implementers, evaluation designers, evaluators, and evaluation users are all faculty members who work together, along with students and other stakeholders, to achieve the evaluation purposes.

Program Evaluation

Program evaluation includes all aspects of curriculum evaluation and a broader scope of elements. These elements are:

- The administrative structure of the school of nursing
- Institutional support for the school
- Faculty members' teaching, research, and professional activities
- Student support services
- Library services
- The school's relationships with other academic units, research institutes, and healthcare and community agencies

Accreditation is an example of a program evaluation, conducted for the purpose of verifying a school's achievement of standards. All aspects of the school's internal functions and its functioning within the university and community are assessed to determine the nursing program's effectiveness and quality.

Purposes of Internal Curriculum Evaluation

Internal formative and summative curriculum evaluation is conducted by members of a school of nursing to determine the curriculum strengths, weaknesses, merits, redundancies, and deficits. Additionally, identification of possible future directions for the curriculum is typically an outcome of the evaluation process (Oliva, 2009). As a quality-control mechanism, the intent of curriculum evaluation is to assure that the curriculum, its courses, the processes undertaken, and student achievement are meeting the required standards.

More specifically, the purposes of internal curriculum evaluation in nursing education are to:

1. Determine the extent to which:
 - Agreed-upon conceptual emphases, logical progression, and unity are evident.
 - The curriculum is relevant for its context.
 - Gaps or redundancies exist.
 - Implementation fidelity is maintained (i.e., the intended processes are being followed).
 - Student achievement is congruent with the curricular intent and demands of the external context.

- Students, faculty members, graduates, and employers are satisfied.
 - The curriculum is meeting defined school and university standards.
 - The curriculum is aligned with approval and/or accreditation requirements.
2. Obtain data that will influence decisions about:
- Ways to strengthen student achievement of curriculum goals or intended curriculum outcomes
 - Curriculum maintenance, refinement, revision, reorganization, or discontinuance and replacement
 - Resource allocations and requests
 - Faculty development needs

Achievement of these purposes contributes to the ultimate purpose of curriculum evaluation, that is, to improve the quality of the curriculum and thus to improve the quality of the education that students experience.

Whether data are gathered for formative or summative purposes, there is an implicit expectation by those providing data that the curriculum will be influenced by their input. Accordingly, in all internal curriculum evaluations, often unstated and possibly unrecognized purposes include assuring all who provide evaluation data that:

- Faculty members are committed to ensuring curriculum quality.
- The curriculum is responsive to influences within and beyond the school of nursing.
- Students will graduate from a dynamic and context-relevant curriculum.

Formative Evaluation

The purpose of internal formative curriculum evaluation is to provide evidence about the feasibility and effectiveness of a portion of the curriculum so that ongoing refinements and improvements can be made. Formative evaluation is carried out at regular intervals during curriculum implementation and the results provide a basis to shape the curriculum (Posavac, 2011). Also referred to as *informative assessment* (Tomlison, 2010), formative evaluation is more than mere feedback; it is feedback in relation to a standard.

Insights gained from formative evaluation relate directly to the portions of the curriculum being reviewed. However, they may have application or relevance to parts of the curriculum not yet implemented. For example, if a deficiency in student achievement is noted in an early nursing course, there needs to be a correction for subsequent offerings of the course. As well, adjustments in a (the) subsequent nursing course(s) for that particular student group may also be necessary to compensate for that first deficiency.

The principal data sources for formative evaluations are faculty members and students. Faculty members, students, administrators, and possibly personnel in professional practice settings are the main audience for formative curriculum evaluation.

Summative Evaluation

Summative evaluation is carried out at the completion of a portion of the curriculum, or the total curriculum. The purpose of this comprehensive internal evaluation is to judge the effectiveness of the total curriculum, and this evaluation becomes the basis of recommendations about maintenance, revision, or discontinuance. Data are obtained from faculty members, students, graduates, administrators, employers, and other stakeholders. Audiences for summative evaluation results are those who provide data (Gaberson & Vioral, 2014), as well as regulatory bodies, funders, consumers, and committees within the educational institution that monitor curriculum quality.

Purposes of External Program Evaluation

External curriculum evaluation is summative evaluation. It is generally undertaken as part of a more extensive summative program evaluation conducted for approval or accreditation by an outside agency. State or provincial approval and regional or national accreditation are processes by which an external organization evaluates and recognizes an institution or program of study as meeting certain predetermined criteria. For both approval and accreditation, schools must submit a self-study report that addresses criteria set by the outside agency. Onsite visits are then conducted by peers external to the school to verify the self-study data. Once the agency reaches a decision about approval or accreditation status and any recommendations, the decision is conveyed to the school, the parent institution, and as necessary, regulatory bodies.

Approval

Nursing program approval is a compulsory evaluation or review process concerned primarily with the protection of public safety. This protection is accomplished by verifying that a program has met prescribed minimum standards set by a body designated in state or provincial legislation, or according to regulations authorized by that legislation. Every nursing program leading to licensure examinations must meet the standards of the body authorized to regulate nursing. Approval indicates that a nursing program is of a quality sufficient for

graduates to be allowed to write the licensing examination. Schools of nursing in Canada and the United States of America cannot operate without approval because graduates would not be eligible to write the NCLEX-RN® examination.

Accreditation

Accreditation in academia is an endorsement of a nursing program by a non-governmental, discipline-specific agency concerned with nursing education. The overall purpose of the accreditation process is quality assurance in the pursuit of excellence. Undergoing review for accreditation is costly and generally a voluntary process for schools of nursing.

Accreditation is a rigorous appraisal of a program to determine the extent to which it meets standards determined by the accrediting board. Nursing programs undergo accreditation to verify their quality to the consumers of their products, that is, students, alumni, and employers (Heydman & Sargent, 2011). “Accreditation provides an important signal of program quality, [and therefore] consumers naturally rely on that signal to support student application decisions, employment recruiting and hiring, professional licensure, and government and private investment” (Pavlakis & Kelley, 2016, p. 81), as well as graduates’ admission to subsequent higher education programs, and possibly students’ ability to obtain grants or loans.

The Curriculum Evaluation Process

Planning curriculum evaluation is a dimension of curriculum development that should occur simultaneously with curriculum and course design, although in some schools of nursing, attention is not given to evaluation until curriculum implementation is underway. Whether planned during curriculum design or later, curriculum evaluation is a participatory process with faculty members, students, and possibly others. Consensus and shared understanding about the purposes and procedures of the evaluation might lead to more willing acceptance of recommendations that result from the evaluation (De Valenzuela, Copeland, & Blalock, 2005; Patton, 2012).

It is prudent to remember that curriculum evaluation is only one aspect of a school’s activities. Therefore, this undertaking should be confined to only that which is necessary to achieve the purposes of the evaluation. However, it is advisable not to let evaluation become an afterthought, but rather to integrate considerations about evaluation into curriculum development discussions. In other words, thoughts about curriculum evaluation should be given attention as the curriculum is being created.

Decisions about each aspect of curriculum evaluation are not made in isolation from one another. Rather, they are made in a more unified fashion and are based on iterative discussions. Decision making in advance of curriculum implementation will allow for organized formative and summative evaluation. When plans are made and activated for ongoing accumulation of data from the time of curriculum implementation, a commitment to continuous curriculum improvement is apparent. Moreover, if data gathering for curriculum evaluation is viewed as a regular, expected, and normal part of curriculum implementation, then the stress associated with intermittent internal and external evaluations is markedly lessened.

Generally, curriculum evaluation activities are shared among many faculty members. Yet, the overall responsibility must rest with an individual or group, such as the curriculum leader, a curriculum committee, or curriculum evaluation committee, so that efforts are coordinated and complete. Documenting the evaluation efforts and results, and subsequent curriculum modifications, will provide information important for later internal and external curriculum and program evaluations. Certainly, evidence of systematic and ongoing evaluation, the results of these appraisals, and actions taken in response to any recommendations, are information required for approval and accreditation.

Planning for curriculum involves requires iterative discussion about the following:

- The evaluation purpose(s), questions, and audiences
- An evaluation plan
- Participant involvement in planning and conducting evaluation
- Selection of an evaluation model
- Standards, criteria, or indicators
- Data gathering procedures and timing
- Possible use of evaluation data beyond curriculum improvement
- Implementation and monitoring of the evaluation plan
- Procedures to judge quality, make recommendations, and report results
- Plans for formal review of the curriculum evaluation process

Defining the Evaluation Purposes, Questions, and Audiences

The first, and possibly the most important, step in planning curriculum or program evaluation is to decide the purposes of the evaluation. Is it to meet institutional requirements for periodic internal curriculum evaluation? Is it to demonstrate fulfillment of requirements for accreditation? Is it to obtain data upon which to base curriculum refinement, revision, or development? At the

outset, it is necessary to establish why the curriculum being evaluated, and how the evaluation data and conclusions will be used.

In general, the purpose of curriculum evaluation is to judge the merit of all or part of the curriculum, with the intention of improving the curriculum. Other purposes pertinent to curriculum evaluation can be to:

- Improve decision making and policy formulation (Fitzpatrick et al., 2011)
- Verify congruence with standards
- Obtain data for subsequent curriculum development
- Meet institutional accountability requirements

Once the purposes are established, evaluation questions are developed. This requires knowing which questions will provide answers that will meet the evaluation purposes. Three types of questions are possible.

- Descriptive questions can address the curriculum as an entity and processes within it.
- Normative questions ask for information about how well an aspect of the curriculum is meeting established standards.
- Output/impact questions are developed to gain information about the effects of the curriculum or its components (Christenbery, 2017).

Although many evaluation questions could be asked, they should be judiciously formulated and selected to provide useful information yet keep the scope of the evaluation manageable. Clarity about the evaluation purpose and questions sets the boundaries of the evaluation (Fitzpatrick et al., 2011), ensuring that efforts will be focused and relevant to the intended use of the evaluation results.

Simultaneously with development of the evaluation purposes and questions, it is necessary to determine who the audiences will be for the evaluation results. Generally, the audiences for the evaluation results are those who are affected by any subsequent conclusions or decisions (Gaberson & Vioral, 2014). Will the audience be:

- Faculty members within the school of nursing only?
- University leaders?
- Students?
- Healthcare and community stakeholders?
- External agencies?

Deciding upon the audiences will help the planning group to refine the purposes and questions to ensure that matters pertinent to the identified audiences are addressed. Confirmation of the evaluation purpose(s), questions, and audiences lead to decisions about the evaluation design.

Creating an Evaluation Plan

Curriculum evaluation should not be a one-time activity undertaken in preparation for external curriculum review. Rather, it should be a regular process that leads to curriculum improvement. Consequently, curriculum monitoring; ongoing data gathering, analysis, and interpretation; formative evaluation and feedback, and summative evaluation form part of an overall curriculum evaluation plan within a school of nursing. The regular formative evaluations contribute to the summative evaluation.

An evaluation plan addresses both formative and summative curriculum evaluation. Typically, what is evaluated are the curriculum components, processes, and outcomes, with conclusions being drawn about fidelity of implementation, gaps, and redundancies. Clarity is required in the plan so that everyone involved understands fully what is expected and when it is expected.

For each evaluation question, the overall curriculum plan specifies:

- Data to be gathered, data sources, and data gathering methods or instruments
- Timing of data gathering
- Persons responsible for gathering data
- Timelines for completion of data gathering activity
- Analysis and interpretation procedures
- Standards and/or criteria
- Persons responsible for analyzing and interpreting data and preparing recommendations
- How and to whom results will be reported

The overall plan also details:

- The frequency of formative and summative evaluation
- A system to manage and store data
- A procedure for recording curriculum recommendations and subsequent actions
- A procedure to review the overall process

Involving Participants in Evaluation Planning

Without doubt, faculty members have the major responsibility in planning for curriculum evaluation. If the evaluation is considered as the curriculum is being designed, all participants in curriculum development are inherently involved in planning curriculum evaluation. However, if planning for evaluation begins after curriculum implementation, it is prudent to consider who ought to be involved in addition to faculty members. Students and other stakeholders have

perspectives that faculty members might not consider and that are relevant to curriculum success. Thus, those initiating curriculum evaluation need to consider and invite suitable individuals to participate in planning the evaluation process.

Selecting an Evaluation Model

Agreement about the evaluation purposes influences the selection of a suitable evaluation model. This choice is affected by the curriculum's philosophical orientation, members' familiarity with various models, the match between the evaluation purposes and models, and the timespan in which the evaluation must be completed and subsequent decisions made. Once a model is selected, evaluation questions may be revised to be consistent with the model.

Typically, no one model will meet all the purposes of a curriculum evaluation, and so elements of several models are used. An overview of curriculum evaluation models, and factors to consider in the selection of a model, are presented in a later section of this chapter.

If the curriculum or program is being evaluated by appraisers or agencies outside the school of nursing (e.g., an accrediting body or institution-wide curriculum standards committee), there is no decision to be made about an evaluation model: the school of nursing is required to provide the data requested in the prescribed format. However, it is important to remember that these periodic appraisals may not meet all the purposes for which curriculum evaluation is conducted in a school of nursing. Also, the time interval between these reviews is lengthy, and therefore, these periodic reviews are not an adequate basis for continuous curriculum quality improvement.

Establishing Standards, Criteria, or Indicators

Conclusions about curriculum effectiveness and quality depend on a clear understanding of the standards against which the curriculum is being judged and the criteria used to determine if the standards are being attained. Standards are "something used as a measure, norm, or model in comparative evaluations" (Stevenson, 2010). It is an authoritative statement or example of correctness, perfection, or quality. Criteria are distinguishing characteristics used to judge whether a standard has been achieved.

Specification of standards and criteria should be created for all evaluation questions, and they should be aligned with the curriculum evaluation model. However, standards and detailed criteria for all curriculum components may not be possible, necessary, or realistic. Therefore, it could be more appropriate to define indicators, that is, observations or calculations that show the presence or state of a condition. For example, the nature of classroom activities is an

indicator of the congruence between the enacted and the intended educational approaches.

Faculty members rely, in part, upon guidelines, standards, and/or criteria for program approval and accreditation when establishing curriculum standards. They might also write standards particular to their school of nursing. As examples, they might view inclusion of research about nursing practices in classes as a criterion of context relevance, or the alignment of students' projects with the philosophical approaches as an indicator of curriculum unity. These examples would be relevant for assessing the total curriculum and individual courses.

Consideration should be given to standards for various curriculum components. For some components, such as strategies to ignite learning, the literature is replete with criteria for effective teaching. These can be invaluable in reaching an agreement about school-specific standards. For other components, faculty members may have to develop their own standards.

The specification of standards, criteria, and/or indicators allows faculty members to answer the questions: *Is this a quality curriculum? On what basis can we say so?* It is vital that the standards, criteria, and indicators be specific enough to be understandable and provide direction for gathering data and making evaluative judgments, while not being too extensive, detailed, or overly time-consuming to create. They can be refined in the future, if necessary. Additionally, experienced and knowledgeable nursing faculty members are generally able to recognize the merits and deficits of a curriculum. They are experts and thus their expert opinions have value, as specified in Eisner's connoisseur/critic model (Posavac, 2011). As standards, criteria, and indicators are considered, relevant questions might be:

- Are the standards, criteria, and/or indicators consistent with the curriculum intent and with those used by university review committees and external evaluating agencies?
- Are the standards, criteria, and/or indicators congruent with the curriculum evaluation model(s) selected?
- Do the number and nature of the standards, criteria, and/or indicators seem reasonable and appropriate?

Planning Data Gathering for Curriculum Evaluation

Planning data gathering for curriculum evaluation requires attention to the methods to be employed, the scope of data required, and logistics of the undertaking. When developing a plan for data gathering, the following questions might arise:

- What data are required to answer the evaluation questions and ascertain if standards are being attained?

- How can data be obtained expeditiously?
- When, how, and from whom will data be gathered?
- Which established data gathering tools could be used? Are they appropriate?
- Who will be responsible for developing, pilot-testing, and approving school-specific data gathering tools?
- Who will be responsible for obtaining the data?
- How often will data be gathered, reviewed, and interpreted, so that conclusions can be drawn and recommendations formulated? Who will participate in this process?
- What resources are required to conduct these activities?
- Might data gathered for curriculum evaluation be used for other purposes?

Data Gathering Methods

Data gathering methods are linked to the evaluation purposes, questions, and models, and predetermined standards. Typically, qualitative and quantitative methods are employed. The methods and tools should allow for a comprehensive evaluation and be understandable and easy to use, cost- and time-efficient, valid, reliable, and credible.

Quantitative and qualitative data gathering methods and procedures with which most faculty members are already familiar can be employed for curriculum evaluation. Surveys can be used to assess faculty members' and students' satisfaction with the curriculum, their views about strategies used to ignite learning, infusion of the philosophical approaches into the enacted curriculum, and aspects of implementation fidelity (such as student engagement). Interviews (individual or focus groups) can uncover qualitative data from students, faculty members, or graduates for similar purposes. Interviews and surveys are also effective in obtaining data from graduates, clinicians, and employers.

Unstructured observations, and annotations about them, can be useful early in the curriculum evaluation process. From these, structured observation based on criteria can be planned. For example, observations of students in professional practice settings can lead to criteria related to students' practice abilities, attitudes, and values, and subsequently to guidelines for structured observations and the acquisition of more specific data. Anecdotal notes can be used to record observations related to course goals or course competencies in lab and professional practice settings, and, when accumulated, provide evidence about student achievement. An examination of a sample of students' written

projects provides insight into the quality of student work and, by extension, their achievement of course expectations. Similarly, peer or expert observation can lead to conclusions about classroom and professional practice teaching-learning encounters and implementation fidelity.

Rating scales, checklists, self-reports, and curriculum maps are other means of obtaining data for curriculum evaluation. Rating scales could be used to measure abstract concepts, while checklists identify expected behaviors or competencies and the related student performance. Attitude scales can measure how students and faculty members feel about a particular subject or situation, such as a professional practice placement or a learning activity. Faculty members could use self-reports or journals to record their ideas and insights as they implement the curriculum. Similarly, student narratives can provide information about their reflections, thoughts, fears, progress, successes, actual outcomes, and ideas for curriculum improvement. Curriculum maps, completed after course implementation, can be compared to the original plan for the course.

It will likely be necessary to develop instruments or guides for data gathering. In this case, time needs to be planned to develop and test them. The tools can be pilot-tested to ensure that they are understandable and so that face validity can be assessed. The instruments or guidelines for data gathering should

- Address processes central to the curriculum
- Be applicable in several contexts, such as classroom, online, and professional practice settings
- Be understandable to users
- Be efficient and cost effective
- Yield important information to answer the evaluation questions

After being used once, the validity can be further assessed, and refinements made.

Data Sources

Data sources can include faculty members, students, graduates, administrators, clinicians, employers, and nursing leaders, as well as curriculum and course documents. Test scores, essays, and journals can lead to valuable insights about students' knowledge, attitudes, and experiences. Records, such as student grades, attrition rates, or success rates on licensure examinations and other external tests, are useful for curriculum evaluation. Additionally, data can be used from formal evaluation processes already in place, such as institution-wide teaching or course evaluations. Use of available data lessens the need to create data gathering tools, thus reducing the work associated with curriculum evaluation. Use of multiple sources allows for triangulation of data and produces a fair and balanced system, with the combination making up for the shortcomings of each source (Appling, Naumann, & Berk, 2001).

Data Gathering Schedule

The timing of data gathering is important. It should begin with the introduction of the first courses so that formative evaluation is undertaken concurrently with curriculum implementation. In this way, early decisions arising from formative evaluation can stabilize the curriculum and prevent problems that might occur in courses yet to be implemented.

Some scheduling of data gathering seems self-evident. Student evaluation of courses and teaching typically occurs at the completion of each course. However, formal course evaluation mandated by educational institutions is unlikely to address all the questions to which curriculum evaluators seek answers. Additional data gathering is best scheduled when students are likely to provide opinions about courses without fear of penalty for unfavorable comments, or without relinquishing the time they feel would be better spent on course work. Similarly, it is evident that data gathering about graduates' abilities cannot occur until there are graduates, but access to graduates requires attention.

A reasonable schedule for gathering pertinent data is necessary. It might be decided that some data do not need to be obtained annually. For example, a survey of graduates might be undertaken every 2 years. The intent is to ensure that data are obtained as frequently as necessary to provide an adequate basis for meaningful evaluation, yet not so often that the task becomes unduly burdensome.

Deciding on Use of Evaluation Data

Use of evaluation data for curriculum improvement is an explicit purpose of curriculum evaluation. However, it is also conceivable that some of the data could be used for purposes beyond the curriculum, and this possibility should be discussed and agreed upon prior to data gathering.

For example, could the data be used as the basis of a manuscript? If so, who will have access to the data and in what format? If teaching or course evaluations beyond standardized institution-wide questionnaires are undertaken, could individual faculty members use those evaluations for promotion and tenure purposes? Will the school leader see the individual teaching evaluations? If faculty journals or portfolios are requested, who will read them, and how will they be assessed in relation to the curriculum? Who will receive the curriculum evaluation results? Discussion and agreement about these and similar questions are necessary before curriculum evaluation activities begin.

Implementing and Monitoring the Evaluation Plan

Once a curriculum evaluation plan has been created and approved, it is implemented. Data are gathered in accordance with the methods and timing specified.

As the plan is being implemented, the procedures are monitored by individual faculty members and the evaluation leader or committee to assess their quality and comprehensiveness. It is possible, for example, that evaluation questions will be revised, additional required data will be identified, or that some data gathering will be deemed unnecessary as a result of ongoing appraisal. Modifications are then made to the plan with a view to ensuring both completeness and economy of effort.

Judging Curriculum Quality and Making Recommendations

Typically, a standing curriculum committee receives the evaluation data. The committee's responsibilities include reviewing and interpreting the data, reaching a judgment, and making recommendations. This work needs to be conducted by individuals with experience in data analysis and interpretation, so that all faculty members, students, and stakeholders will have confidence in their conclusions.

Once data gathering is complete, each data set is analyzed and compared to the standards, criteria, and/or indicators previously defined. The extent of similarity or divergence between the findings and the standards is determined. Then, the analysis findings are synthesized to determine their meaning in relation to the evaluation questions and the curriculum's quality.

It is important to remember that with multifaceted, complex interventions, such as a curriculum, it is not possible to assume a linear relationship (cause and effect) between any one curriculum element and curriculum outcomes (Frye & Hemmer, 2012). Rather, a more holistic perspective is necessary in the interpretation of evaluation data. From the conclusions drawn, recommendations are formulated about actions required to maintain or improve curriculum quality. Alternately, there could be a recommendation to discontinue the curriculum and begin afresh with curriculum development.

Reporting Evaluation Results and Recommendations

The committee responsible for receiving and interpreting evaluation data, in addition to formulating recommendations, reports to the school leader, faculty members, and other audiences as previously decided. Generally, the committee prepares a comprehensive written report for internal use and plans meetings for verbal presentations of the report (Posavac, 2011).

There is variation among schools of nursing in their reporting procedures and the extent of information provided to interested groups. Some might report a summary of all data and the subsequent curriculum decisions to all groups that provided data. Others might emphasize data from a particular stakeholder group to that group.

Audiences for the evaluation report generally appreciate a comprehensive view of the data and the rationale for curriculum recommendations. As broad a view of data as possible will allow individuals to see where their data fit into the big picture, and possibly to understand how their suggestions are integrated into the recommendations, or why their ideas are absent. There needs to be an opportunity to discuss and possibly modify the recommendations before endorsement can be expected.

Although students are involved in the curriculum evaluation process and have a strong interest in its consequences, they are sometimes forgotten, or are challenging to access, when evaluation results, recommendations, and subsequent actions are reported. Hosting student fora and/or posting information on student websites could be effective ways of disseminating information about evaluation outcomes and endorsed recommendations. Students want to know if and how their ideas will influence the curriculum.

Results of internal curriculum evaluation and subsequent actions should also be reported to appropriate administrators and incorporated into external evaluation reports. If curriculum revision is to be undertaken as a consequence of the evaluation, the evaluation results will be part of the contextual data for curriculum redevelopment and provide rationale for a request for resources for further curriculum work.

Care is necessary in the reporting process so that unfavorable conclusions are not interpreted as criticism of individuals. Rather, it may be possible to frame a problem area as one that received insufficient support in its development or implementation. In this way, the evaluators, who are faculty members themselves, can minimize personal hurt, maintain positive relationships with colleagues, and indicate that all members have a responsibility for supporting every aspect of the curriculum.

The recommendations are considered by the affected course faculty member or by the total faculty group if they have implications throughout the curriculum. They may be accepted as presented, modified, or rejected. Once accepted, curriculum modifications proceed.

Reflecting Back and Looking Forward

An evaluation of the overall process is the final formal step (Fitzpatrick et al., 2011; Patton, 2013; Posavac, 2011). The purpose is for participants to identify the learning they have gained from the process, thereby increasing their individual and collective capacities (Patton, 2013). This can include new insights into curriculum evaluation itself and into curriculum tenets and processes.

A meta-evaluation of the curriculum evaluation process can be useful to identify which processes worked and should be retained for future curriculum

evaluations, and which were not successful or unnecessary, and thus should be modified or eliminated. This review can also be useful to propose what might be added to future curriculum evaluations. The ongoing appraisal of curriculum evaluation will contribute to the meta-evaluation.

Through individual self-reflection, participants may attain new understandings of the curriculum and their role in it. For example, some might have a clearer sense of the extent to which they are reflecting the curriculum philosophy in their actions; others may gain a deeper appreciation of how they can contribute to student success. Some may develop insights into how course components should be linked; others may have more knowledge of curriculum evaluation processes. There could be a collective revisioning of the school as an organization that is progressively working to achieve excellence. Provision of an opportunity for faculty members and other stakeholders to reflect on the curriculum evaluation processes, and share their learning, can increase the capacity and empowerment of all groups.

A critical aspect of the meta-evaluation occurs after the evaluation report is presented. *Overall, was the evaluation useful? Are the recommendations actually being implemented* (Patton, 2012)?

Curriculum Evaluation Models

A curriculum evaluation model is a framework that guides the evaluation of a curriculum. Variations in models arise from differing philosophies, and conceptions and definitions of evaluation. Accordingly, models vary in the emphasis placed on the curricular aspects to be examined, the approaches to data gathering, timing, and the basis for judging the quality of the curriculum. The models provide a path for planning and conducting evaluation, not a detailed roadmap.

Evaluation models and approaches range from checklists and suggestions to comprehensive appraisals. Despite differences, all models were developed to shed light on the processes, outcomes, and value of a curriculum or program (Posavac, 2011). In nursing education, evaluation of the total curriculum is comprehensive, because a holistic evaluation is most appropriate for a unified curriculum. It is typically based on standards of quality and incorporates quantitative and qualitative approaches. Included in **Table 15-1** are brief summaries of several evaluation models and their relevance to nursing curriculum evaluation.

Each evaluation approach has particular strengths that illuminate different aspects of the curriculum. Therefore, selection of a curriculum evaluation model, or evaluation approach, should be contingent upon the curriculum's philosophical approaches, purpose of the evaluation, questions to be addressed, issues to be taken into account, available resources, ease of application, and faculty preference for one model over another.

Table 15-1: Summary of Several Evaluation Models in Chronological Order, and Their Value in Nursing Curriculum Evaluation		
Models in Chronological Order	Description	Value in Nursing Curriculum Evaluation
Scriven's (1967, 1972) goal-free	Measures all outcomes/effects of program, regardless of program goals or objectives. There are no prespecified objectives. May be applied to total or sections of the curriculum.	It is possible to access unintended curriculum outcomes and thus, information about the hidden curriculum can be revealed.
Stufflebeam's (1971) CIPP	Involves decisions about planning (Context), structuring (Input), implementing (Process), and recycling (Product). Investigates what needs to be done, how it should be done, if it is being done, and if it succeeded.	An examination of the relationships among curriculum elements can lead to a determination of the nature and degree of integration in the curriculum. Can lead to conclusions about the merit, worth, and significance of the curriculum and its components.
Provus's (1971) discrepancy evaluation	Compares performance with standards to determine if a discrepancy exists between the two. Includes five stages: definition of program, installation of program, process, product or outcomes, and cost-benefit analysis. Involves intended vs. actual outcomes, and effects.	The process can lead to identification of gaps between: <ul style="list-style-type: none"> • The planned and enacted curriculum (fidelity of implementation) • The curriculum and internal or external standards
Stake's (1972) (countenance) congruence-contingency	Involves congruence (agreement between desired and actual outcomes) and contingency (relationship among variables). Takes into account antecedents (characteristics of students, teachers, curriculum, facilities, materials, organization, community), transactions (all educational experiences), and outcomes (abilities, achievements, and attitudes resulting from educational experience).	An examination of all curriculum components is possible, as is the development of conclusions about curriculum processes and outcomes.
Stenhouse (1975)	Discloses meaning of curriculum, purposes of courses, problems amenable to solutions, influence of context on curriculum, and whether the evaluation contributes to theory development. Includes five criteria: meaning, potential, interest, conditionality, and elucidation.	A full understanding of curriculum problems is possible.
Eisner's (1977, 1985) connoisseur/critic	Premise is that experts (connoisseurs) can understand and appreciate subtle qualities of the classroom or program, and merits of the teacher and curriculum.	An outside expert can provide insights not evident to curriculum participants.

(continued)

Table 15-1: Summary of Several Evaluation Models in Chronological Order, and Their Value in Nursing Curriculum Evaluation (*continued*)

Models in Chronological Order	Description	Value in Nursing Curriculum Evaluation
Stufflebeam's (1983) educational decision model (an extension of the original CIPP model)	Addresses four concerns to facilitate decision making: <ul style="list-style-type: none"> • Context: setting, mission, community, philosophy, internal/external focus • Input: resources, support systems, learners, program plan • Process: implementation, teaching/learning strategies and transactions, learning materials, efficiency and effectiveness • Product: learner outcomes and satisfaction 	Holistic examination of the curriculum from the perspectives of faculty members, students, and stakeholders is possible. Consideration of the processes gives direction for improvement.
Wholey's (1983) program logic model (based on Provus's [1971] discrepancy evaluation)	Compares program progress against predetermined indicators. Assesses logical linkages (as described by the program model) among parts of the program, such as resources and activities, program processes, outcomes, outputs, and impact. Takes context into account.	Indicators of acceptable performance are specified in advance of curriculum implementation. Thus, self-assessment and improvement could be ongoing.
Stake's (1991) education evaluation model	Evaluation is organized around issues and concerns of stakeholders (students, faculty members, administrators, parents, employers); goal is to discover merits and weaknesses of the program. Uses methods to generate data responsive to identified issues and concerns.	Merits and weaknesses of the curriculum can be identified in response to identified concerns.
Patton's utilization-focused model (2008, 2012, 2013)	Evaluation is planned and conducted for and with specific primary users for specific purposes. Appropriate theories, methods, and processes are determined for specific situations and intended use of evaluation results.	Information related to matters of most importance to faculty members and students are collected and evaluated. Participant involvement in decision making about evaluation processes may enhance use of evaluation results.

Data from Frye, A. W., & Hemmer, P. A. (2012). Program evaluation models and related theories: AMEE Guide No. 67. *Medical Teacher*, 34, e288–e299; Herbener, D. J., & Watson, J. E. (1992). Evaluating nursing education programs. *Nursing Outlook*, 40, 27–32; McLaughlin, J. A., & Jordon, G. B. (2010). Using logic models. In J. S. Wholey, H. P. Hatry, & K. E. Newcomer (Eds.), *Handbook of practical program evaluation* (3rd ed., pp. 55–80). San Francisco, CA: Jossey-Bass; Patton, M. Q. (2008). *Utilization-focused evaluation* (4th ed.). Thousand Oaks, CA: Sage; Patton, M. Q. (2012). *Essentials of utilization-focused evaluation*. Thousand Oaks, CA: Sage; Patton, M. Q. (2013). *Utilization-focused evaluation (U-FE Checklist)*. Retrieved from http://www.wmich.edu/sites/default/files/attachments/u350/2014/UFE_checklist_2013.pdf; Stufflebeam, D. L. (2007). CIPP evaluation model checklist. Retrieved from http://www.wmich.edu/sites/default/files/attachments/u350/2014/cippchecklist_mar07.pdf; Stufflebeam, D. L., & Shinkfield, A. J. (2007). *Evaluation theory, models, and applications*. San Francisco, CA: Jossey-Bass; Wholey, J. S. (1983). *Evaluation and effective public management*. Boston, MA: Little, Brown.

Whichever model(s) can provide the best evidence to address the evaluation purpose and answer the evaluation questions within the resource constraints would be a good choice. If no one model seems sufficient, a combination of relevant concepts from different models can be used (Glatthorn, et al., 2016). This eclectic approach, while not an evaluation model as such, might offer more scope than one model, and also mature, diverse, and sophisticated evaluation strategies (Fitzpatrick et al., 2011). Within a dynamic evaluation approach, elements from different models are selected (eclecticism), with the additional feature that ongoing attention is given to assessment and refinement of processes, even as the evaluation is being conducted (Grammatikopoulos, Koustelics, Tsigillis, & Theodorakis, 2004).

It is also possible to use published standards and criteria as an evaluation framework. For example, the standards and criteria of the Accreditation Commission for Education in Nursing have been used as a basis for curriculum evaluation (Schug, 2012), as have the Institute of Medicine core competencies (Morris & Hancock, 2013).

In accordance with the premises of utilization-focused evaluation, the model or methods selected and the evaluation design created should achieve the purposes determined by the prime users of the evaluation results. The approaches should be practical, cost-effective, and ethical (Patton, 2008). Other factors to consider when selecting an evaluation model are:

- Burden on participants
- Suitability for all levels of the curriculum
- Ability to assess significant aspects of the curriculum, including the hidden curriculum and any unintended effects
- Probability of providing information for decision making
- Consideration of the curriculum context
- Use of quantitative and qualitative methods for data gathering and analysis (Glatthorn et al., 2016)

Planning Evaluation of Curriculum Components

In their curriculum evaluation, faculty members may wish to examine all or some of the curriculum components specifically. Below are ideas that could be incorporated into the curriculum evaluation.

Philosophical Approaches

The philosophical approaches are fundamental to the implementation of the curriculum and to students' beliefs about nursing and clients. For the purposes

of curriculum evaluation, it is important to know if the philosophical approaches are being enacted in all learning environments. Essentially, evaluators want to learn the extent to which:

- The written description of the philosophical approaches is understandable to faculty members.
- Students can articulate the philosophical approaches and explain how they act in accordance with these approaches in classroom, professional practice, and peer interactions.
- The philosophical approaches are being enacted in teaching-learning encounters.
- Processes used to assess student learning are congruent with the philosophical approaches.

Curriculum Goals or Curriculum Outcome Statements

The curriculum goals or curriculum outcome statements broadly identify the abilities of graduates. The complexity of the abilities should be appropriate for the educational level of the program and be consistent with, or exceed, criteria for approval and/or accreditation.

When planning the evaluation of curriculum goals or outcome statements, faculty members want to determine if they are appropriate and reasonable. Are they the most suitable or would others be more fitting? More specifically, faculty members are interested in the extent to which the curriculum expectations:

- Incorporate or reflect the curriculum foundations
- Are appropriate to the program level
- Are relevant to the healthcare context
- Reflect the practice and standards of the educational institution, higher education, the nursing profession, state or provincial licensing bodies, and approval or accrediting organizations

Curriculum Design

When faculty members are planning evaluation of the curriculum design, the scope of this component becomes evident. The design encompasses the curriculum goals or curriculum outcome statements and the configuration of the program of studies, that is, courses, their sequence, interrelationships, and mode(s) of delivery. In addition, it includes faculty and student activities, and policies governing the curriculum. Therefore, faculty members are interested in the extent to which:

- The design reflects the philosophical approaches and is relevant to the context in which the curriculum is offered.

- The configuration of courses supports student achievement of curriculum goals or intended curriculum outcomes.
- There is internal consistency, congruence, and logical organization among and within courses.
- Course titles present an image of a conceptually unified curriculum.
- Concepts and substantive context are complete and relevant.
- Required non-nursing support courses facilitate achievement of curriculum goals or intended curriculum outcomes, and contribute to a well-rounded liberal education.
- Necessary prerequisites are included so students can be successful.
- Students and faculty members believe that courses are appropriate and logically sequenced.
- The curriculum is a unified whole.

Curriculum Concepts

Evaluation of the curriculum concepts involves two dimensions: the appropriateness of the concepts themselves and the extent to which they form a successful foundation for courses and substantive content. Evaluation of the former rests on qualitative data from students and faculty members about the meaningfulness of the concepts for learning about nursing and their utility in professional practice. Faculty members can offer ideas about whether the concepts might require modification, such as synthesis of several concepts or greater analysis of a concept into its constituent subconcepts. They might also have thoughts about missing concepts. Students can provide information about their understanding of the concepts and how they use the concepts in professional practice and course work.

The extent to which the concepts form a successful foundation for courses and substantive content is an area to be evaluated. Faculty members know how well they were able to plan classes that were based on the concepts, and how well the concepts and substantive content merged to form significant learning opportunities for students. In assessing the concepts, curriculum evaluators are interested in whether the curriculum concepts are:

- At an appropriate level for students
- Sufficient in scope to address the important ideas needed in nursing practice
- A useful basis for class planning and implementation
- Meaningful to faculty members and students
- Perceived by students to have value in their professional practice

Courses

Evaluation of courses is, in some measure, a microcosm of the total curriculum evaluation. All aspects of course design and implementation are considered. Faculty members might determine the extent to which:

- Course goals or course competencies are appropriate and linked to curriculum goals or outcome statements.
- Expectations of students are reasonable.
- Learning activities are consistent with the philosophical approaches, educational approaches, and course goals or course competencies.
- Course activities contribute to students' progress.
- Course activities suit the delivery mode.
- Strategies to ignite learning and technologies used are effective in facilitating learning.
- Content is current, evidence-based, related to other fields of study, and logically organized.
- Core curriculum concepts and key professional abilities are evident in written course materials and classes.
- Opportunities for students to demonstrate learning are appropriate in nature and number, varied, and clearly linked to course goals or course competencies.
- Students have achieved course expectations.
- Each course can be justified within the curriculum.
- Each course has been implemented as originally conceived (i.e., has fidelity of implementation).
- There are redundancies or deficiencies among courses.

Educational Approaches and Strategies to Ignite Learning

When planning evaluation of educational approaches and strategies to ignite learning, faculty members can be guided by literature that describes effective teaching, dimensions of teaching competence, successful relationships with students, personal characteristics, and evaluation practices. These ideas can be adopted, adapted, or extended to match the educational and philosophical approaches of the curriculum.

In general, faculty members seek to answer the following questions:

- What is the nature of student–faculty interactions?
- How do students respond to the strategies to ignite learning?
- In what ways have faculty members affected students' growth as individuals and future practitioners?

Faculty members also want to know the extent to which the strategies to ignite learning:

- Are congruent with the philosophical and educational approaches
- Assist students in their progress toward course and curriculum expectations
- Respect student diversity
- Promote creativity and deep learning

Finally, an assessment of satisfaction may be appropriate. Are students and faculty members satisfied with the educational approaches and learning activities?

Opportunities for Students to Demonstrate Learning and for Faculty Members to Evaluate Student Achievement

Appraisal of strategies to evaluate student achievement is another important dimension of curriculum evaluation. The methods by which students are asked to provide evidence of their learning, and how that evidence is assessed, have great significance to them and color their reaction to the curriculum. Considered could be the extent to which students' opportunities to demonstrate learning are:

- Reflective of the curriculum's philosophical and educational approaches
- Logically linked to course goals or course competencies
- Perceived to be fair and flexible
- Varied within a course, semester, and year to accommodate students':
 - Diverse ways of knowing
 - Academic workloads
 - Need for formative and summative feedback
 - Desire to have input into evaluation methods
- Suitable for faculty members' academic workloads
- Consistent with faculty members' expertise and preferences

A review of students' submitted work might be undertaken to determine their engagement with the content and depth of their thinking. An appraisal of the nature of faculty feedback and its alignment with curriculum tenets could be included.

Planning Evaluation of Other Aspects of the Curriculum

In addition to the curriculum components, there are other matters that require attention, because they reflect and affect the enactment of the curriculum. The learning climate, curriculum policies, and resources devoted to curriculum enactment all influence its success.

Learning Climate

The learning climate consists of the social, emotional, and intellectual atmosphere that exists within the school, campus-based nursing courses, and those offered through distance delivery. It is a strong indication of one aspect of fidelity of implementation, specifically, the adherence to the espoused philosophical approaches. The enacted and perceived philosophical approaches affect the learning climate and strongly influence the satisfaction, psychological comfort, and empowerment of students, faculty members, and staff. In evaluation of the curriculum's learning climate, it is important to determine the extent to which members of the school are satisfied with:

- Available learning opportunities
- Settings in which learning occurs
- Flexibility in the curriculum
- Variety of perspectives in course content, discussion, and readings
- Diversity of backgrounds of authors and content of required texts and readings
- Fostering of responsibility and accountability
- Relationships with one another
- Perceived freedom to take intellectual risks and make mistakes without repercussions
- Availability of support when undertaking new challenges
- Sense of belonging and feeling of community

Policies

Curriculum policies are developed to support student achievement while ensuring that academic standards are maintained. Therefore, in reviewing and evaluating curriculum policies, faculty members consider whether the policies are appropriate, reasonable, understood by all curriculum participants, and applied consistently. Evaluators might also ascertain if there have been situations that might indicate a need for new policies.

Human and Physical Resources

An important dimension of curriculum evaluation is ascertaining if suitable and sufficient human and physical resources are present. When planning curriculum evaluation, faculty members are interested in assessing the extent to which:

- Faculty members are sufficient in numbers and academic preparation to maintain implementation fidelity.
- Teaching assignments are aligned with faculty expertise.

- Support staff numbers, roles, and functions are reasonable to support the curriculum.
- Offices and meeting rooms are available and suitable.
- Classrooms are satisfactory in size, structure, comfort, and appearance.
- Classrooms and labs are equipped with appropriate and functional technologies.
- Professional practice placements and experiences match requirements in quality and quantity.
- Library holdings (both physical and online) are sufficient in number, scope, and quality.
- Material resources are adequate.

Planning Evaluation of Actual Curriculum Outcomes

The purpose of all nursing curricula is to prepare graduates who will provide quality nursing care safely in a changing healthcare environment, thereby contributing to the health and well-being of those they serve. It is essential to determine if current students are progressing toward this outcome, and if graduates are successful as they begin practice. Evaluation of actual student outcomes is viewed by some as the most important aspect of curriculum evaluation. The overriding evaluation question is: *Are students being adequately prepared for professional practice?*

Success rates on NCLEX-RN[®] examinations, possibly in comparison to state, provincial, or national results, should be examined, although it is prudent to remember that these examinations test only for the minimum acceptable level of safety. However, it may be unwise to overemphasize these test results as an indicator of academic quality because of “psychosocial-cultural variables germane to NCLEX[®] that are beyond the direct control and accountability of educational programs” (O’Lynn, 2017), variables that are present in diverse student populations. Moreover, O’Lynn cautions that overemphasis on NCLEX[®] scores might divert attention away from building students’ competencies in caring and ethical dimensions of nursing, and developing curricula that lead to success for diverse and nontraditional students.

A further means to assess the overall curriculum quality is a determination of new graduates’ successes and sources of difficulty, and employers’ satisfaction with graduates’ nursing practice. This may give a more rounded picture of graduates’ success than NCLEX[®] scores alone.

In addition to obtaining data from and about graduates, an examination of students’ progress allows for conclusions about actual outcomes within the curriculum. This includes attrition rates for each level of the curriculum, course

grades, grade distribution, completion rates, and time to completion. Moreover, curriculum evaluators are interested in the extent to which students:

- Can articulate the curriculum's philosophical approaches, course and curriculum expectations, major curriculum concepts, and key professional abilities.
- Can explain how they use curriculum concepts and philosophical approaches in professional practice experiences.
- Perceive themselves to be ready to begin practice at program completion.

Assessment of Fidelity of Implementation

The purpose of assessing fidelity of implementation (FOI) is to determine how well an enacted intervention (e.g., a total curriculum or particular teaching approach) matches the original planned intervention, so that conclusions might be drawn about whether outcomes can be attributed to the intervention. It is worthwhile to note, however, that in nursing curricula, the educational interventions are complex, multifaceted, and highly influenced by the dynamic nature of learning contexts and interactions. Therefore, outcomes may not be linked to any one intervention, but rather to a constellation of interventions.

As noted in an earlier chapter, the critical structural components of FOI are procedural (how the curriculum is to be implemented) and educative (knowledge instructors must possess to implement the curriculum as designed). The critical instructional components are pedagogical (how faculty members behave) and student engagement (how students behave) (Stains & Vickrey, 2017).

Information relevant to FOI is gained through evaluation of the curriculum components. For example, course syllabi, teaching evaluations, and course evaluations provide data about procedures, and instructor and student activities. Faculty members' reports of course implementation provide insights into procedures and possibly areas for further faculty development.

Although assessment of the FOI of all procedures, practices, instruction, and student engagement could be undertaken, it would be unwieldy. Rather, FOI is more likely to be discussed as part of a synthesis of all evaluation data. Moreover, if students are achieving the curriculum expectations, detailed analysis of FOI may be unnecessary. Yet, FOI is an important frame of reference as curriculum components are evaluated.

A careful examination of FOI, along with a review of design features, would be useful if students are not achieving key expectations. In this case, evaluators might ask:

- What aspects of the implementation do not match the design?
- "What is an acceptable level of fidelity?" (Harn, Parisi, & Stoolmiller, 2013)

Benefits of Participation in Planning and Conducting Curriculum Evaluation

Faculty Members

Participation in curriculum evaluation planning, and in the evaluation process itself, may lead faculty members, individually and collectively, to increase their awareness and appreciation of curriculum evaluation and its value to curriculum quality. This knowledge is particularly increased for those who have been involved in faculty development about curriculum evaluation (Robinson, Cotabish, Wood, & O'Tuel, 2014). They may expand their capacity to design and implement curriculum evaluation processes, and this will have relevance throughout their careers.

Importantly, through involvement in evaluation planning and curriculum evaluation, faculty members may modify or develop deeper conceptual understandings of certain aspects of the curriculum (Alkin & Taut, 2003). They may also develop ideas about how to enhance the curriculum in their own courses without a formal revision (Holden et al., 2015). Both results could improve their teaching.

Additionally, the curriculum evaluation process may extend faculty members' capability to develop practical curriculum recommendations based on systematically gathered data. This may strengthen their commitment to evidence-informed nursing education and augment their sense of empowerment. These benefits are independent of the evaluation findings (Robinson & Cousins, 2004).

Because it is the faculty who plan and undertake curriculum evaluation, determine recommendations from internal evaluation, and agree on subsequent actions, the value of curriculum evaluation extends beyond improvements to the curriculum itself. For example, faculty members may experience benefits such as pride in being part of a progressive, dynamic program, or the social rewards and empowerment that accrue from engaging in important activities with colleagues and stakeholders. Moreover, curriculum improvements may yield increased student satisfaction, resulting in an enhanced teaching and learning environment.

Students and Other Stakeholders

All who are involved in planning for curriculum evaluation can experience many of the benefits described for faculty members. Importantly, students and other stakeholders have the potential to ensure that matters important to their constituencies are included in the evaluation.

For example, a group of undergraduate nursing students, supervised in a research practicum by authors (Iwasiw and Andrusyszyn) of this text, surveyed

all undergraduate nursing students at Western University to determine matters they considered important to include in a curriculum evaluation. Students identified items about which they were not routinely asked, such as the importance of choice in professional practice placements, consistency of professional practice instructors' expectations, course workload, clarity of course assignments, role of graduate teaching assistants, and expenditures additional to tuition (Fisher et al., 2003). Inclusion of matters important to students will yield a broader picture of curriculum implementation, provide information about the hidden and experienced curriculum, and explicitly reinforce the value of student perspectives in curriculum evaluation.

Stakeholders such as professional practice leaders also have ideas about what is important to evaluate in a curriculum, such as the nature of nursing staff–student relationships or the integration of psychomotor or critical thinking skills learning in the curriculum. Although stakeholders may not participate in the details of curriculum evaluation planning, their ideas can be obtained and integrated into curriculum evaluation processes and materials. In this way, their context-specific perspectives are honored and partnerships are strengthened.

Relationship of Curriculum Evaluation to an Evidence-Informed, Context-Relevant, Unified Curriculum

Curriculum evaluation data and analysis provide evidence for decisions to alter or discontinue the curriculum. If, during the evaluation, the curriculum goals or outcome statements, processes, concepts, and content are appraised for their relevance to the context, and the unity within the curriculum is assessed, then these features of the curriculum can be maintained or strengthened as necessary. Further curriculum work can emanate from the evaluation data; thus, the curriculum will continue to be evidence-informed, context-relevant, and unified.

Core Processes of Curriculum Work

Faculty Development

Faculty development can initially focus on the purposes and processes of curriculum evaluation. Following this, information about evaluation models, approaches, standards, criteria, and indicators can be presented. Through discussion, faculty members can formulate evaluation questions to be answered about each curriculum component, and determine data gathering approaches. Published accreditation or approval guidelines can serve as exemplars during these activities. Through their involvement in curriculum development, novices will understand the curriculum components, but they may need assistance with defining standards and criteria, and limiting the extent of data gathering. Provision of curriculum

data will allow faculty members to practice interpreting and judging data, and then deriving recommendations. After the curriculum evaluation is completed, methods to help members identify the learning that was gained could include reflective processes such as storytelling, descriptions of changes in members' work, and group development of the meaning that could be derived from the curriculum evaluation process and results (Verdonschot, 2006).

Ongoing Appraisal

As curriculum evaluation is being planned and conducted, many questions can arise that could lead to an improvement of the processes. These questions include the following:

- Is there clarity in the purposes to be achieved and the questions to be answered? Are these purposes and questions as meaningful as possible?
- Have the best processes been selected to obtain the necessary data? Might there be more expedient means to obtain the information?
- How well will the data gathering processes reflect respect for participants' time?
- Will any important data be missed? What are these data?
- Are all the data that have been identified absolutely necessary to answer the evaluation questions?
- Will the available resources be sufficient to develop instruments and guidelines, define standards, and obtain and analyze data? If the resources are not available, what can be modified?
- Are there published materials that would be helpful?
- Have students and appropriate stakeholders been included in planning for evaluation?
- How thorough are the plans for reporting evaluation results and recommendations?
- How thorough is the plan for ongoing formative evaluation? For summative evaluation?
- Has anything been missed?
- Are the decisions about curriculum evaluation satisfactory and reasonable?

Scholarship

Manuscripts describing the processes undertaken to plan and conduct an internal curriculum evaluation can be instructive to faculty at other schools. Also important could be a description of the preparations for external evaluation, with attention to the timeframe, activities, and participants. Methods of outcome evaluation, particularly successful ways to obtain data from graduates, would be a valuable

contribution to the literature. Furthermore, it would be beneficial to prepare manuscripts that illuminate the deliberations involved in analyzing and synthesizing evaluation data, and the decisions that lead to curriculum recommendations.

Evaluation studies of the outcomes of particular curriculum strategies, such as simulation or paired student–staff nurse professional practice work, add to the evidence base for nursing education. Needed also are larger scale reports of the outcomes of curricula of a similar nature, such as concept-based curricula or curricula based on a particular philosophy or educational approach, so that results can be compared and conclusions drawn. Importantly, studies of the nursing practice of graduates from schools with differing philosophies or curriculum frameworks, and the effects of the practices on clients, will be the ultimate evaluation of curricula. Although such studies will be complex, it should be possible to arrive at conclusions about which approaches are contributing most effectively to desired practice behaviors (Iwasiw, Goldenberg, & Andrusyszyn, 2005).

CHAPTER SUMMARY

In this chapter, definitions germane to curriculum evaluation in nursing are presented, along with the purposes of internal and external curriculum evaluation. The overall curriculum evaluation process is described in detail, and specific ideas are presented for evaluating curriculum components. Curriculum evaluation models are summarized. Assessment of actual curriculum outcomes and fidelity of implementation are addressed. The benefits of participating in curriculum evaluation planning are considered. Possible topics for faculty development activities, questions for ongoing appraisal, and ideas for scholarship projects are proposed. The relationship of curriculum evaluation to an evidence-informed, context-relevant, unified curriculum is explained.

SYNTHESIS ACTIVITIES

The Moorecroft University Faculty of Nursing case describes a school of nursing that is about to begin planning for curriculum evaluation. The case is followed by questions and activities to facilitate analysis. Then, questions and activities are provided for consideration when curriculum evaluation is planned in individual settings.

■ Moorecroft University Faculty of Nursing

Moorecroft University is a well-established university that offers a range of undergraduate and graduate programs. The Faculty of Nursing offers

a 4-year Bachelor of Science in Nursing (BScN) program, a RN-BScN program that will discontinue admissions in 3 years' time, and master's and doctoral programs.

Most full-time faculty members teach in more than one program, although three highly productive researchers teach in the PhD program only. Undergraduate professional practice courses are taught by both full-time and part-time faculty members.

Year 1 of a reconceptualized 4-year BScN curriculum was implemented in September, and it is now early February. Classes will finish at the end of March and will be followed by a 4-week examination period.

Years 2 to 4 of the existing curriculum are continuing, with the final class of the current curriculum expected to graduate in 3 years' time. Intensive, detailed planning for implementation of Year 2 of the redesigned curriculum is underway.

Oversight of the implementation of the redesigned curriculum is the responsibility of the Undergraduate Curriculum Committee, which is chaired by Dr. Jee Kim, whose PhD is in nursing education. Dr. Kim again raises a matter with the committee that she has consistently addressed during the development and early implementation of the redesigned curriculum: evaluation planning. To date, there has been little enthusiasm about this topic and the work it will entail.

Dr. Carlos Sousa acknowledges that the group has avoided the matter of evaluation. It seemed too complex and too onerous to think about how to evaluate the curriculum during its development. He agrees, however, that they can delay no longer. He comments that the first year of the redesigned curriculum will soon come to a close and some evaluation should be conducted in case there are implications for the second year courses and for the second offering of the first year courses.

Dr. Aisha Akhmetov, who has some responsibility for the lab and professional practice courses in Year 1 comments, "If we're going to evaluate the first year, we need to do it quickly. We have already started to talk about some refinements for the courses, based on our experience so far. What do you want us to evaluate, Jee? How are we going to get it done before the end of term?"

■ Questions and Activities for Critical Analysis of the Moorecroft University Faculty of Nursing Case

1. How might Dr. Kim respond to Dr. Akhmetov's question?
2. Should evaluation of Year 1 proceed without an overall evaluation plan for the curriculum? Justify your response.

3. If evaluation of Year 1 should proceed, who should be involved in planning the evaluation?
4. What might be the purposes of evaluating the first year courses now? What would the evaluation questions be? What data would be useful? How could the data be obtained?
5. Could the fall semester be evaluated retrospectively? How?
6. How might the purposes and questions differ if curriculum evaluation had been planned earlier?
7. Are faculty members' experiences a sufficient basis for further planning about the Year 1 courses?
8. How could Dr. Kim initiate the development of a comprehensive evaluation plan for the curriculum? Who should lead the initiative? Who should be involved?
9. Consider the fact that detailed planning for Year 2 is underway without any evaluation data about Year 1 courses. What might be the consequences?
10. What resources might be needed to plan and implement a comprehensive evaluation plan?

■ **Questions and Activities for Consideration When Planning Curriculum Evaluation in Readers' Settings**

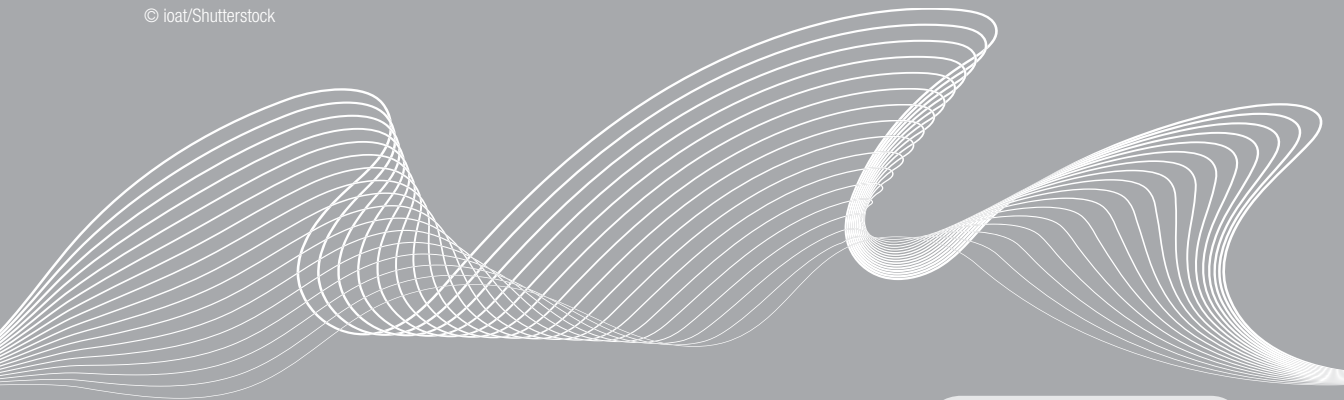
1. For what purposes should curriculum evaluation be undertaken? Formulate the corresponding evaluation questions.
2. Decide who should be involved in planning for formative and summative curriculum evaluation.
3. Which individual or group will be responsible for coordinating the curriculum evaluation?
4. Identify any special features of the curriculum or characteristics of the internal and external environments that might influence curriculum evaluation. How could these be taken into account?
5. Examine evaluation models and approaches for fit with the philosophical approaches of the curriculum. Choose suitable ones, or suitable aspects of the models, and explain the rationale for the choice(s).
6. Which components of the curriculum will be evaluated?
7. How can standards, criteria, and/or indicators be established?
8. Develop an overall plan for regular formative and summative curriculum evaluation. How could this plan be modified if faculty numbers are low and their workloads heavy?

9. Propose a detailed plan for data gathering, including data to be obtained, data sources, persons to gather data, and frequency of data gathering.
10. Identify tools or guidelines needed for data gathering. Who will develop them? When will they be pilot-tested?
11. How and where will data be recorded?
12. Create a plan for interpreting and judging the data, and making recommendations.
13. How will a record of the evaluation efforts and subsequent curriculum alterations be maintained?
14. When, how, and to whom will data, evaluation results, and recommendations be reported?
15. Develop a plan for review of the evaluation process.
16. Describe any faculty development needed to support curriculum evaluation. What is the basis of this assessment?
17. Are there questions related to ongoing appraisal of the curriculum evaluation that should be asked, in addition to those suggested in the chapter? If so, what are they?
18. Propose scholarship activities about curriculum evaluation that could be undertaken.

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PART
VI

Nursing Education by Distance Delivery

Curriculum Considerations in Nursing Education Offered by Distance

CHAPTER PREVIEW

In this chapter, nursing education offered partially or fully by distance delivery and the institutional requirements for education using distance delivery are described. Ethical considerations and values and beliefs about distance education are proposed. The sources of decisions to offer nursing education by distance and the consequent curriculum implications are outlined. Curriculum design is briefly overviewed. The section on course design focuses specifically on nursing education provided using technology-enabled, or online, distance education. The criticality of pedagogy in technology-enabled teaching and learning is emphasized. Addressed are technology, course concepts and content, strategies to ignite learning, features of individual online “classes,” opportunities for students to demonstrate learning, and evaluation of student achievement. Implementation and evaluation of courses that are offered by distance education are addressed. The relationship of nursing education offered by distance, in whole or in part, to a context-relevant, evidence-informed, unified curriculum is explained. The core processes of faculty development, ongoing appraisal, and scholarship activities related to distance education are presented. The chapter concludes with a summary and synthesis activities.

QUESTIONS ADDRESSED IN THIS CHAPTER

- What are the various terms used to convey the idea that education is offered at a distance?
- What are the institutional infrastructure requirements to offer distance education?

- How do values, beliefs, and ethical principles influence choices to teach by distance?
- How does distance education influence course design, implementation, and evaluation?
- What considerations about cognitive, social, and teaching presence should be taken into account when accepting the responsibility of teaching by distance?
- How can students' sense of control and confidence in their ability to be successful be fostered in distance education courses?
- What is the relationship of nursing education by distance to an evidence-informed, context-relevant, unified curriculum?
- How are the core processes of faculty development, ongoing appraisal, and scholarship integrated into the process of designing courses for distance?

Distance Education

Distance education is teaching and learning where technology serves as a conduit (Frith, 2013) to provide formal, rigorous, educational offerings when students are physically separated from the instructor and/or educational institution. The term *distance education* is often used synonymously with technology-enabled methods such as Internet-enabled online learning and webcasts, m-learning, and e-learning, as well as technologies such as broadcast systems, audio- and video-conferencing, pod- or video-casts, or telecommunications systems, among others. The teaching and learning process can be synchronous or asynchronous, print-based or technology-enabled, fully or partially online, or a combination of these. The choice of delivery systems and approaches is dependent on many factors such as the learners, their learning styles, the learning context, curriculum goals and intended outcomes, as well as available human resources, faculty members' knowledge and readiness, available wired or wireless technologies, cost, and institutional infrastructure (Friesth, 2016; Frith, 2013).

In contrast to traditional or conventional place- and time-dependent in-class/in-seat delivery, distance education implies single or combined use of delivery methods that are adaptable to a wide variety of students and expected learning outcomes. In essence, distance education is shaped in whole or in part by the concept of flexibility, which suggests suppleness, elasticity, and nimbleness. These adjectives capture the idea of nonlinearity, which is consistent with the teaching-learning processes of distance delivery. In other words, there is flexibility in the delivery methods employed, in addition to when and how they are used.

The technologies used in distance education are generally web-based, multifaceted learning management systems (LMSs) with provision for private and two-way communication between and among teachers and students. The LMSs used by educational institutions allow for learning resources to be embedded with technology tools such as blogs, wikis, social networking sites, discussion groups, instant messaging, cloud computing sites, learning objects, closed circuit TV, satellite, podcasts, and vodcasts, among others. The combinations and permutations continue to evolve as technologies become more sophisticated (Frith, 2013).

Distance delivery, with or without the inclusion of web technologies, can be employed for complete curricula, individual courses, or for parts of courses in nursing using hybrid/blended delivery. Typically, back-channel digital communication (e.g., email, instant messaging, Facebook®, Twitter®, LinkedIn®) is used to support connections between students and faculty members (Schmitt, Sims-Giddens, & Booth, 2012). Collectively, these systems must be agile and allow students and faculty members to communicate, collaborate, create content, generate knowledge, and share evidence-informed approaches (Adams Becker et al., 2017; Chu & Kennedy, 2011), consistent with a constructivist theory of learning (Greener, 2012; Paily, 2013).

Distance education suggests a physical or geographic separation between and among the participants, but it is possible for students and course professors to be in the same city, close to the educational institution, yet engaged in online courses for reasons of convenience, personal preference, or course availability. Depending on the method chosen, the social distance is often imperceptible, and interactions and shared learning experiences between and among participants can be rich and deep. The quality and rigor of technology-enabled distance learning with regard to knowledge, skill, or satisfaction outcomes are at least equal to and not significantly different from conventional teaching methods (Allen & Seaman, 2015; Frith, 2013; Lahti, Hätönen, & Valimäki, 2014; McCutcheon, Lohan, Traynor, & Martin, 2014; Vogt & Schaffner, 2016; Voulitinen, Saaranen, & Sormunen, 2017).

Geography, by itself, is no longer an obstacle to education except for individuals for whom: computer or mobile device ownership is not possible; Internet access is absent, uneven, or slow; or efficacy with technology is lacking (Adams Becker et al., 2017). Consequently, technology-enabled distance education is not *yet* an absolute solution for many learners, including nursing students in under-resourced areas of the world. However, the integration of computers and mobile devices and a worldwide telecommunications network to connect them has led to greater feasibility of computer-based distance education in much of the world (Amirault, 2012). Therefore, computer-based distance education has been embraced by degree, certificate, and continuing nursing education programs.

Institutional Requirements for Distance Education

Robust strategies that integrate online, mobile, and blended learning approaches are important for continued survival of educational institutions (Adams Becker et al., 2017). “While mobile and digital learning strategies have increased over time, disparities in high-speed broadband connectivity and in engagement between different student groups (socioeconomic status, gender, etc.) prompt higher education leaders to continuously evaluate the affordability, access, and quality of their offerings” (Adams Becker et al., 2017, p. 6).

Distance education for an entire curriculum or individual courses, whether web-enhanced, fully online, blended, or hybrid, can be considered only if suitable supports are in place. Without them, the desire of faculty members to extend the curriculum beyond the physical classroom will be unfulfilled or, at best, fragmented, depending on what individual faculty members can cobble together to meet teaching and learning goals. Therefore, the nature, quality, and extent of the institutional supports available are parameters for curriculum and course design for distance education.

Infrastructure

The structural features, processes, and procedures of an institution’s LMS and seamlessly integrated content management system (CMS) should be robust enough to accommodate a wide variety of course management and web functions, student learning needs, and curriculum outcomes. The design and functionality of the system have to be considered to accommodate various teaching approaches (Davis, Little, & Stewart, 2008). The necessary data security, backup, quality assessment features, and quality improvement measures are also essential so that appropriate system evaluation data are collected and protected. An institutional technology plan with attention to financial, technical, and cultural readiness, and centralized maintenance of the technology system are necessary (Basak, Wotto, & Belanger, 2016; Cheawjindakarn, Suwannatthachote, & Theearoungchaisri, 2012). However, “once developed, any infrastructure must be able to evolve in order to accommodate changing student needs, technologies, and curricula” (Davis et al., 2008, p. 121).

From the perspectives of students and faculty, the LMS and CMS need to:

- Accommodate the desired teaching, learning, assessment, and testing activities and leave room for adjustments for growth and increased demands
- Have intuitive navigation and built-in help features
- Allow for interaction between and among faculty members and students, collectively and privately, synchronously and asynchronously

- Be comprehensive enough to preclude the need for use of systems external to the LMS
- Accept podcasts, vodcasts, wikis, blogs, and embedded links to external websites
- Interface with student information systems for course enrolment (Davis et al., 2008) and include a recordkeeping system for marks associated with course activities and assessments
- Provide reliable access to library holdings, electronic databases, journal articles, and e-books as well as support the use of copyrighted material within course sites

Resources to Support Distance Education Design, Teaching, and Learning

Allen and Seaman (2015) report that the percentage of academic leaders for whom online learning is a critical aspect of their long-term strategy has grown from 48.8% in 2002 to 70.8% in 2015. However, they also note that the added effort inherent in teaching online poses a significant barrier for 78% of academic leaders and “only 28% of chief academic officers say that their faculty members accept the ‘value and legitimacy of online education,’” revealing no change from their 2003 findings (Allen & Seaman, 2015, p. 6). Nevertheless, more than 4.9 million post-secondary students participated in distance education in Fall 2015 in the United States, and of those, 2.1 million students were exclusively enrolled in distance education courses despite existing reservations in the academic world about distance education (McFarland et al., 2017).

There are a number of reasons why concerns about the value and legitimacy of distance education continue to exist. In a meta-analysis of research about barriers to distance education, increased time commitment, difficulty keeping up with technological changes, and lack of support staff to help with course development were identified by faculty members (Berge & Muilenburg, as cited in Simonson, Schlosser, & Orellana, 2011). The potential threat to tenure and promotion, the lack of expertise in instructional design for online learning, the fear of losing intellectual property, as well as skepticism about the quality of interactions or even the possibility of building an online community (Crawford, 2015; Oaks, as cited in Crawford, 2015; Yuksekdog, 2015) are also barriers, which point to a need for improved and sustained faculty development and support.

Faculty Development

Faculty development related to every aspect of distance education is essential once a decision has been made to offer a course, in whole or in part, or an

entire curriculum, by distance delivery. According to Hicks (2014), “We are moving into an era where all faculty need to have a level of competence with online learning and technologies. This is no longer optional but is *core* to the university learning environment” (p. 267). It is imperative for educational institutions to support faculty development in order to optimize the teaching and learning experience, particularly for those with little to no experience teaching online as they will have greater trepidation about distance delivery than those with experience (Lloyd, Byrne, & McCoy, 2012). Specific ideas about faculty development are presented in a later section of this chapter.

Instructional Design Support

Instructional designers should be available to support faculty members’ transition to alternate delivery methods, providing guidance not only in how to use the technology, but also in facilitating integration of high quality learning experiences, and scholarship when using various media (Yuksekdag, 2015). Ideal would be instructional designers with both pedagogical and content expertise, and a sound understanding of disciplinary culture when facilitating curriculum or course design (Kanuka, 2006). Lenert and Janes (2017) assert that “the role of faculty development (and professional instructional design) is increasingly more important now in guiding faculty on how to create learning spaces, specifically with the use of technology online and how to help instructors adapt to the new roles expected of them” (p. 3). The creation of smooth, productive, and comprehensive teaching and learning experiences may require the expertise of instructional designers and media specialists until faculty members acquire confidence, experience, and skill in distance education.

Technological and Academic Support for Faculty Members and Students

Concomitant with assistance for faculty members from instructional designers is assistance with and orientation to the technology being used for course professors and students. Learning to use the technology, having access to expert help such as a role model or mentor for teaching and learning, along with immediate assistance when problems arise during course implementation, are essential. Prompt assistance from technical and library help desks, and from others with expertise, will reduce stress and build confidence in all users. A telephone technical help line, ideally available 24 hours a day, and above all, staffed during peak and online examination periods to resolve problems quickly, is essential. Although just-in-time (JIT) support may be a great help to deal with an immediate issue, it should not preclude the need for faculty members and students to learn to use the technology and processes that will form their learning environment in

advance of using it. Adequate staffing to manage JIT help may be challenging for institutions (Wingo, Peters, Ivankova, & Gurley, 2016), but contributes significantly to the quality of the teaching-learning experiences.

Orientation to technology for faculty members and students, especially those for whom learning technologies are new, will be important so that actual course time is not needlessly diverted to technical issues as the course begins. Essential is information about account activation, computer and software requirements, Internet speed, course registration, and access to the library system and library services (Ellis, 2016; Lenert & Janes, 2017; Zhu, McKnight, & Edwards, 2006). Reliable access to learning materials is vital to support course-related work for professors and students unable to visit or be physically present in the on-campus library.

Orientations to technology can be accomplished through onsite sessions, provision of written material or instructional websites before courses begin, faculty mentoring, and peer-tutoring systems, among others. Elements that influence online success for professors and students can also be addressed in orientation sessions (Blackmon & Major, 2012; Cho, 2012; Schmitt et al., 2012). These may include:

- Strategies for teaching and learning in an online environment
- Knowledge construction and shared learning
- Commitment to online co-presence and engagement
- Quality of interactions and participation
- Best practices for use of social media
- Time commitment, time management, and academic–personal life balance
- Assessment of readiness for distance education
- Self-direction and motivation in an online environment

Of particular importance is providing sufficient guidance and attention to faculty members, including those who are part-time and unfamiliar with distance delivery options but who will be expected to transition seamlessly to use of the technology in their courses. Student frustration and discouragement, negative instructor ratings, and ultimately, attrition, can result when faculty members are not adept with distance education and when there is a lack of timely assistance for students experiencing academic and technological problems (Lee & Choi, 2011; Tallent-Runnels et al., 2006).

All faculty members also need to know how to:

- Access support for students' academic success, such as online tutoring
- Provide timely responses to student questions about courses, academic requirements, and assignments (Outlaw & Garrett, 2016)

- Provide early outreach to at-risk students (Shaw, Ferguson, & Burrus, 2016)
- Redirect students when a need arises for financial aid, and academic or personal counseling

Institutional Policies, Guidelines, and Practices

Suitable institutional policies such as access to and security of servers, privacy, and transparency are needed to support distance education. Academic integrity policies and ethical practices are vital in technology-enabled curricula. The policies, guidelines, and practices require frequent review as the distance education landscape is constantly evolving, presenting new opportunities and challenges for institutions. On the horizon, policies about data mining and learning analytics (Ferguson, Brasher, Clow, Griffiths, & Drachler, 2016; Ferguson & Clow, 2017; Woodie, 2016), as well as adaptive learning systems (Pugliese, 2016) with relation to technology-enabled learning will also be considerations.

Guidelines for faculty development, different financing structures, workload adjustments, reductions or release time to recognize the learning curve and time required to build and teach online courses, could be reasonable provisions of faculty contracts (Adams Becker et al. 2017; Lloyd et al., 2012; Wingo et al., 2016). Intellectual property rights and ownership of courses authored for distance education could also be addressed in faculty contracts (Hentschke, 2017). Additionally, guidelines related to class size and examination processes to ensure safety, security, and rigor should be in place (Vaughn, 2007).

Policies addressing ethical behavior in distance education and “students’ digital citizenship” (Adams Becker et al., 2017, p. 26), that is, rights and responsibilities related to technology-enabled learning, warrant attention (Simonsen, 2012). Institutional policies related to plagiarism, cheating (including e-cheating), and deceptive actions related to “collection, security, ownership, access, dissemination, and application of learning data” (Adams Becker et al., 2017, p. 14) may require close review and modification for technology-enabled courses. Questions might arise regarding whether physical presence is required for testing for online courses or whether biometric verification and visual identification to log on to the testing site software, is sufficient (Bedford, Greg, & Clinton, 2011).

Within schools of nursing, professional requirements related to privacy and confidentiality become critical when clients, their families, or practice agencies become part of class discussions. Course participants need to be fully informed about the importance of using secure sites for course discussion and assuring privacy of any client or agency information.

As course sites and dialogue within discussions can be archived by the institution, it is important for course participants to be aware of why, how long,

and in what circumstances course data are retained, as well as to whom the data belong. Students should also be aware that their course participation can be tracked in the LMS system.

Values and Beliefs Inherent in a Commitment to Nursing Education by Distance Delivery

A commitment to nursing education using distance technology reflects nursing faculty members' values and beliefs about themselves, students, nursing education, and the nursing curriculum. These include acceptance and openness to advances in educational methods and technology, readiness to learn and apply new pedagogical and technological skills, willingness to engage students in technological learning environments, and belief in the importance of accessible education for nurses. Additional values and beliefs inherent in the provision of distance education in nursing are:

- A conviction that rigorous and high quality nursing education is possible through the use of technology
- The view that active participation and shared knowledge construction are essential to learning (i.e., support of constructivism and brain-based learning)
- Recognition of and respect for the importance of ongoing cognitive, social, student, and instructor presence
- Dedication to the development of scholarly learning communities as well as safe and supportive class cultures
- Trust in students' autonomy and their capacity and desire to learn
- Respect for diverse student characteristics and learning styles

Sources of Decisions to Offer Distance Education and Consequent Nursing Curriculum Implications

A decision to offer distance courses in a nursing curriculum can arise from three different circumstances. Each has implications for subsequent nursing curriculum and course development.

First, during curriculum development, the analysis of contextual data can lead to the logical decision that educational approaches should include distance delivery for all or part of a nursing curriculum. In this situation, the total faculty group endorses the idea, and this decision will be a significant parameter in subsequent curriculum and course development.

Secondly, apart from a formal curriculum development process, nursing faculty members may decide to initiate or expand the use of distance technologies within existing programs in response to student characteristics, a desire to increase enrollment or access, a conviction that quality learning outcomes can be achieved, and so forth. This choice will result in modifications in course design and implementation, within the existing curriculum design. The number of courses involved will determine the extent of necessary development activities.

Thirdly, there can be a strategic decision by the educational institution to increase access to educational programs through distance education. As a consequence, the school of nursing is obligated to support the institution's strategic plans. This situation can result in the development of a completely reconceptualized nursing curriculum, or modifications within the existing curriculum.

Designing Nursing Curriculum and Courses for Distance Delivery

Curriculum design, explicated as the configuration of a program of studies, includes the courses selected, their sequencing and delivery, relationships between and among them, and associated curriculum policies. The curriculum design process entails all activities and decisions that result in the creation of the actual program of studies, that is, the completed curriculum. The design process for curricula employing distance delivery parallels that for curricula with campus-based, face-to-face delivery.

The starting point for nursing curriculum development is the context in which the curriculum will be offered and in which graduates will practice nursing. The aim is to develop a curriculum that: is evidence-informed, context-relevant, and unified; provides opportunities for students to achieve goals or intended outcomes; is congruent with curriculum foundations; and has internal consistency, logical flow, and unity. There should be planning to maximize implementation fidelity and to prepare for formative and summative evaluation of students' achievement and the curriculum. These fundamental considerations are necessary in all curriculum development, regardless of the delivery method.

Designing Nursing Courses for Distance Delivery

A defining characteristic of course design for distance delivery is the confluence of pedagogy and technology. Ample time should be provided to prepare a course for the online environment because course design is not a matter of simply transposing a conventionally delivered course to another format.

Designing nursing courses for distance delivery includes planning all components of conventional courses: title, purpose, description, goals or competencies, strategies to ignite learning, content, classes, opportunities for students

to demonstrate learning, faculty evaluation of student achievement, and the relationships between and among these components. The skillful integration of these components gives vitality to courses. Achievement of a satisfactory convergence with technology might require assistance from instructional design and media experts. Only the details of course design that require particular consideration for distance delivery are presented in this chapter.

Course Design Parameters

Course designers are mindful of parameters that influence all course design, such as characteristics of students, educational and philosophical approaches, curriculum goals or intended outcomes, major curriculum concepts, key professional abilities, and placement of courses in the curriculum. For courses offered by distance, the institution's LMS, the availability of web 2.0 technologies to promote interaction and collaboration, and policies about distance education are major parameters of course design.

Course designers also consider factors within distance courses that influence student success such as student interaction with faculty, technology, and the educational institution (Paul & Cochran, 2013), other students and self (Andrusyszyn & Davie, 1997), student–content interaction, student autonomy and control, and student social presence or sense of community connectedness (Shearer, 2013). Although these are considerations in conventional courses, they are highlighted in distance courses because of the physical distance between and among participants and instructor, and the potential for some students to feel invisible, isolated, or disenfranchised. Another possible parameter is temporality. An *a priori* decision may be made about whether course delivery will be synchronous or asynchronous, or include elements of both. Alternately, this decision may emerge during the design process.

Technology Selection

The technological aspects of course design are most prominent when considering strategies to ignite learning and opportunities for students to demonstrate learning. The LMS and web technologies that are used should serve and support learning and teaching in as seamless a fashion as possible and never overwhelm students or distract them from the course purpose.

An institution's LMS provides a consistent organizational template for course materials and teaching-learning processes, while allowing choice in the features that are used, and in the teaching, learning, and assessment processes. The template provides a standardized look across courses and this facilitates students' familiarity with, and timely access to, commonly used course elements such as syllabi, discussion groups, timetables, and web links (Halstead, 2005). The standardized look also contributes to the curriculum's visual unity.

Course Design Process

Designing distance courses is not a matter of recreating a face-to-face class online (Dennen, 2013). Rather, it requires beginning with the course goals or intended competencies and creating a course that takes into account the factors that influence student success, the curriculum foundations, the available technologies, the best blend of technologies, and the nature of student participation. Nursing education courses offered by distance delivery are not designed in isolation from other courses in the curriculum. Each course is part of a larger whole whose aim is to facilitate students' development as professional nurses. Thus, it is essential that course designers consider the placement of each course within the curriculum and ensure that there is logical and conceptual unity within and among courses.

Course design is facilitated by faculty consultation and collaboration with instructional designers, media specialists, and by access to technologies that capture best practices in distance education, whether the course is fully online or hybrid. Decisions about course design are similar for conventional courses and those offered through distance delivery, with the added feature that an instructional designer and media specialist may be part of the process. Iterative thinking, discussion, and ongoing appraisal are necessary about the course components and their relationship to the technology, and the overall fit of the technology with the course design. Consideration should be given to:

- How the course looks and feels. Consistency among courses within a curriculum contributes to visual unity and ease of navigation for participants. Faculty members' comfort and ease with the LMS is critical to ensure smooth operations and inspire a positive learning experience for all participants.
- Guidelines, rubrics, and self-assessment tools to help students develop confidence in their learning progress (Dunlap, 2005).
- Methods for students to demonstrate learning within the context of selected technologies, course expectations, and timelines.
- Moderation of discussion forums. Will students assume leadership roles, acting as moderators or discussion summarizers while faculty members coach them from the side?
- Expectations about frequency of participation, active presence for faculty members and students, course etiquette, and ethical issues regarding professional practice discussions.
- Provision of lectures, and preparatory and/or supplementary materials and timely learning opportunities that will blend course goals or competencies, content, and technology, seamlessly, transparently, and intuitively.

A finalized course design will result when nursing faculty members, instructional designers, and media specialists are satisfied that they have achieved a reasonable convergence of pedagogy and technology, where the pedagogy drives the technology. The result should be a course that is:

- Philosophically, educationally, and conceptually consistent with the curriculum foundations and incorporates evidence-informed design and teaching scholarship
- Constructed with technology whose navigation is intuitive and transparent, or a combination of technology and conventional learning that engages students and moves them toward achievement of curriculum expectations
- Rigorous and contributes to the unity of the curriculum

Course Concepts and Content

As in conventional courses, the course concepts and content are determined by the curriculum mapping that is part of curriculum development. Concepts are addressed at the desired depth and scope in online discussion with skillful facilitation to ensure a suitable balance between concepts and content. It is important to ensure that any interactive web technology is intuitive and does not overshadow attention to course topics.

Strategies to Ignite Learning

The intent of strategies to ignite learning is to move students toward achievement of course goals or intended competencies, in a manner unhampered by the available technology. Active learning and collaborative knowledge construction are critical values of distance education; thus, the strategies to ignite learning typically require students to engage in divergent thinking, discussion, and collaborative work.

The strategies to ignite learning ought to encompass four types of interaction previously described: student–faculty, student–student, student–content, student–self (Andrusyszyn & Davie, 1997; Moore, as cited in Bernard et al., 2009). While the first three are readily understood, student–self interaction focuses on the two-way interaction between the inner/personal self and the academic/professional self and occurs through reflection and reflexivity. Revisiting and analyzing insights through individual and shared reflection can lead to deeper, more meaningful learning (Andrusyszyn & Davie, 1997). Therefore, strategies to ignite, promote, and sustain reflection and reflectivity should be integral to nursing courses offered by distance delivery.

Embedded opportunities within the LMS for social interaction, synchronous and asynchronous discussion, and collaboration on practice issues or case studies perceived as authentic by students will promote disciplinary discourse and allow student engagement with the content and the process of knowledge construction (Dunlap, Sobel, & Sands, 2007; Larreamendy-Joerns & Leinhardt, 2006; Martens, Bastiaens, & Kirschner, 2007). With courses delivered through a LMS, didactic material and links to other learning resources can be posted electronically. The learning resources could be designed with technological enhancements to overcome limitations of written text and static presentations and consist of resources such as videos, journal articles, material posted on other websites, and supplementary notes.

Other strategies might involve online live discussion or real-time virtual classrooms with lectures and demonstrations, provided these features are part of the LMS. Such strategies are convenient for guest lecturers and practice experts, and add immediacy and authenticity to the learning. Student presentations are also possible in this way, or through didactic postings. Full use of LMS components allows for a wide range of strategies to ignite learning and attends to a variety of teaching and learning styles. Countless combinations and permutations of strategies and technologies are possible, limited only by faculty members' imagination, creativity, time, and expertise, and the institution's technology infrastructure and support. Web 2.0 technologies such as blogs, wikis, and cloud computing are readily employed in nursing education, depending on course context. Web 3.0 technologies, also referred to as the semantic web or artificial intelligence, take Web 2.0 a step further by empowering teachers and learners through the use of open and cross-platform applications, data mining through built in algorithms, 3-D virtualization, and cloud computing (Chauhan, 2015). In an expanding technological world, it is most critical to select strategies to maximize achievement of curriculum goals or intended outcomes, and to respect student diversity and multiple ways of knowing.

Individual “Classes”

Guidelines for student learning can be prepared for distance education courses, just as they are for conventional courses. These guidelines for activities provide direction to learning, assisting students to focus on the ideas and processes that lead to success in the course. Because these ought to be prepared in a consistent format throughout the curriculum, the guidelines provide visual unity to the course and curriculum as a whole.

When planning for individual classes, it is necessary to decide exactly what constitutes the temporal span of a “class” in a course that employs ongoing discussion. For example, will the class start on Monday at 9:00 a.m. and continue

to Friday at 4:00 p.m., or continue for 7 days a week? When, how, and by whom will the summary and transition to the next topic occur? Will discussions be closed to further contributions after a unit of time, or remain open for review and further contributions for the duration of the course?

Another aspect of temporality is how best to facilitate students' substantive and continuous engagement in asynchronous online discussion, rather than sporadic superficial participation that does not advance the dialogue. Setting clear expectations about the frequency and timing of contributions will enhance course rhythm and avoid chaos within an asynchronous learning environment. Of note is that use of blogs or sites such as Google Drive™ online storage service allows for tracking of contributions, possibly enhancing participation in collaborative work and reducing the "missing in action" phenomenon (Bento and Schuster, as cited in Booth, Andrusyszyn, & Iwasiw, 2011) in online courses.

Class design decisions also include matters about small group versus plenary work. If a large class is divided into smaller groups, timing and design considerations need to include whether all small groups will report back to the whole at a plenary session or if summaries of discussions should be posted for all to read. Whether small group discussions are visible (or not) for other groups is a philosophical debate with which the course professor must wrestle, weighing the benefits and drawbacks of either design choice.

Consideration may be given to whether or not students will share leadership responsibility for facilitating discussion in small groups and in the total group. This may be desirable if the activity aligns with course expectations and if the logistics can be organized so that all students have an opportunity to do so.

The need for faculty presence in online discussions is important for student guidance and learning. Faculty presence through role-modeling, coaching, and reinforcing active engagement with positive feedback builds students' self-confidence. In conventional classes, students typically manage their own discussion in small groups, albeit with physical presence, but limited involvement, of a faculty member. Therefore, a suitable balance between faculty presence and student autonomy is considered when online courses are designed.

Opportunities for Students to Demonstrate Learning and for Faculty Members to Evaluate Student Achievement

In all courses, students will be expected to demonstrate, and faculty members to evaluate, achievement of course goals or course competencies. The choice of methods for students to demonstrate learning is related to consistency with philosophical and educational approaches, and course goals or course competencies. As always, a variety of methods are preferred. The appropriateness of giving grades for participation remains debatable. A decision for rewarding

participation (or not) with grades is rooted in faculty members' beliefs and values about teaching and learning and should be carefully considered.

When deliberating about methods for students to demonstrate achievement, faculty members examine factors such as:

- Compatibility of ideas with curriculum foundations and the available technology
- Student access to the necessary resources and supports to demonstrate learning
- Balance among individual work, group work, and individual contributions to group work
- Plans for timely feedback
- Examination schedules (synchronous or asynchronous)
- Security and ease of testing and the assignment-submission system

The opportunities available for students to demonstrate their learning can occur within or beyond the bounds of the LMS. In all cases, the effort required by students to create the work, and by faculty members to evaluate it, should be commensurate with the extent to which the completed work will demonstrate an integrated achievement of course expectations.

Demonstration of Cognitive, Affective, and Psychomotor Learning in Distance Education

Demonstration of cognitive or affective learning in a distance course parallels that of conventional courses with strategies such as tests, term papers, portfolios, presentations, videos, and case analyses, among others. Affective learning can be made evident through discussion, creation of video role plays, responses to ethical dilemmas, online debating, and other approaches (Oermann & Gaberson, 2014).

Less straightforward is the demonstration of psychomotor learning, because faculty members are unable to observe the psychomotor performance in person. However, students can engage in virtual simulations and submit videos of psychomotor skill performance. It is also possible to engage experts to evaluate performance in person, depending on the course context and experts' familiarity with the expectations.

When students are asked to create health-related or issue-related videos, blogs, or wiki entries, they are usually eager for these to become public. Thought should be given to how the course professor can assess these learning products quickly and give feedback so students can make necessary revisions within the timeframe of the course. An additional consideration in the work that students submit is the limit on the file size allowed by the LMS. A completed video may

have to be located on an external Internet site, such as YouTube. If external sites are used, care must be taken to ensure that no infringements of privacy, confidentiality, or copyright have occurred. It is also important to explore who will own copyright of the work once posted.

Academic Integrity

With computer-based testing, security can be strengthened with the use of tightly timed examinations, online proctoring systems, randomized distribution of several forms of the exam, and randomization of test items and response options (Bedford et al., 2011; Caudle, Bigness, Daniels, Gillmor-Kahn, & Knestrick, 2011). Alternately, consideration can be given to the use of examination centers that all students must physically attend.

Whether or not online testing is used, the creation and support of an environment of academic integrity is an important element of all courses. Consistent with institutional policies, clear explanations of what constitutes academic honesty and dishonesty, why it is important to cite sources (including those from the Internet), what plagiarism is, and when collaboration is (and is not) appropriate, are part of developing a culture of honesty (Conway, Klaassen, & Kiel, as cited in Oermann & Gaberson, 2014; Hart & Morgan, as cited in Oermann & Gaberson, 2014). Significantly, these ideas form part of the course syllabus. Helping students understand that cheating is unacceptable and antithetical to professional nursing values requires serious discussion. Explanations and discussion about how academic honesty relates to professional values and ethics can add importance to ideas of academic integrity for students. Further, the matter of academic integrity can be raised as dates for submission of student work approach.

Summary of Curriculum and Course Design Process for Nursing Distance Education by Distance Delivery

The curriculum and course design process for nursing education by distance or hybrid delivery is the same as designing for conventional delivery. The difference lies in the influence of the delivery technology on course design. Involvement of an instructional design expert, and, if possible, a media specialist, is often necessary until faculty members develop expertise in creating distance education courses. Nonetheless, all decisions and deliberations are based on the curriculum foundations, that is, the philosophical and educational approaches, the major curriculum concepts, and the key professional abilities, along with curriculum goals or outcomes. Important to remember is that the process of design is iterative, with the intent of achieving an internally consistent course with a well-balanced blending of pedagogy and technology.

Implementing and Evaluating Nursing Education by Distance Delivery

Exemplary Teaching in Distance Courses

Faculty–student interaction is essential to student achievement in all courses regardless of delivery method. As students engage in the learning activities, faculty members are responsible for attending to the teaching actions that validate students’ participation and learning efforts, offer guidance in learning, support motivation, and provide feedback about achievement (Paul & Cochran, 2013). For students to feel they are part of a community of learners, particularly in a fully online or web-based (e.g., audio-, video-, or SKYPE conferencing) learning environment, their social, cognitive, and affective presence require validation. In a study by Wingo et al. (2016), instructor participants expressed that they had to work harder at communicating effectively to facilitate engagement with students and avoid feeling disconnected from them. Therefore, the course professor should plan for intentional validation of student participation through course design and teaching presence (Stavredes & Herder, 2013).

A critical element of the interaction is the faculty member’s clarity of communication. Unambiguous written communication is paramount, particularly when the course is fully online because verbal clarification may not be possible. Misunderstandings can lead to student frustration and be challenging to correct (Wingo et al., 2016).

Exemplary teaching via distance delivery can be viewed as consisting of three interrelated and mutually supportive categories of teaching actions. These categories encompass actions that promote learning; strengthen interaction, community, and inclusion; and enhance students’ sense of control and confidence in their ability to be successful. All require a faculty member’s continuing presence, that is, “being visible to, engaged with, and caring for the students through every step of the way through the learning journey on which they embark together” (Ekmekci, 2013, p. 34). **Table 16-1** includes examples of teaching actions and their fit with the three categories of instructional purposes.

Evaluation of Nursing Education Offered by Distance Delivery

Faculty members continually engage in appraisal of curriculum and course design. The design of the course evaluation should be completed before the course is implemented and be consistent with the evaluation plan, model, and procedures used in the full curriculum. There may be a need to clarify the purpose of course evaluation specific to distance delivery, if the entire curriculum is not offered in this way. Criteria or standards for courses offered

Teaching Actions	Promote Learning	Strengthen Interaction, Community, and Inclusion	Enhance Students' Sense of Control and Confidence
Prepare a well-designed course in which: <ul style="list-style-type: none"> • Attention is given to curriculum concepts and substantive, evidence-informed content, grounded in the world of nursing. • Textbooks or online resources are available. • Navigation is smooth. • All course material is immediately visible or sequentially opened to students. • Embedded links and external sites (e.g., social networking or document preparation sites) are live. 	✓	✓	✓
Create a vod- or podcast to welcome students to the course.	✓	✓	✓
Refer students to sites for orientation to distance learning and/or technology.	✓		✓
State clear expectations that lead students to perform beyond their initial perspectives of what they would achieve (Edwards, Perry, & Jansen, 2011).			✓
Use intentional processes such as modeling and clear communication about the expected depth, scope, quality, length, and quantity of interaction.			✓
Attend consistently to the relationships between course learning and students' participation in the practice of nursing.	✓	✓	✓
Include course concepts in dialogue with students (Siemens, 2010) and in feedback about student submissions, making concepts omnipresent.	✓	✓	✓
Post frequent acknowledgments of ideas and reinforce positive points by including the names of contributors, making sure that all students are acknowledged at some point in the course (if possible).	✓	✓	✓
Coach and guide students as they develop interaction skills, and send personal messages to individuals or groups, particularly when personal or learning support is needed (Ivanoka & Stick, as cited in Lee & Choi, 2011).	✓	✓	✓
Intervene in a timely fashion for requests for help (e.g., coaching, questioning, or refocusing discussion to guide or scaffold learning; referring to student services).	✓	✓	✓
Explain the purpose of course activities and invite comments about their relevance for nursing practice.	✓	✓	✓

(continued)

Table 16-1: Teaching Actions and Instructional Purposes <i>(continued)</i>			
Teaching Actions	Promote Learning	Strengthen Interaction, Community, and Inclusion	Enhance Students' Sense of Control and Confidence
Provide or negotiate guidelines for communication, participation, and collaboration (Booth et al., 2011).	✓	✓	✓
Ask heuristic questions to help students make connections among concepts, previous learning, and nursing practice (e.g., I wonder about . . . ; Help me to understand how X relates to Y; Tell me how these ideas fit together . . .).	✓		
Include activities and offer comments that invite reflection, higher order thinking, metacognition, and meaning-making.	✓		
Sensitize students to professional and ethical aspects of social technology use (Schmitt et al., 2012).		✓	✓
Ensure that all communication is understandable, clear, unambiguous, inclusive, and free of derogatory language or expressions.	✓	✓	✓
Plan creative student–student, student–content, and student–self interaction through small- or large-group discussion and projects, peer teaching via online student presentations, student leadership in discussions, student creation and posting of videos, and provision of student choice about projects and/or course activities.	✓	✓	✓
Provide guidelines and rubrics for projects, and self-assessment tools to help students determine their achievement (Dunlap, 2005).	✓		✓
Limit the variety of technologies used so pedagogy remains the driver of technology.	✓		
Create incremental opportunities for students to demonstrate learning and include opportunities for students to explore the networked world beyond the course site.			✓
Use authentic assessment techniques that reflect a balance of individual and group activities.	✓		✓
Provide prompt and meaningful feedback that serves as a learning scaffold.	✓		✓
Acknowledge stressful times, (e.g., exams; term paper deadlines), and offer encouragement through email, vodcast, podcast, or an online forum.		✓	✓
Be open to renegotiate due dates for course work in response to individuals' life events.			✓

by distance delivery could be necessary, if not already part of the overall curriculum standards. Once the evaluation is completed, reporting of evaluation results may extend to instructional designers, who are now stakeholders in the nursing curriculum.

All aspects of conventional course evaluations ought to be included in the evaluation of courses delivered via technology. Useful information specific to the pedagogy-technology interface include students' feedback about matters such as:

- Sense of connectedness with peers and course professors, feeling of control over technology, perceptions of how the course design influenced their learning, volume of work, and time on task
- Ease of navigation in the LMS and use of system features, such as email and submission of completed work
- Fit between specific learning activities and technologies
- Reasons why students did or did not engage in specified activities (TLT Group, 2011)
- Suitability of technologies for learning about a person-centered, practice discipline
- Authenticity of learning activities and opportunities to demonstrate learning
- General satisfaction with course delivery

The results of organized and regular course evaluations contribute to ideas about subsequent course refinement or revision. When offering courses by distance delivery, or incorporating technology into on-campus courses, it is incumbent on nurse educators to expand ideas of course evaluation to explicitly include features of the technologies used and their intersection with learning about nursing. If an entire curriculum is being offered by distance delivery, the considerations noted earlier continue to apply. Additionally, all features of planning curriculum evaluation are essential.

Relationship of Nursing Education by Distance Delivery to an Evidence-Informed, Context-Relevant, Unified Nursing Curriculum

Nursing education courses may be offered by distance delivery in combination with, in addition to, or instead of conventional classroom-based nursing courses. In all cases, they ought to be visually and conceptually consistent with other courses in the curriculum. In other words, nursing courses offered by distance technology are not separate from the school's curriculum but an integral part of it. Therefore, if the curriculum as a whole has been developed to be

evidence-informed, context-relevant, and unified, individual distance education courses will fit into the curriculum framework and form part of a unified whole.

If an entire nursing curriculum is intended to be offered by distance delivery, its development, implementation, and evaluation should follow the processes of the Model of Evidence-Informed, Context-Relevant, Unified Curriculum Development. If this is done, the evidence-informed, context-relevant, and unified nature of the curriculum will be assured.

Core Processes of Curriculum Work

Faculty Development

Faculty development and support are necessary when designing and implementing courses offered by distance delivery. Development sessions can be led by technology specialists, instructional designers, and media experts, as well as faculty members experienced in distance education. These can focus on (1) technology as it relates to curriculum and course design, and (2) teaching and interpersonal interactions with distance technologies.

Technologies and Course Design

The overall goal of faculty development as it relates to curriculum and course design is to advance members' appreciation, understanding, and knowledge of distance methods, the accompanying technologies, and their intersection with pedagogy. Essential is the development of proficiency in use of the institution's LMS and other systems such as content and student management systems, as appropriate. Importantly, it is incumbent upon faculty members to learn about current web technologies, social media, and their potential applications in nursing education.

Faculty development can include individual, microlevel assistance with course development, based on faculty members' comfort, knowledge, and expertise with distance delivery. Broader discussions could be undertaken with faculty experts from nursing and other disciplines about possible opportunities for students to demonstrate learning in distance courses, the right balance of various technologies, academic integrity in courses, or the ethical considerations of distance education. A strategy used by Indiana University for faculty development when transitioning to a new online LMS was to designate "super-users," individual faculty members who served as ongoing resources to colleagues to ease the process (Judge & Murray, 2017).

Faculty development opportunities with a wider scope might include centrally offered workshops to address strengths and limitations of selected delivery methods, or informal dialogue among faculty members about successes and frustrations with specific delivery or communication methods. Sharing circles

with novice and experienced members could encourage discussion among those who are tentative about the effectiveness of distance education and those who are convinced of its value. Such perspectives and experiences might provide a balance between positive and negative views.

Guided workshops for professors developing or converting courses to distance delivery could include brainstorming about course (re)configuration to incorporate different technologies. This may also be relevant for those wanting to introduce a hybrid approach to their conventional classes. In addition, with student agreement, novices might be observers in distance courses being offered and modeled by experienced peers (Lenert & Janes, 2017) as they develop their own courses for distance delivery.

Teaching Using Distance Technologies

A critical aspect of preparing for teaching via distance technologies is an understanding of the faculty role in course implementation. For some faculty members, a shift is needed from being the playwright, active director, and featured actor of in-class learning activities, to being a combination of playwright, minor player, and prompter. The playwright in traditional and distance courses creates the course structure, and develops and makes available necessary resources and processes. As a minor player, the nursing faculty member in distance courses contributes to the unfolding dialogue and learning but rarely becomes the central focus and only for brief periods. The prompter's presence is persistent and known to students, who receive support and assistance as needed. This may represent a significant change in teaching style for some faculty members, who although skilled in classroom teaching, may need support in shifting their teaching style (Johnson & Meehan, 2013). Not all faculty members are confident or suited to teach in other than conventional settings, and a curricular change to distance delivery may be stressful or even resented. Gradual immersion with tangible successes may be desirable for some to ease fear or anxiety.

Facilitation of online courses or web-conferencing courses is a skill that involves knowing when to coach or intervene, where to coach or intervene (in the public discussion forum or privately via email or even face-to-face), how to express ideas so the intent is conveyed clearly and without judgment, and when to observe without comment. The aim is to promote student engagement that will provide all class participants with opportunities to find their voice online. Development or refinement of these skills can be supported through review and analysis of examples of online discussion (used with participants' permission). The nature and tone of the faculty development and online facilitation ought to be consistent with the philosophical and educational approaches of the curriculum.

Another faculty development activity might be to consider the evidence-informed teaching practices that faculty members are using in the classroom and consider

how they could be transformed into teaching actions in distance education. An introduction to best practices and research about teaching in distance education courses would strengthen this discussion. Sessions focusing on the transition to distance teaching could include colleagues from other disciplines and/or members of the institution's teaching support center.

Shared teaching with experienced distance education professors can be a way to ease the transition from classroom to distance teaching. Ongoing mentoring can be useful to novices as they encounter teaching challenges in distance education. Regular discussions among faculty about topics such as online teaching, web conferencing, the use of web technologies, and social media can be of help to experienced and novice faculty members in distance, hybrid, and conventional courses. Furthermore, faculty members' self-assessment, course evaluations, and student feedback all contribute to the development of those leading nursing education courses delivered by distance technology.

Ongoing Appraisal

The ongoing appraisal processes of curriculum development, implementation, and evaluation for nursing education by distance delivery includes all the appraisal questions posed during curriculum development of conventional courses, as described in previous chapters. Additional areas of appraisal relate to the intersection among pedagogy, learning, and technology. Faculty might consider the following:

- Sufficiency of plans for active student engagement to sustain comfort, voice, presence, motivation, and learning
- Fit of learning activities with curriculum foundations, the selected technology(ies), and course timeframe
- Availability, responsiveness, and sufficiency of academic and technical support for students and faculty members
- Attention to matters of privacy, confidentiality, and online etiquette

Scholarship

Nursing education by distance delivery is an area of scholarship requiring development beyond expository literature and reports of the learning outcomes of individual courses. If comparisons are made between face-to-face and distance courses, the variables that influence learning outcomes (e.g., student time on task, class size, course processes, course materials, nature and amount of feedback, interactions, student and faculty member characteristics) should be accounted for so that supportable conclusions can be drawn from the results (Liu, 2012; Simonson et al., 2011).

Attention should be given to the wealth of scholarship about distance education generally, and the following question should be asked: *What is particular about distance education in nursing that requires explication or investigation?* Qualitative studies that examine how, and how well, students learn about a person-oriented profession, develop professional values, and are acculturated to nursing in courses with no face-to-face contact, would deepen an understanding of effective learning strategies and activities in nursing education.

A topic worthy of development is ethics and values in distance courses. For example, an exploration could be undertaken of the perspectives of nursing faculty members and students about the ethical issues inherent in the use of external websites and web tools for course work in which client information forms the basis of discussion. Results could be compared to the perspectives of students and academics in other health disciplines to determine if there are shared values and beliefs. This could have implications for interprofessional education by distance.

Another example of a scholarship project that could be of value is a survey of student beliefs about academic integrity in a course that relies on student access to and use of Internet resources. It would also be relevant to determine if and how Internet-based learning shapes student perspectives on nursing professional values and academic values and whether the views are the same or different from those in conventional courses.

To expand the evidentiary foundation for nursing education by distance delivery, a school of nursing might adopt a single theory or group of theories upon which to base studies. In this way, a theory-based body of knowledge would be developed and could be further examined.

CHAPTER SUMMARY

Distance education and nursing education by distance delivery are defined, and the institutional requirements for offering distance education are explained. Ethical considerations, values, and beliefs pertinent to distance education are described. The sources of decisions to offer nursing education by distance and implications for nursing curriculum are summarized. Curriculum design is briefly overviewed and highlighted is the fact that the design process for distance and conventional courses in nursing is the same. However, considerations particular to nursing education by distance delivery are described. Discussed are course components of concepts and content, strategies to ignite learning, features of individual classes, and opportunities for students to demonstrate learning and for faculty members to evaluate student achievement. Deciding on course design is addressed, as are implementing and evaluating nursing education by distance. The relationship of nursing education by distance delivery to a context-relevant, evidence-informed, unified curriculum is explained. The core processes of curriculum work in relation to distance education in nursing are described.

SYNTHESIS ACTIVITIES

The case presented for analysis is the Whitebrook University Faculty of Nursing that is considering further integration of distance delivery into the Bachelor of Science in Nursing (BScN) curriculum. Questions are provided to guide analysis. Then, questions and activities are suggested for readers' deliberation when planning, implementing, and evaluating distance education in nursing relative to their own programs.

■ Whitebrook University Faculty of Nursing

Whitebrook University Faculty of Nursing has a 15-year history of offering undergraduate nursing programs and the faculty members are always seeking new opportunities for their program to be on the cutting edge of change. They have had three classes of 150 graduates from the current BScN program who have been well received by the healthcare community. In the last 5 years, four new PhD-prepared faculty members have been hired into full-time appointments, bringing the complement of faculty to 14.

The faculty members enjoy being together and sharing ideas. Every Friday, the majority gets together with the dean for an informal potluck lunch and inevitably someone puts forward a question, concern, or new idea. This week, Dr. Rachel Booth wondered why none of the courses in the undergraduate program were offered using distance delivery methods. She explained how rich and deep her learning experiences had been in her PhD program, which used a hybrid design, and she wondered about others' experiences.

Two faculty members, Dr. Ursula Minton and Dr. Keisha Jefferson both had similar experiences in doctoral studies and were eager to explore further possibilities for the undergraduate program. Dr. Virginia Angel shared that she could not imagine how interpersonal communication, caring, and empathy could possibly be integrated in a technical space and her passion about the importance of personal contact to fully socialize students into nursing was palpable. However, she was open to exploring the idea and learning more.

There was a heightened buzz in the room about how distance delivery and web technologies could be incorporated into nursing courses. Dean Sunaya Tornquist was fully engaged in discussing possibilities as well and praised the group for their energy and creativity. She suggested that the topic of distance delivery be added to their Faculty Council agenda and that a small working group take the lead in exploring this possibility further. She further noted that distance education and enhancing web

learning technologies are identified on the university's strategic plan and that the university as a whole has been working on how to maximize and expand the infrastructure to include all programs. Four faculty members volunteered to take on the challenge and said they would meet and propose a plan for a more formal discussion at the next council meeting.

■ **Questions and Activities for Critical Analysis of the Whitebrook University Faculty of Nursing Case**

1. Develop a plan for the Faculty Council meeting. How should the discussion about integration of distance education be planned to encourage open dialogue and expression of apprehensions and convictions?
2. What concerns or questions might the working group anticipate in proposing the introduction of technology-enabled courses?
3. Consider how the working group should or could intersect with the school's curriculum committee to maximize inclusion and avoid any sense of interference in the committee's mandate.
4. Describe the supports that might be necessary to expand the use of distance delivery and web-based technology in the undergraduate curriculum.
5. Compare the benefits and drawbacks of both full and gradual immersion into distance delivery.
6. Deliberate about the fit of online teaching and learning with professional practice courses.
7. Consider the faculty development and scholarship activities that might be undertaken if there is a formal decision to proceed.

■ **Questions and Activities for Consideration When Planning, Implementing, and Evaluating Nursing Education by Distance Delivery in Readers' Settings**

1. Analyze the factors propelling the school of nursing toward offering nursing courses by distance delivery.
2. What strategic directions, institutional policies, infrastructure, and resources are available within the educational institution and the school of nursing for offering nursing education by distance?

3. Analyze the faculty climate regarding distance delivery and integration of web technology into conventional and distance courses.
4. What is one web tool not currently used that could readily form part of a course? How could it enhance student learning beyond what is currently done?
5. Propose ideas for learning activities that reflect a creative and learning-focused integration of technology and pedagogy.
6. How can conceptual and visual consistency be maintained in the curriculum when distance courses are developed and implemented?
7. What faculty development activities might effectively support a shift toward distance education?
8. In addition to the ideas suggested in the chapter, what ongoing appraisal questions should be asked?
9. Suggest scholarship activities that could be undertaken about the development, implementation, and evaluation of nursing education courses and curricula offered by distance delivery.

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