SECTION II

Classroom Teaching

CHAPTER 3

Curriculum Development

OBJECTIVES

- Define curriculum development.
- Analyze the components of a nursing curriculum.
- Determine appropriate curricula designs based on educational levels.
- Analyze a curriculum case study in preparation for taking on a new faculty role.

As you think about taking on the role of nursing educator, there are some important factors to consider. Before applying for the job, you should explore several institutes of higher education to see which types of programs are being offered. Next, you should explore whether there is an option to teach your preferred subjects at either the associate, baccalaureate, or master's levels. It is not unusual for some new faculty to start by teaching at the associate-degree level, so as to gain confidence in the classroom. Once they become comfortable, they go on to teach at the baccalaureate level and later progress to teaching at the graduate level. Other considerations may include the discipline/content to be taught and one's ability to do so, and the availability of promotion and advancement opportunities within the organization.

Whatever your preferences, one of the major roles of faculty that you will encounter is developing and implementing the curriculum. As a new faculty member you may initially be more concerned with honing your teaching skills and managing the classroom environment, and pay little attention to the overall process of curriculum development. However, once you have delved into the full faculty role, not only will you be expected to understand the process of curriculum development, but you also may find yourself involved as a member of a curriculum development team. By becoming a member of this important team you will be exposed to a deeper understanding of the entire process and its impact on the nursing program. Once you gain an intimate understanding of curriculum development, it will become clear to you how constructs are developed, goals and objectives established, and outcomes measured and evaluated. Furthermore, you will have a clear understanding of why it is necessary to periodically redesign the curriculum to meet changes in societal needs.

DEFINING CURRICULUM DEVELOPMENT

This chapter starts by establishing a grounded definition for curriculum development. It goes on to describe components of a curriculum, discuss factors influencing curriculum development, describe steps in choosing a curriculum design, and outline challenges to curriculum development.

The literature is replete with definitions of the word *curriculum*; it is therefore important for us to establish consistency in the way we use this word throughout this text. A curriculum is an academic plan or course of study that clearly lays out goals for student learning, the content to be learned, the sequence in which material will be taught, the methods of instructions, the teaching resources to be used, who will be responsible for carrying out the teaching, and how the learning outcomes will be measured. It is expected that after completing the course of study, students will have gained the knowledge, skills, and attitudes that are expected within the profession.

As previously mentioned, several disciplines have designed their own definitions of curriculum, so as you explore the literature you will come across a variety of approaches to curriculum development and implementation. Even so, you will notice that curricula basically result in the same end goal of providing a program of study aimed at assisting students to attain their educational goals. The core of all nursing education programs can be linked to the type of curriculum. The curriculum forms the foundation on which all aspects of the educational program are built; it consists of a mission or vision that is congruent with that of the parent organization, a philosophy, an organizing framework, constructs, goals of the program, and course objectives.

Faculty and other responsible parties are in charge of developing and implementing the curriculum using professional nursing standards as a guide. It is extremely important that all participants in the development of the curriculum be made aware of the expected outcomes and how they will be measured. There must also be a clear understanding of the steps or learning processes that will be undertaken to ensure and measure that the outcomes are met.

The teacher, students, resources, and educational environment are the major factors in the success of the learning process. Dillon (2009) describes the teacher as the most influential person in the teaching/learning process, one who has all the personal characteristics, qualifications, training, education, and background to make a difference in the student's learning outcomes. The student who wants to learn comes to the teaching/learning environment to gain guidance and education to help meet personal educational goals. The subject content included in the curriculum will depend greatly on the discipline of study. The method of presentation will influence the teaching/learning approach. The teaching/learning environment plays a major part in the learning process and should never be overlooked, whether it involves teaching face to face in a single classroom, online, within a community, or to society in general.

Overall, the curriculum process, design, and implementation involves a teacher, students, the subject matter to be taught, an environment in which teaching will occur, resources and methodologies, activities, expected outcomes, and methods of evaluation.

STEPS IN DEVELOPING THE CURRICULUM

Educators preparing to develop or revise a curriculum should follow steps similar to those in the familiar nursing/learning process, which include assessing, planning, developing, implementing, and evaluation.

- Start by convening a group of faculty to discuss trends, assess the needs of the organization/school, identify the content to be taught and all needed resources, and determine which environment and mode are best to deliver the specific curriculum.
- Develop a timeline and sequencing for the implementation of the curriculum and decide on measuring tools with which to evaluate the outcomes.
- The next step deals with articulating the findings and developing the curriculum. In this phase, faculty explore various philosophies and come up with a decision as to the one that best suits the organization.
- Courses are identified, and resources to assist with the implementation of the curriculum and measurements to determine student progress are decided upon.
- During the implementation phase, the program is put into practice; thereafter it is evaluated as to how well outcomes have been met.
- The information gained from formative and summative evaluations of the curriculum is used to update and redesign future programs.

Although experienced faculty are usually the first to be called on to be engaged in developing the curriculum, newer faculty have a great deal to contribute. It may seem bold to say, but some newer faculty have been exposed to more current teaching strategies, have been exposed to more current material, understand the theory of integration of technology into the curriculum, and may be more familiar with younger students' needs. Understanding the different generations of learners will be discussed in Chapter 12.

Curricular content will depend greatly on the discipline. For example, a nurse practitioner (NP) curriculum would contain mostly a higher level of content and the delivery approach would focus more on providing information that would assist the NP in assessing and prescribing. The RN curriculum, in contrast, would be geared toward providing information that will help students assess and identify situations, implement within their scope of practice, and/or report to the medical team. Once the

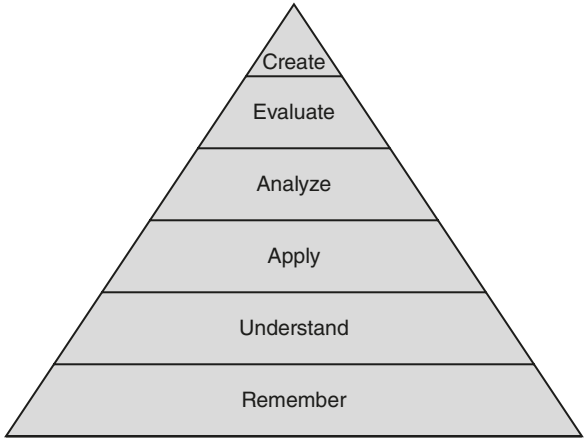
decision has been made as to which courses will be included in the curriculum, faculty can focus on the content to be included and the types of resources needed to deliver the teaching. This information is provided in the form of a curriculum guide, which includes the mission goals and philosophy of the program, sequencing and leveling of courses, expected course outcomes, course objectives, yearly course plan, and an assessment plan. See **Appendix 3-A** for a sample course outline.

Getting Ready to Redesign the Curriculum

Prior to participating in the design and/or redesign of the curriculum, faculty will benefit from reviewing Bloom's taxonomy (see **Figure 3-1** and **Table 3-1**). Bloom's taxonomy promotes higher-order thinking in education. It is one of the most commonly used tools adopted by faculty in the design of curriculum. The taxonomy forms a structure from the simple to the complex in terms of cognitive process. For a discussion of this taxonomy, which is considered a classic in the educational literature, go to www.bloomstaxonomy.org.

Bloom's taxonomy divides the way people learn into three domains or categories: cognitive, affective, and psychomotor. Cognitive refers to knowledge or mental skills, affective refers to change in attitude or feeling, and psychomotor refers to manual or

FIGURE 3-1 Cognitive levels as stated by Bloom.



Modified from Anderson, L. W., Krathwhol, D. R., Airasian, P. W., Cruikshank, K. A., Mayer, R. E., Pintrich, P. R., . . . Wittrock, M. C. (2001). *A taxonomy for learning, teaching, and assessing: A revision of Bloom's taxonomy of educational objectives, complete edition.* Upper Saddle River, NJ: Pearson.

TABLE 3-1 Bloom's Categories with Accompanying Objectives and Statements

Category	Remember	Understand	Apply	Evaluate	Create
Objectives	List and describe	Classify and calculate	Explain and differentiate	Assess and conclude	Plan and compare
Statements	Recall basic pharmacology facts regarding medicating children.	Determine in which situations it would be most important to administer Narcan.	Explain why understanding EKG tracing is vital in monitoring a cardiac patient.	Conclude why the intra-abdominal route is best for administering insulin.	Develop a research proposal on current evidence in healthcare delivery.

physical skills. These learning behaviors can be considered as the goals of the learning process. In an orderly fashion, learners should acquire changes in their knowledge, skills, and attitude.

Hallmarks of a Good Curriculum

The National League for Nursing outlines the criteria for an appropriate curriculum (see www.nln.org). After having reviewed the hallmarks of an appropriate curriculum, you will be prepared to participate in building a curriculum that is flexible, evidence based, culturally aware, values forming, and innovative.

Components of a Curriculum: The Mission

A traditional curriculum is composed of a mission, a philosophy, constructs, goals, and objectives. No matter the method of curriculum delivery, all curricula possess some basic characteristics. The curriculum generally begins with a **mission statement**, which clearly outlines the specific services of the organization and what the program has to offer. Additionally, a mission identifies the goal of the organization, the geographic location of the target population, and the standards to which the organization holds itself.

An example of a school's mission could be as follows:

> BLU Nursing Program is committed to providing quality baccalaureate and master's-level education. The mission is congruent with that of the college, with a strong emphasis on an interdisciplinary curriculum enhanced by experiential opportunities and intercultural understanding.

> Graduates of the nursing programs will function in a variety of settings caring for individuals of diverse backgrounds, having been well equipped to form partnerships with professionals from other disciplines (Modified from Ramapo College of New Jersey [RCNJ] Nursing Programs, 2014).

Establishing a Philosophical Foundation for the Curriculum

As you explore information on nursing curricula, you will notice that most curricula start with the philosophy of the nursing program. The philosophy highlights the beliefs of faculty about what a nursing education ought to be and is influenced by professional nursing standards as well as the mission of the school or college. There are several educational theories and philosophies, discussion of which is outside the scope of this text; however, you may note that some nursing philosophies are developed based on the structural hierarchy of contemporary nursing knowledge. Jacqueline Fawcett (1995) developed four basic metaparadigms of nursing that serve as the underpinning to the entire universal conceptual framework for the nursing profession. According to this theory, contemporary nursing knowledge takes the form of a hierarchy, as outlined here:

- Metaparadigm concept, which sets the boundaries of the discipline and includes the roles of person, nursing, environment, and health.
- Philosophy or beliefs and values held by members of the discipline. These may be psychological or sociological.
- Conceptual models/constructs, which are abstract representations of reality. These are often referred to as organizing frameworks.
- Nursing theories, which are less abstract and more concrete than conceptual models and may vary in scope.
- Empirical indicators, which are tools used to measure theories and outcomes.

The philosophy of the program declares why certain areas are being addressed, the beliefs of the faculty regarding the areas being addressed, how education is implemented, and the recipients' expected outcomes. The philosophy springs from and is congruent with the mission of the parent organization and highlights faculty's knowledge, beliefs, and commitments to the curriculum. The philosophy also states the expectations for students who complete the program.

Constructs

Schools often develop constructs or concepts around which their curriculum is focused. This is referred to as the program's *organizing framework*. Constructs may be determined by the mission of the offerings or may be guided by competencies set forth

by accrediting agencies such as the AACN, CNEA, ACEN, and other professional bodies. These agencies create guiding principles for professional nursing with the aims of protecting the public and safeguarding the welfare of customers. Common examples of constructs utilized by some nursing programs are outlined in **Table 3-2**, which contains sample objectives and potential assignments to meet these objectives. These constructs include knowledge, research and evidence base, leadership, technology, social advocacy, global issues, diversity, and role function, among others. Constructs are leveled based on students' expected outcomes at different stages of the curriculum. See **Appendix 3-B** for sample of leveled constructs.

TABLE 3-2 Sample Concepts with Matching Objectives and Applicable Assignments

Constructs	Course Objectives	Assignment
Knowledge	Apply knowledge synthesized from nursing science, basic science, social science, humanities, and educational theory to support the educator in the institution of higher learning.	Complete weekly graded written assignments on a variety of topics based on science and the humanities.
Research and evidence base	Demonstrate ability to carry out a clinical or educational evidence-based project.	Research the literature, collect data, and develop an evidence-based project on assigned units.
Technology/ information management	Utilize outcomes from a systematic plan of evaluation to suggest improvements to the teaching/learning environment.	Complete a systematic plan of evaluation on an assigned organization and make recommendations for changes.
Leadership	Analyze attributes of leadership required for a successful educator role.	Observe clinical faculty on site and assist in supervising nursing students. Model professional behaviors for students.
Role function	Function in the role of educator in an institution of higher learning. Function in the role of educator in healthcare institutions.	Collaborate with preceptor to develop and carry out a teaching plan. Teach two face-to-face classes. Make a mini-presentation to staff colleagues, faculty, and students. Participate in interdisciplinary efforts to address healthcare needs locally, regionally, nationally, and internationally.

Modified from Ramapo College of New Jersey MSN Program. (2015).

Once the program constructs have been decided upon, all objectives and course outcomes are based on these general concepts. Faculty will go on to develop the components of the curriculum outlining the role that different individuals will play in its implementation. Nursing school graduates are expected to have demonstrated competency in all outcomes.

Choosing a Curriculum Design

Designing a curriculum is a process or way of thinking or organizing disciplines and identifying content and concepts that students are expected to learn or understand during a specific period of time. It involves a broad picture of activities that students are supposed to cover during a specific program of study. Several factors need to be taken into consideration when choosing a curriculum design. Important factors include the mission and type of program, the types of students the program will attract, available resources, the environment in which the program will be carried out, and the level of administrative support. Nursing curriculum design would incorporate all the required and recommended courses that a student should complete prior to graduating from the program.

Often schools form a committee to identify which curriculum design best suits the particular organization. Faculty then vote to approve the one that is acceptable to all.

A curriculum design may be content based (i.e., organized in a traditional format that is discipline specific, such as medical–surgical or pediatric nursing) or it may be concept based (i.e., certain concepts are chosen by faculty to be addressed at different stages across the lifespan). A variety of common curriculum designs are listed in **Table 3-3**. This topic will be discussed throughout the text.

Developing Goals

Once faculty choose a curriculum design, the next step is developing goals for the curriculum. The **goals** are based on the constructs and the overall expected outcomes of the program. Goals are broad and overarching, measurable, attainable, realistic, and time bound. Program and course goals are developed with certain factors in mind, including the types of students, the clients to be served, and the type of content required for the discipline.

Developing Objectives

The course **objectives** provide a step-by-step approach on how the course goals are to be met. Although linked directly to the content, the objectives are also guided by the basic constructs of the program. Objectives are measurable and provide the framework for summative and formative evaluations. The objectives form a guide for the teacher as to which material is to be covered and a guide to the student as far as what needs to

TABLE 3-3 Some Commonly Used Curriculum Designs

Curriculum Design	Description
Oregon Consortium for Nursing Education model (OCNE)	Developed in 2001 in response to the critical nursing shortage. It is a shared partnership among eight community colleges and five campuses of the Oregon Health & Science University School of Nursing. This model provides opportunities for greater numbers of students to obtain necessary clinical experiences in community-based and long-term care facilities (OCNE, 2013). Details about this program can be reviewed at www.ocne.org.
Evidence-based curriculum model	In this model, research data are used to drive the implementation of the curriculum. Learning experiences are designed to support evidence-based practice, provide a multidisciplinary approach to care, provide expertise in specialty roles, and support student clinical competency. More information on this model can be obtained at www.nln.org or www.ncsbn.org.
Competency- or outcomes-based model	Often referred to as Quality and Safety Education for Nurses (QSEN), this model was developed to provide nursing faculty with strategies to integrate quality and safety into nursing curricula. The six competencies are patient-centered care, teamwork and collaboration, evidence-based practice, quality improvement, safety, and informatics (QSEN, 2013). The scope of the curriculum focuses on the knowledge, skills, and abilities (KSAs) that embody professional nursing practice. More information can be obtained by going to www.qsen.org.
Concept-based curriculum model	Students are taught from a series of chosen concepts that are linked to evidence-based exemplars. Concepts may be chosen across the lifespan, across the environment, or along the health–illness continuum (Ebner & Hubbard, 2010).
Curriculum mapping	This design offers a framework of teaching that provides transparency into all aspects of the curriculum. In this style of delivery, teachers' work can be tracked and students have access to the entire scope of the curriculum. Most importantly, the curriculum is aligned to the program objectives in such a way that gaps in teaching can easily be identified and remedied.

be learned to meet the course outcomes as well as what will be evaluated. Faculty are required to revisit the objectives regularly as they give assignments and perform evaluation/testing. A frequent question one should ask is, "Have I provided students with enough or the right information so they can meet the stated objectives of the course?" The following is an example of a course objective with accompanying assignment:

> Analyze a variety of approaches to curriculum development using current evidence. **Assignment:** Participate in weekly discussions and analysis of relevant educational advancement and research.

The **course content** to be covered is included in the syllabus. There should be dates and timelines showing when each set of content will be covered. Content may include readings from assigned texts or other material, web searches, and independent reading assignments. Reading material may be listed as required or as recommended. Required content should relate directly to the course objectives. Recommended content may be indirectly related to the objectives but provides extra information to broaden the student's knowledge base. Content should be chosen for its relevance to the course, currency, accuracy, and overall global appeal. Assignments should assist students in meeting course outcomes.

Implementing the Curriculum Through Specific Course Syllabi

Courses that make up the curriculum are delivered via individual syllabi. The **syllabus** is essentially the working paper for each course and is a reflection of the overall program curriculum. The syllabus contains goals and objectives, expected outcomes and evaluative measures, reading requirements, a weekly content outline, and policies specific to that particular course. (See **Table 3-4** for a sample syllabus outline.) General policies are usually relegated to the student handbook. Specific policies may include those on plagiarism, class participation, class behavior, and students having special needs. At the beginning of the semester, students and faculty discuss the content of the syllabus, and the overall expectations of the course are outlined. Students are informed of the methods that will be used to perform not only the students' formative evaluations, but also their summative evaluations of the course. Once the syllabus has been reviewed and presented to the class, it is important to avoid making any changes unless they are fully presented and agreed upon by the class. If changes have to be made, they should not affect students' grades for the worse.

PROGRAM DELIVERY FORMAT

The format in which the program is to be delivered is also of utmost importance. The method of presentation will influence the teaching/learning approach. The teaching/

TABLE 3-4 Sample Syllabus Outline: Bachelor of Science in Nursing

COURSE SYLLABUS	
Course Number:	NURS3102
Course Title:	Fundamentals of Nursing Research
Course Credit:	3 credits
Course Level:	Third Year
Prerequisite Courses:	Theoretical Basis of Nursing
	Statistics for Social Sciences
Faculty:	Faculty name
	Office phone:
	Web-enhanced class
Office Hours:	Mondays & Wednesdays 2–4 PM
Contact Hours:	14 weeks of lecture
Course Description:	
Course Goals:	
Course Objectives: *Linked to constructs*	
Teaching Methods: *Mode of delivery*	
Evaluation Methods: *How objectives will be measured*	
Required Text(s): *Primary text*	
Recommended Text(s):	
Course Requirements:	
Course Grades:	
Course Policies: *May include student expectations, academic misconduct, tardiness, or ethics*	

learning environment plays a major part in the learning process and should never be overlooked, whether it involves teaching face to face (F2F) in a single classroom, online, in a community, or to society in general.

Delivery formats may include the traditional face-to-face meeting in a classroom; a partially web-enhanced format, called hybrid; or totally online. The mode of delivery may impact to some degree the level of interaction; however, the basic content should be designed so that the educational goals can be fully achieved.

Traditional Delivery

Despite discussions to the contrary, the traditional face-to-face classroom delivery method is still very attractive to many students, especially those who may not be self-disciplined or self-motivated to do the work on their own time. According to

Petrina (1998), this type of curriculum delivery mode may be carried out in a transmissive, transactive, or transformative manner. In the transmissive orientation, information is passed from teacher to student. In the transactive method, information is discussed and negotiated between teacher and student. In the transformative method, the teacher provides content and acts more as a coach and guide for students as they decipher and learn. Flipping the classroom, discussed in Chapter 4, is one way to deliver the curriculum in a transactive manner.

Online Delivery

For returning students with multiple and sometimes competing life activities, an online design may be very attractive. This method of delivery allows students to participate in their education on their own time. Students register for courses and are oriented to an electronic platform through which the course is being delivered. A program of study is designed that allows students to participate at their own pace. There are pros and cons to this delivery method, as discussed in Chapter 4.

Hybrid Delivery

Even more appealing to some students are the web-enhanced methods of delivery. In this design, students attend face-to-face meetings at predetermined times during the semester and carry out the rest of the class via online assignments and discussions. These methods and designs will be discussed in detail in Chapter 4.

The discipline of nursing requires some form of student clinical experience to be included and accounted for in the curriculum. Students may be assigned clinical instructors to attend clinical sites, which may be supplemented with experiences of laboratory simulations. Laboratory simulations have come into favor over the last decade and are currently being used in most nursing school programs. Simulation pros and con are discussed further in Chapter 12.

INTERNAL AND EXTERNAL FACTORS AFFECTING CURRICULUM DEVELOPMENT

Designing and redesigning curricula seems to be a constant in the life of faculty. Historically, curricula have been changed and redesigned based on societal needs, political involvement, industrial and economic needs, and changing demographics. One point is constant: Curricula are not static, but rather must adjust to and be reflective of changing needs. Additionally, curricula do not undergo rapid changes; therefore, implementation must be carefully developed to ensure that all aspects of need, content, and learning outcomes have been considered.

A recent example of the need for curricular change has been the rapid and exponential growth of technology and the need to integrate technology into the curriculum. Another current reason for redesigning the curriculum, according to Keating (2010), is healthcare reform legislation, such as the Patient Protection and Affordable Care Act. Accreditation of programs by national organizations also places great responsibility on institutions to design and redesign programs that are current and flexible.

Despite the fact that nurse educators are usually held accountable for developing the curriculum, their efforts are not carried out independent of important internal and external influences. When planning to develop a new curriculum or to restructure an existing one, it is important to collaborate with stakeholders including faculty, students, administration, and consumers in the local community.

Table 3-5 summarizes the three types of factors that exert the greatest influence on curricular changes: internal, external, and organizational influences.

Internal influences on curriculum development include the mission and vision of the parent organization, the school philosophy, the quality of the program, the qualifications of the educators, the organizational management (such as directors, CEOs, presidents, and provosts), and students. Curricula are developed to reflect the college or university's mission; for example, a college that serves a small community may develop programs that will graduate students with skills that are needed in the community and would attract students from the community who want to obtain these skills. A large state college or university, in contrast, would likely develop multiple programs within the school to attract a wider, more global audience. Required faculty educational backgrounds also differ from school to school and from program to program.

TABLE 3-5 Factors Influencing Curriculum Development

Internal Factors	External Factors	Organizational Factors
Quality of faculty	Society	Organization mission
Academic discipline	Politics	Student demands
Students	Government	Resources
Program mission/vision	Stakeholders	Academic plan
Program resources	Professional associations	Leadership goals
Diversity of population	Employers	Structural availability
Quality of program	Alumni	
	Technology	
	Accrediting agencies	
	NCLEX pass rate	
	Globalization	

An aspiring educator with an MSN degree may be able to secure employment on the nursing faculty in a community college. In most cases, however, you would need to have a doctoral degree to teach at the BSN level, and definitely at the master's level in most schools. If your highest educational level is an MSN, you should continue your education so you will be prepared to teach at a higher level. If you want to carry out educational research, you will need to be doctorally prepared and should seek employment in organizations that are research focused.

Other internal forces may be related to the increased **diversity** of the population and changes in the demographics of healthcare providers. There is no doubt that over the past several years the population has become more diverse in terms of ethnicity, disability, and many other factors. Not only is the general population more diverse, but also nursing faculty and students. Nursing programs are currently developing more flexible curricula to address these rapid changes. It is important that nurses become well equipped to address the needs of the changing population. Changes in societal behavior such as increased violence in schools, increasing bioterrorism, technological advancements, new diseases such as human immunodeficiency virus (HIV) and Ebola virus, and the increasing incidence of malaria in the United States are just a few of the issues that faculty need to take into consideration when redesigning the curriculum. As previously mentioned, nurses themselves also reflect the changing population, and as such curricula must adjust to their demographics. McGuire and Scott (2006) sum up the need for addressing diversity in educational curricula by stating that an instructional paradigm shift is forcing instructional access to change from accommodation to full inclusion.

Whereas **internal influences** are linked to the needs and expectations of the faculty, administrators, students' characteristics, academic discipline, types of programs, and the resources needed to run those programs, **external forces** include the community's needs, government involvement, changing societal needs, and the need to take progress into account, such as implementing technology into programs.

To a new faculty member, it may seem farfetched that politics should have much influence on the development of a nursing program's curriculum; however, politics often exerts a major influence because the political machine is often responsible for funding schools' buildings, resources, and human resources. Along with political influences, external forces often involve stakeholders who demand that colleges prepare students to meet industry needs. Currently there is a great demand for experts in the technology and business fields. It is likely that stakeholders have begun demanding that curricula be developed to address these needs. Nurses must be adept at working in a technology-rich environment, be prepared to work in the community, and be ready to work with the aged and diverse populations. Despite the popular belief that external forces more strongly influence vocational than traditional curricula, more recently traditional curricula have come under scrutiny and under the influence of stakeholders outside of the organization.

Organizational influences on curriculum development include administrative goals and objectives, the academic plan, students' demands, structural availability, and resources. Often the curriculum will be expanded or shrunk to accommodate programs. An example of this is what is currently occurring in the nursing field: Owing to the shortage of nursing faculty, many nursing programs have decreased their student nurse enrollment due to insufficient numbers of instructors. Sometimes organizational influences may even be linked to the head administrator's personal trajectory or to the unavailability of adequate physical structures and other resources to accommodate large numbers of students.

CHALLENGES IN CURRICULUM DEVELOPMENT

Curriculum restructuring may sometimes be related to other interorganizational processes, such as long delays in obtaining committee approvals for curriculum changes due to a large amount of hierarchical bureaucracy. Accrediting organizations also set standards that influence the way the curriculum is implemented. Some of these standards bring about barriers, as noted in Keating (2010). These barriers may include accreditation standard requirements, state laws and regulations, and state-by-state approval of programs, which dictate institutional eligibility to receive financial aid.

A common phrase you may often hear is "Faculty own the curriculum." This may be true to a point, because faculty are indeed accountable for assessing, planning, implementing, and evaluating the curriculum. Faculty are challenged to properly develop a curriculum that is relevant so that students will be able to reach their academic goals. They must design flexible curricula that deliver the best educational opportunities for their students. Another important challenge lies in the fact that institutions are constantly changing and redefining themselves to keep up with healthcare trends and demands. The healthcare environments have become more diversified, with care now being delivered in ambulatory care settings and even in supermarkets. Healthcare costs have increased, and alternative approaches to delivery of care are no longer uncommon. The nursing curriculum must not only reflect these changes, but also be innovative and creative as well as appropriate to meet accreditation standards. Faculty are constantly trying to make the curriculum attractive, and nursing schools are always making changes to attract potential students. These changes sometimes focus on altering the number of credits in the program, redistributing course grade requirements, and designing curricula that are more flexible and student friendly.

In the face of the recent technology explosion, faculty are challenged to make the curriculum more interactive and less boring. Students have as much access to new and current information as faculty; therefore, faculty must sharpen their creative skills as they guide students to fulfill course requirements and meet their goals.

Iwasiw et al. (2014) sum up the issue well by stating, "Curriculum development in nursing education is a scholarly and creative process intended to produce an evidence-informed, context-relevant, unified nursing curriculum." The curriculum must be relevant, flexible, accommodating of diversity, innovative, creative, and technology infused. Organizing a curriculum not only requires faculty, evaluations, ongoing appraisals, and implementations, but also experts, community, and evidence-based practice—and the end result must align with the parent institution's framework (Keating, 2011).

Evaluation is one of the most important aspects of a curriculum. Several aspects of the curriculum must be considered. The goal must be appropriate to the program, the objectives must address the needs of the goal, and the assignments must be congruent with the objectives. Most importantly, the content must be delivered in such a way as to provide students with adequate information so that they are able to meet the expected outcomes of the program. Evaluations are done formatively and summatively. Chapter 6 focuses on curriculum evaluation, including sample tools and directions regarding evaluation techniques. Chapter 6 explores program evaluation, peer evaluation, and student evaluation.

CASE STUDY

As a nurse about to embark on a teaching career, you are currently interviewing at several schools of nursing, but you are unsure as to which questions you should ask. Having discussed this with several experienced educators, you decide to start by researching the schools to obtain a clear picture of what is involved in their program curricula, what makes up the curricula, what some challenges are at each school, and what the schools' expectations are. You decide to ask questions about the roles and responsibilities you will have to take on regarding developing the curriculum. You also have an interest in who should be responsible for developing the curriculum. You are concerned about how curriculum outcomes will be measured.

DISCUSSION QUESTIONS

1. What are some factors to consider when choosing a specific program curriculum?
2. Discuss specific issues to be taken into consideration when developing curricular frameworks.
3. Describe the main components of an official program guide.
4. List some internal factors that affect the development of a curriculum.

5. List some external factors that affect the development of a curriculum.
6. To what extent will the increased use of technology impact the development of the curriculum?
7. Explain why regulatory bodies have a great deal of influence on the development of the curriculum.
8. Discuss some crucial factors that should dictate changes and adjustments made to a curriculum.
9. Describe common strategies that faculty use to promote critical thinking in their students.
10. To what extent should faculty involve students in curriculum development?

REFERENCES

Dillon, J. T. (2009). The questions of curriculum. *Journal of Curriculum Studies, 41*(3), 343–359. doi:10.1080/00220270802433261. Retrieved from http://web.ebscohost.com/ehost/pdfviewer/pdfviewer?sid=deb50a82-6827-4cb3-8961-80f132569edb%40sessionmgr110&vid=1&hid=108

Ebner, M. K., & Hubbard, A. (2010). Concept-based learning. Community College Baccalaureate Association. Retrieved from http://www.accbd.org/wp-content/uploads/2010/08/Concept-Based-Learning-by-M.-Kathleen-Ebener-PhD-RN-and-Ann-Hubbard-Ed.D.-CNE.pdf

Fawcett, J. (1995). *Analysis and evaluation of contemporary nursing knowledge: Nursing models and theory*. Philadelphia, PA: FA Davis.

Iwasiw, C., Goldenberg, D., & Andrusyszyn, M. (2014). *Curriculum development in nursing education.* Burlington, MA: Jones & Bartlett Learning.

Keating, S. (2010). *Curriculum development and evaluation in nursing*. New York, NY: Springer.

Keating, S. (2011). *Curriculum development and evaluation in nursing* (2nd ed.). New York, NY: Springer.

McGuire, J. M., & Scott, S. S. (2006). Universal design for instruction: Extending the universal design paradigm to college instruction. *Journal of Postsecondary Education and Disability, 19*(2), 124–134.

Oregon Consortium for Nursing Education. (2013). OCNE: Curriculum. Retrieved from http://www.ocne.org/students/Curriculum.html

Petrina, S. (1998). Chapter 9: Curriculum and instructional design. Retrieved from http://www.uwplatt.edu/~steck/Petrina%20Text/Chapter%209.pdf

QSEN Institute. (2013). Competencies. Retrieved from http://qsen.org/competencies

Ramapo College of New Jersey-Nursing Programs. Constructs with course objectives and assignments

APPENDIX 3-A

Bachelor of Science in Nursing Course Outline

Course	Course Credits	Theory/ Lecture Credits	Clinical/Lab Credits
GENERAL EDUCATION COURSES			
Anatomy and Physiology I	3	4	2
Anatomy and Physiology II	3	4	2
Microbiology I	3	2	1
Nutrition	3		
Microbiology II	3	2	1
Inorganic Chemistry	3	2	1
Statistics	3		
English II	3		
Psychology I	3		
Sociology	3		
Psychology II	3		
Intermediate Algebra	3		
Technology in Health Sciences	3		
ELECTIVE COURSES			
Modern American Literature	4		
History of Music or History of Art	3		
Cultural Diversity	3		
English or Spanish or French Studies	3		
TOTAL GEN. ED. CREDITS	**52**		
MAJOR NURSING COURSES			
Fundamentals of Nursing	5	3	2
Medical–Surgical Nursing I	7	4	3

Family Health Nursing	7	4	3
Psychiatric/Mental Health Nursing	5	3	2
Advanced Care Nursing	7	4	3
Acute Care	7	4	3
Chronic Care	7	4	3
Caring for the Community	7	4	3
Nursing Research I	3		
Historical Perspectives	3		
Pharmacology in Nursing	3		
Ethical and Legal Issues in Nursing	3		
Leadership and Trends in Nursing	3		
Transcultural Nursing or Holistic Nursing	3		
Transition to Professional Nursing Practice	3	1	2
TOTAL NURSING CREDITS	**73**		
SCHEDULE OF COURSES (FULL-TIME STUDENT}			
FIRST YEAR (FALL SEMESTER)			
	Course Credits	**Theory/Lecture**	**Clinical/Lab**
Fundamentals of Nursing I	5	3	2
Psychology I	3		
Anatomy and Physiology I	4	3	1
Nutrition	3		
English	3		
TOTAL CREDITS	**18**		
FIRST YEAR (SPRING SEMESTER)			
Medical–Surgical Nursing	5	3	2
Pharmacology	3		
Microbiology	3	2	1
Anatomy and Physiology II	3	2	1

Technology in Health Care	3		
TOTAL CREDITS	**17**		
SECOND YEAR (FALL SEMESTER)			
Psychiatric/Mental Health Nursing	5	3	2
Chemistry I	3	2	1
Sociology I	3		
Psychology II	3		
Historical Perspectives	3		
TOTAL CREDITS	**17**		
SECOND YEAR (SPRING SEMESTER)			
Maternal–Child Health Nursing	7	4	3
Organic Chemistry	3	2	1
Intermediate Algebra	3		
Elective (1)	3		
TOTAL CREDITS	**16**		
THIRD YEAR (FALL SEMESTER)			
Nursing Care of the Individual	7	4	3
Statistics for Social Sciences	3		
Transcultural Nursing or Holistic Nursing	3		
Elective (2)	3		
TOTAL CREDITS	**16**		
THIRD YEAR (SPRING SEMESTER)			
Family Centered Nursing	7	4	3
Nursing Research I	3		
Elective (3)	3		
TOTAL CREDITS	**13**		
FOURTH YEAR (FALL SEMESTER)			
Caring for the Community	7	4	3
Ethical and Legal Issues in Nursing	3		
Elective (4)	3		
TOTAL CREDITS	**13**		

FOURTH YEAR (SPRING SEMESTER)			
Critical Care Nursing	7	4	3
Transition to Professional Nursing Practice	3	1	2
Advanced Leadership in Nursing	3		
TOTAL CREDITS	**13**		
Total Credits for the Program	**126**		

APPENDIX 3-B

Leveling the Constructs

Constructs: Program Outcomes	Level I	Level II	Level III	Level IV
Knowledge: Apply knowledge gained in the primary sciences courses to support nursing practice.	Demonstrate understanding of lifespan development.	Integrate pharmacological, biological, and pathophysiological aspects of health and illness in caring for families.	Implement pharmacological and pathophysiological concepts in managing health and illness in groups.	Synthesize the impact of environmental and biophysical factors on the care of client aggregates/communities.
Scientific research: Articulate identified problems in health care that lend themselves to clinical research.	Relate *Healthy People 2020* and current healthcare research to health promotion.	Identify current research findings that provide rationales for family-centered care.	Discuss current research findings that provide rationales for all levels of care.	Articulate identified problems in health care that lend themselves to clinical research. Develop research proposals.
Information management: Use information and communication technologies to enter, retrieve, and manipulate data for the delivery of health care.	Collect individual patient-specific healthcare information.	Analyze appropriate data to inform specific healthcare delivery.	Utilize appropriate data to plan care for all levels of clients.	Expand complex skills in retrieving and cross-checking healthcare data of aggregates/communities. Utilize findings to plan, implement, and evaluate care.