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DESIGNING AND TEACHING ONLINE COURSES IN NURSING



SALLY KENNEDY

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Designing and Teaching Online Courses in Nursing

Sally Kennedy, PhD, APRN, FNP, CNE, is a semi-retired lifelong learner who is committed to reforming online education. She recently retired as an assistant professor to pursue consulting and writing. Dr. Kennedy has been a nurse for more than 40 years, with most of her career spent in clinical practice as a nurse practitioner. When she began teaching nurse practitioner students 20 years ago, she became enthralled with teaching methods and subsequently pursued a doctorate in online education with a specialization in online instructional design. Along the way, Dr. Kennedy was introduced to problem-based learning (PBL), realized its potential for clinical nursing education, and subsequently led faculty in the transition from a master's-level, classroom-based PBL curriculum to an online program, which *U.S. News & World Report* recognized as number one among online graduate nursing programs.

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Sally Kennedy, PhD, APRN, FNP, CNE



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*For my husband,
Milt Dodge*

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Contents

Preface ix

Acknowledgments xiii

Share Designing and Teaching Online Courses in Nursing

1. Our Learners and How They Learn 1
2. Concepts and Theories to Support Teaching and Learning 27
3. Backward Design and Elements of Course Design 41
4. Writing Behavioral Objectives 67
5. Rethinking Teaching and Assessments 101
6. Case-Based Authentic Teaching and Assessment 125
7. Writing Engaging Discussion Questions 157
8. Effective Online Testing With Multiple-Choice Questions 181
9. Grading and the Rubric 199
10. Presence in an Online Course 225
11. Facilitation Strategies and Pearls 241
12. Online Interface Design and Course Management 265
13. Tips for Converting a Classroom-Based Course to the Online Environment 277

Appendix: Curriculum Design Templates 285

Index 299

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Preface

It is hard to believe that the call to reform nursing education came more than 5 years ago with the publication of *Educating Nurses: A Call for Radical Transformation* (Benner, Sutphen, Leonard, & Day, 1984/2010). However, as is true to my experience in the profession and the past 50 years of nursing history, we are not a group of early adopters. Yet, today, online education is upon us as evidenced by the rise in popularity of online RN to bachelor of science in nursing (BSN), master's, doctor of nursing practice (DNP), and PhD programs. Driven by economic issues, the nursing shortage, adult learners with responsibilities beyond their careers, and technology, more and more nursing educators—like it or not—are faced with teaching online.

As with teaching in the classroom, the assumption has been that teaching online will just come naturally. After all, most of our current nursing educators learned to teach by the apprenticeship method; they learned from a seasoned educator. This has worked for decades, but the philosophy of teaching and the educational theories that support it have changed—or, more accurately, we are now becoming aware of and working to implement these changes. Although lecturing has been the teaching method used for decades, we can no longer ignore constructivism, social constructivism, and findings from cognitive psychology research that have recently been translated and made understandable for the average educator (Brown, Roediger, & McDaniel, 2014; Miller, 2014).

Online education has made it possible not only to operationalize a constructivist learning environment, but also to create learning opportunities that recognize and build upon the knowledge and skills the adult learner brings to it. However, most nursing educators must rely on their commitment to lifelong learning to become proficient with strategies available for teaching online. If they are fortunate, they can learn from a seasoned online educator. The apprenticeship method remains alive and well.

In this how-to book, I have outlined the steps I see as necessary to accomplish the call to transform nursing education, specifically, contextualizing knowledge and understandings (knowing *that*) with knowing *how*, *when*, and *why* to mimic the complexities of nursing practice, be that from a clinical, research, administrative, or educational perspective. As a result of their education, students must be able to employ multiple ways of thinking consistent with their new role, extract salient information in changing and unstable situations, and develop an evidence-based plan and see it through. We must not only teach the knowledge, skills, and attitudes necessary to accomplish this, but also help students gain the ability to use these tools in flexible ways.

This transformation will require more than simply replacing the lecture with online discussions. It will involve rethinking how we teach, moving away from a content-focused, teacher-driven perspective to one that is outcome focused and learning driven. The process must begin by changing how objectives are written and how we view teaching and assessing. Not-so-recent research from cognitive psychology can guide us, and you might be surprised how.

In writing this book I have drawn from my experience working as an instructional designer teaching faculty how to teach online. Most of these educators had little theoretical background in educational theories, models, and concepts and lacked a solid understanding of how to operationalize these online. Research from cognitive psychology has been difficult to interpret, and then translate into effective teaching strategies, until recently with the understandable synthesis of research published by Brown, Roediger, and McDaniel (2014) and the practical application to teaching for higher education found in the work of Miller (2014).

In Chapters 1 and 2 of this book, my goal was to start with an even playing field by discussing what I consider foundational theories and concepts related to who our learners are and how they learn, introducing how research from cognitive science can help us create opportunities for deep, long-term learning. The testing effect, spaced study, and “interleaving” may be new concepts for many, but what they can teach us about how people learn will amaze you.

When planning an online course, backward is best. By that I mean using the process of Backward Design (Wiggins & McTighe, 2005) to design your online course, *starting* with outcomes instead of *covering* content. This approach maintains your focus on learning, not teaching, and puts assessment in a prominent place that shares its position with teaching methods, as the two cannot be separated when teaching online. More on that appears in Chapter 3, where you will also find some very practical information on the elements of online course design and how workload impacts that.

Although writing behavioral objectives for your course may seem like old news, we must approach them differently if we are to transform nursing

education. As Chapter 4 reminds us, objectives drive what is taught and learned, so only by communicating the desired learning outcome of integrated performance will that be realized.

Teaching and assessment are one activity when teaching online; they are not separate activities and cannot be considered as two unrelated processes. This is an important concept to grasp, especially if you are a seasoned classroom instructor accustomed to creating separate assessments that add to your workload. Chapter 5 explores how this interconnected approach works. Online small group discussions serve as both formative and summative assessment; these discussions are engaging for students as they wrestle with complex questions and real-life case studies that have them thinking like a nurse practitioner, administrator, researcher, or educator—whichever role they aspire to. Creating engaging discussion questions and case studies is your job, which is so vital to teaching online that I devoted two chapters to these topics (see Chapters 6 and 7). Chapter 8 details methods for effective online testing using multiple-choice questions, which take advantage of the testing effect, creating additional opportunities for teaching and learning.

Grading is an important function that drives learning and deserves some attention, as I think we have lost our way to some degree when assessing what constitutes academic achievement. Rubrics have replaced other grading strategies, but not all meet the expectation of greater objectivity in grading, which is their initial intent. Chapter 9 is presented to reorient educators to the value and intent of this grading tool by reiterating the three components that define a rubric. Included in this chapter are step-by-step instructions on how to create a rubric in Excel, add formulas to compute a grade, and save grading time.

A hot topic in online education that relates to workload is the expectation of faculty presence in an online course from both faculty's and the student's perspective. This topic is explored in Chapter 10. What is currently recommended may shock you, but if my recommendations throughout the book are followed when designing your online course, daily presence is not so daunting. To help you be present in your course, meet students' expectations, yet not become the center of the discussion, facilitation strategies, as described in Chapter 11, provide some useful tools.

For many faculty, technology adds an often unwanted challenge when starting to teach online. Learning management systems (LMSs) that house online courses have similar functionality, so if you learn one, learning the next is not as difficult. In Chapter 12, I provide tips on interface design that will help you create a user-friendly course with consistent navigation so students can focus on learning and not spend hours trying to find information.

Converting a classroom-based course to the online environment can be a time-consuming task when you do not have some guidance as to where to start. Online education is more than uploading your classroom lectures

into the LMS. Lengthy lectures, particularly those that reiterate the assigned readings, simply have no place online. However, they can be useful in planning learning activities and assessments. In Chapter 13, I provide a step-wise approach with some additional tips on converting a classroom course to the online environment, based on many concepts discussed in earlier chapters in the book.

This book differs from most others related to teaching online because it takes a how-to approach with the dual goals of answering the call to transform nursing education and benefiting from research in cognitive psychology. Each chapter includes relevant concepts, theories, and models to guide course design and teaching online, as well as practical tips and pearls. Included in the Appendix are templates that provide a means of organizing your thoughts as you design your online course or convert a classroom course to the online environment. Reviewing these templates in the Appendix will give you a better idea of what I am referring to in the text of the various chapters. **So that you do not have to re-create the wheel, these templates are also available for download in Word format (.docx) from the Springer Publishing Company website at www.springerpub.com/kennedy. They can be used “as is” or customized to meet your needs. Also available online is an example of a rubric in Excel, and a one-page tutorial on how to use this.**

In addition, this book is written informally, moving away from the impersonal third person typically found in nursing texts. I wanted this to be more of a conversation with the readers, indicating that we are in this together. I have attempted to learn from cognitive psychology, taking advantage of spaced education and the interleaving technique that you will read about in Chapter 2 by repeating important concepts and adding to them in the process. So, you will notice some repetition, which was done by design.

Sally Kennedy

REFERENCES

- Benner, P., Sutphen, M., Leonard, V., & Day, L. (1984/2010). *Educating nurses: A call for radical transformation* [Commemorative ed.]. San Francisco, CA: Jossey-Bass.
- Brown, P. C., Roediger, H. L., III, & McDaniel, M. A. (2014). *Make it stick: The science of successful learning*. Cambridge, MA: Belknap Press.
- Miller, M. D. (2014). *Minds online: Teaching effectively with technology*. Cambridge, MA: Harvard University Press.
- Wiggins, G., & McTighe, J. (2005). *Understanding by design* (2nd ed.). Alexandria, VA: Association for Supervision and Curriculum Development.

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Designing and Teaching Online Courses in Nursing



3

Backward Design and Elements of Course Design

Prior to teaching a course for the first time, faculty have decisions to make. These decisions include identifying learning outcomes, determining what content should be taught and how it should be organized and assessed, and choosing a textbook or other reading material. The order in which these decisions are made can have an impact on students' meeting the learning outcomes. This chapter describes the Backward Design process (Wiggins & McTighe, 2005) and how it has been reconceptualized for teaching online. This outcome-focused process is effective not only when planning assessments and teaching methods for an online course, but also for drilling down to the individual assignments.

Also included in this chapter is an explanation of workload for both students and faculty and how it impacts course design choices. The various elements of course design are explored, including authentic teaching and assessment options, and the use of quizzes as formative assessment.

APPROACHES TO COURSE DESIGN

When developing a course for the first time, several approaches to course development and design can be employed. Richards (2013) referred to these various methods as forward, central, and backward design, as they each relate to the starting point for course development. *Forward design* starts with identifying content. *Central design* focuses on the process of teaching (teaching methods). *Backward Design* begins with the learning outcomes.

In forward design, the method commonly employed in nursing, course development focuses on content. A textbook is chosen, the reading assignments are uniformly divided over the semester, teaching methods are considered, and types of assessments are identified (Richards, 2013). This

method clearly focuses on teaching—what faculty will do—not on what students will learn.

Central course design begins with decisions related to what teaching methods will be employed. Although this method is not commonly used in higher education, given the growing popularity of online education where teaching methods are different from the classroom approach, knowing the mode of course delivery up front is important. Central course design may be more prevalent in K–12 classroom-based courses, where planning what the students will *do* during classes that span an hour to many hours is very important to the teacher. This method does focus on learning to some extent if the active process of coconstruction of knowledge—where students work together to help each other learn—is operationalized (Richards, 2013). However, when the focus is filling the day, the result can be what Wiggins and McTighe (2005) referred to as “hands on without being minds on” (p. 16), a very descriptive phrase that indicates one of the “twin sins” (p. 16) of instructional design. If constructivism is not the prevailing theory upon which building a course using this method is based, the danger is that activities will be planned to keep students busy without thought to the value for learning, a true definition of busywork. Even though processes or teaching methods are important to developing online courses and must be considered, they are not the best starting point for course development.

BACKWARD DESIGN PROCESS

Backward Design is an outcome-focused method for course creation or planning that is similar to purposeful task analysis (Wiggins & McTighe, 2005) and is useful at the course, curriculum, or program level. The basic premise is to teach for understanding, and that can occur only when the learning outcomes are clearly understood by faculty prior to developing any other aspect of the course. Here the authors use the term *understanding* in a way that is more inclusive than Bloom’s second level of the cognitive domain. To Wiggins and McTighe, understanding means:

to make connections and bind together our knowledge into something that makes sense of things (whereas without understanding we might see only unclear, isolated, or unhelpful facts). But the word also implies doing, not just a mental act: A performance ability lies at the heart of understanding. (p. 7)

Further discussion on what it means to understand is in order as understanding is the goal of teaching. Wiggins and McTighe (2005) have identified six “facets of understanding,” which are listed in Box 3.1.

BOX 3.1

SIX FACETS OF UNDERSTANDING

- *Explanation* or *making sense of* content by telling (verbally or in writing) the how, what, where, and why of events, data, observation, and so on, and coming up with a solid explanation as to why it is supported by evidence. Another way to look at this explanation is having students *show their work*.
- *Interpretation* is the facet where the questions of *What does it mean to me?* and *So what?* are internalized and personalized. Students develop their own *story* as they wrestle with the content. This facet is where learning meets experience and results in ownership of a perspective.
- *Application* implies transfer, such as using knowledge and skills in different and perhaps new situations.
- *Perspective* requires the ability to *not* take what is known or taught at face value regardless of the source. It requires a certain amount of inquisitiveness, objectivity, and dispassionate curiosity, which allows logic to flow. It is the ability to step back and question to arrive independently at one's own view.
- *Empathy* is about appreciating diversity or what it is like to walk in another's shoes. It can be considered somewhat of a polar opposite from the facet of *perspective*, which requires distancing oneself to take an objective view. Empathy requires that the student set aside assumptions, beliefs, prejudices, pat responses, and knee-jerk reactions to understand others from their perspective. Empathy is closely related to insight, which perhaps can be thought of as the end game of being empathetic, that of gaining insight.
- *Self-knowledge* focuses on self-assessment fueled by metacognition and reflection, two constructs discussed in detail in Chapter 1.

For the practice of nursing, a balance must be struck between the facets of *perspective* and *empathy*. Benner, Sutphen, Leonard, and Day (1984/2010) label this as *boundary work* and note:

In learning boundaries with patients, students learn not to merge with the patient's plight or pain or overidentify with the patient. They must also learn not to be too objective, too distant, but to be sufficiently open to the patient's experience to understand the patient's concerns and be of help. (p. 185)

To summarize in a few simple words without any intent to do injustice to its complex meaning, to understand is to *get it*. Educators intuitively

understand this notion, yet it is difficult to define objectively and even more difficult to assess unless outcomes are clearly specified. The key, however, is to find teaching methods that promote understanding, and not simply convey the teacher's understanding, which results in memorization by the student, a common occurrence when lecture is used as the main teaching strategy (see Chapter 5 for an elaboration of this statement).

STAGES OF BACKWARD DESIGN

The Backward Design process of course design includes three sequential stages that must be aligned (Wiggins & McTighe, 2005):

1. Identify desired learning outcomes (understandings, goals, and objectives)
2. Determine evidence to demonstrate these outcomes have been met (assessments)
3. Choose learning experiences and teaching methods

Stage One

The first stage—that of determining outcomes—is more than writing behavioral objectives to indicate the learning that should occur. Fundamentally, this stage involves faculty understanding how the course being developed fits into the curriculum for the program. In other words, understanding what knowledge, skills, and attitudes students must take away from your course because content that will not be taught anywhere else must be carefully explored. This content may be *applied* in other courses, but knowing what content is unique to your course and on what level it should be taught is essential.

For example, students learn about lung function in a prerequisite anatomy and physiology course. When developing the content to accompany a clinical course, students will need to understand lung function *as it applies to* caring for a patient with chronic obstructive pulmonary disease. Thus, instead of revisiting basic lung function in detail, learning about the various methods of assessing pulmonary function would be more appropriate for a clinical course. In order for students to fully understand pulmonary function tests, they may need to revisit basic information that could be accomplished through independent study and not taught directly. So, faculty need the *big picture* of the curriculum in order to understand the contribution their course makes to the overall program. In addition,

content required by the accreditation and other regulatory bodies must be considered.

The first step of identifying outcomes is to become clear on the overarching goals of learning for the course. Details on the appropriate *format* for writing goals and objectives are discussed in Chapter 4. However, to gain clarity on the goals themselves, Wiggins and McTighe (2005) recommend a few *essential* questions faculty should ask themselves. These questions are as follows: What should students know, understand, and be able to do? What content is worthy of understanding? What *enduring* understandings are desired? (p. 17).

Although these questions will point faculty to important content, keep in mind that limitations exist in that not every aspect of the topic can be taught in one course, so reasonable priorities need to be set. To further assist you in identifying important content from all possible content, Wiggins and McTighe (2005) distinguish between “worth being familiar with,” “important to know,” and what they term “big ideas and core tasks” (p. 71). Content that is worth being familiar with and important to know is anchored by the big ideas and core tasks. Let us take a brief detour from Stage One to explore what is meant by these concepts.

Big Ideas

As defined by Wiggins and McTighe (2005), big ideas are the

core concepts, principles, theories, and processes that should serve as the focal point of instruction and assessment. By definition, big ideas are important and enduring. Big ideas are transferable beyond the scope of a particular module. . . . Big ideas are the building material of understandings. (pp. 338–339)

For example, diagnostic reasoning is at the core of advanced nursing practice, yet teaching the *theory* of hypothetico-deductive reasoning or pattern recognition with the goal of students subsequently being able to *apply* these theories may not yield the desired results. Diagnostic reasoning is a big idea that can be built into authentic teaching methods and assessments indirectly via the case study method. Another example of a big idea is that of using evidence to guide practice. This is a topic that may be essential content in a foundational graduate course for advanced practice nurses and a big idea in subsequent courses. Wiggins and McTighe refer to a big idea as the “linchpin” or “conceptual Velcro” (p. 66): ideas at the core of understanding that organize otherwise fragmented content and help students make sense of it.

Core Tasks

Core tasks are those skills that are essential for the role. When talking about skills in nursing, thoughts immediately migrate to clinical skills such as

starting an IV or assessing heart sounds. Those are skills in the narrow sense. Wiggins and McTighe (2005) describe skills as “performance demands” (p. 78), which broaden the construct to include the complex tasks nurses do, such as reviewing patient data, assessing the patient’s status, extracting the salient features, and then analyzing the results to arrive at a plan of action. Core tasks are essentially understandings-in-action.

A note of caution here. When thinking about big ideas and core tasks, one can quickly lose sight of the three steps of Backward Design, as this mental activity seems to be focused on identifying content. Keep in mind that the purpose of identifying these big ideas and core tasks is to develop a list of desired outcomes as part of the first step of the Backward Design process. The next step is to write broad goals for teaching that will become the foundation for developing learning outcomes for students, written in the form of behavioral objectives, which is discussed in Chapter 4. Suffice to say that identifying outcomes and subsequently either writing behavioral course objectives or reviewing those that were developed by the curriculum committee is the final part of Stage One.

Stage Two

Returning to the stages in the Backward Design process, the second stage of the process involves choosing the types of assessments that will determine whether the desired learning has occurred (Wiggins & McTighe, 2005). Placing this step before a decision is made on teaching methods may seem counterintuitive, but it really places the focus on assessing the learning outcomes (the objectives) instead of the minute aspects of content taught. Because the goal of teaching is for *understanding*, the facets of understanding should be revisited here as a guide as you work on Stage Two. Some of the assessments appropriate for teaching online are discussed later in this chapter under the Elements of Course Design section.

Stage Three

The third and final stage of the Backward Design process is to determine which teaching methods will promote learning at the *desired* level or the level indicated by the specific verbs that appear in the course objectives. By *learning at the appropriate level*, I am referring to the three taxonomies—cognitive, affective, and psychomotor—that describe levels of learning along a continuum. The types of assessments and teaching methods chosen must align with the level of verb in the objective. This alignment will be better understood after reading Chapter 4.

Questions suggested by Wiggins and McTighe (2005) that faculty can ask themselves in this stage are as follows:

1. What teaching methods will result in understanding?
2. What teaching materials and readings are needed to support learning for understanding?

Upon completion of these three steps, you are ready to write the objectives for the course and create the syllabus. When drilling down to the lesson level, it is helpful to repeat the steps of Backward Design to create the lessons or modules of the course to maintain your focus on learning outcomes.

Summary of Original Backward Design Process

To recap, the Backward Design process as conceived by Wiggins and McTighe (2005) is based on teaching for understanding and comprises three stages and action steps. They are summarized in Box 3.2.

BACKWARD DESIGN RECONCEPTUALIZED FOR ONLINE COURSES

The Backward Design process was originally conceived for use in classroom-based courses where summative assessment methods, or assessment of learning, and teaching methods were two discreet entities. However, in

BOX 3.2

SUMMARY OF THE ORIGINAL BACKWARD DESIGN PROCESS

1. Identify desired learning outcomes:
 - a. Write goals
 - b. Write or review behavioral objectives
2. Determine evidence to demonstrate meeting these outcomes:
 - a. Determine types of assessments that will indicate learning has occurred (summative assessment)
 - b. Determine opportunities for formative assessment
3. Choose learning experiences and teaching methods:
 - a. Match teaching methods with content considering the desired performance and level of learning required
 - b. Determine sequence of instruction and assessment

designing a course for the online environment, the distinction between teaching methods and assessments is blurred. In traditional classroom instruction in nursing, for example, midterm and final multiple-choice exams have been used to assess learning outcomes as summative assessments. Due to inherent difficulties, such as the potential for cheating in the online environment, in addition to the questionable value of this type of assessment to assess learning over all, the use of multiple-choice exams is changing. Frequent low-stakes quizzes are now often employed in the online environment as formative assessments and student self-assessment to promote learning from the readings and provide practice on certification exam-style questions. In addition, online group discussions provide opportunities for both formative and summative assessments. For now, it is important to begin to visualize how the indistinct line between teaching and assessment impacts online course development using the Backward Design process.

When developing an online course with the foundational underpinnings that include constructivism, social constructivism, and andragogy, all concepts discussed in Chapter 2 under the headings so named, small group discussions will most likely be the primary method of teaching, if not the teaching method of choice. Whenever student discussions are included, faculty facilitate the discussions, scaffold student learning, and provide feedback for individual students as well as on the group's overall progress toward meeting the learning outcomes. These activities, which are considered types of formative assessment, will result in reflection, potential revision of their position, and learning. Eventually, these discussions will be graded (summative assessment). Consequently, the choice of teaching methods must be considered *concurrently* with assessments. This approach compresses the second and third steps of the Backward Design process into one. The Backward Design process reconceptualized for creating online courses is summarized in Box 3.3.

The Backward Design process maintains initial focus on assessments to measure the outcomes indicated in the objectives, but also considers the

BOX 3.3

THE BACKWARD DESIGN PROCESS RECONCEPTUALIZED FOR ONLINE COURSE DESIGN

1. Identify desired learning outcomes
2. Determine methods of assessment that include opportunities for formative and summative assessments as well as methods of teaching

potential for doing double duty as teaching methods. This approach to course design eliminates the need to identify additional means of assessment in the form of assignments that could result in busywork for the students.

THE ONLINE COURSE SYLLABUS

The course syllabus is an important document that guides teaching, learning, and organization of the learning management system (LMS). When developing a syllabus, West and Shoemaker (2012) recommend that faculty consider what it is like to be an online student who must juggle multiple courses, work, and family life. These students are most likely millennials who, according to Wilson and Gerber (2008), seem to struggle in courses that lack structure, but a well-thought-out syllabus can provide this needed structure. If students are to be successful, self-directed learners, we must give them enough direction from the start in order to do so.

Purpose of a Syllabus

Course syllabi serve multiple purposes. Smith (2005) identified 51 competencies required for those who plan to teach online. Some of these competencies were related to the course syllabus and helped to define its purpose, such as clearly outlining course requirements, clear explanation of what the term *participation* means, and how points will be allocated. Matejka and Kurke (1994) mentioned that a syllabus functions as a contract, means of communication, a plan, and cognitive map. In addition, a syllabus serves faculty as a planning tool to organize thoughts and schedule events (teaching and assessment).

A syllabus serves a very important function for faculty in that it demonstrates evidence of application of appropriate pedagogy (assessment strategies and teaching methods) for promotion, tenure, and accreditation. A syllabus is a permanent record of what occurred in the course and an indication to various stakeholders whether the course was appropriately designed in order to support student learning. For this reason and others, faculty should keep copies (both electronic and hard copies) of every syllabus they create. Ideally, someone at the school should be in charge of collecting and archiving all syllabi.

Because faculty spend an undue amount of time organizing a syllabus prior to teaching an online course for the first time, they are intimately familiar with the course schedule by the time the course begins. Students, on the other hand, may take a cursory look at the syllabus before classes

begin and then set it aside, not fully internalizing its contents. At least that has been my experience, for multiple questions often arise 2 weeks into the course, the answers to which can be found in the syllabus. This can be frustrating for faculty, but should be kept in perspective. Strategies to avoid repeatedly having to remind students where to find information by answering multiple, individual e-mails are discussed in Chapter 12.

According to Slattery and Carlson (2005), students do rely on the syllabus in order to organize their time, especially if they are taking more than one course concurrently. Parkes and Harris (2002) provided a unique, *student-centered* perspective that is especially relevant for a constructivist paradigm.

A learning-centered syllabus will provide information about how to plan for the tasks and experiences of the semester, how to evaluate and monitor one's performance, and how to allocate time and resources to areas in which more learning is needed. (p. 58)

This is truly how faculty hope students will use a syllabus.

From my perspective, a syllabus is a means of communication among faculty, students, and other stakeholders; a road map; and a *contract* among the students, teaching faculty, and the school. To underscore its importance as a legally binding agreement, some schools require students to sign that they have read the syllabus and had all questions addressed (Matejka & Kurke, 1994). A syllabus has also been useful to settle disputes when students have challenged grades (Parkes & Harris, 2002; Slattery & Carlson, 2005). Matejka and Kurke noted that many student frustrations and problems that arose during a course could be traced to inadequacies in the course syllabus, or policies well stated in the syllabus that were not followed once the course was underway.

Another important use of the syllabus is as a basis for equivalence when a student requests to have a course from one institution transferred to another for credit. A syllabus contains not only the course description and objectives, but also an overview of the entire course design, including reading assignments and assessments (Parkes & Harris, 2002). A quick review of a syllabus from another school will indicate if the two courses are academically equivalent. Course faculty who are the content experts are often called upon to complete this review.

Organization of an Online Syllabus

West and Shoemaker (2012) stress the need to organize the syllabus well so students can find information. The ideal situation for a school or program

is to create a standardized syllabus format that faculty throughout the program or college will use. A template can be created in which certain fields can be altered by faculty to include their course-specific information, whereas those that are mandated by the school cannot be changed. When all syllabi contain the same headings, students can find information easily and appreciate the consistency.

A standardized syllabus will also partially assure that the overall look and feel is professional, but what faculty add requires careful attention. Parkes and Harris (2002) caution that: "A syllabus that is contradictory, sloppy, misleading, and incomplete models a lack of respect and of care which the students may well resent or even emulate" (p. 58). My perspective is that if we expect students' work to include proper grammar, punctuation, syntax, and American Psychological Association (APA) formatting, then what we produce should model this professional format and writing style. A hastily prepared syllabus that was copied from the previous time the course was taught requires special scrutiny to assure that all dates are correct, the textbook edition reflects the version being used, and the course description and objectives are current.

Organizing the information in a syllabus follows a logical progression. Exhibit 3.1 suggests the order and headings for a syllabus. Exhibit 3.2 depicts a Course Schedule in the syllabus that outlines how the dates and weeks are grouped in the course; educational topics, activities, and reading assignments; and the beginning and ending dates for discussions. A narrative at the top of Exhibits 3.2 and 3.3 provides additional information related to the content of the exhibit. Exhibit 3.3 demonstrates an Assessment Template in the syllabus that indicates the name of the assignments, dates they are due, the potential points for the assignment, and the actual points earned by the student. Note that midterm and final are not included in this grid. The reason for this will become evident in Chapter 8. Quizzes are, however, appropriate to help students learn course content, as formative assessments. If quizzes will be used in your course, they should be included in the Assessment Template.

EXHIBIT 3.1
Recommended Order of Information on the Syllabus

Heading	Content
Course title	Course-specific information—center course title and left justify the other headings
Course number	
Term and credit hours	
Prerequisites	

(continued)

EXHIBIT 3.1
Cognitive Case Map Example (*continued*)

Heading	Content
Faculty name(s) Contact e-mail Contact phone Skype contact	List for each faculty in this order. Indicate the lead faculty first if more than one name is listed. This person should be the go-to faculty for questions. Include preferred means to communicate with faculty.
Faculty availability	List <i>virtual office hours</i> and whether appointments are needed outside of office hours
Course description	Obtain from course catalog
Objectives	Obtain from Office of Academics
Texts • Required • Recommended	Distinguish between required and recommended texts. The listing of all texts should be in APA format with ISBN at the end of the reference.
Course schedule	List week-by-week or biweekly schedule by topic with range of dates (starting and ending) that includes reading assignments from course text and timing of discussion boards. If additional readings are required and will be linked in the LMS, list "additional readings are posted in course." <i>See Exhibit 3.2 for format of this section.</i>
Assessments	List assessments with points or percentages as they relate to the total for the course, due dates in specified time zone and types of assessments—discussions, quizzes, group projects, papers, and other assignments. Grading rubrics should be included at the end of the syllabus. <i>Exhibit 3.3 demonstrates recommended formatting for this section.</i>
Late assignments • School policy • Faculty policy	Indicate late-assignment or missed quiz/exam policies—list both the school's and yours if different
Attendance • At start of course • Continued presence	Define what students need to do to meet initial attendance requirements and to be considered as academically active throughout the course
Technical support	List contact information (e-mail and phone) and hours of availability for technical support
Policies	List institutional or program-specific policies or procedures that are required to be included in course syllabi. Most schools have a student handbook and a university policies website. Repeating information from these documents should not be done unless mandated.

APA, American Psychological Association; LMS, learning management system.

Adapted from Altman and Cashin (1992), Ko and Rossen (2010), Parkes and Harris (2002), West and Shoemaker (2012), as well as the author's experience.

EXHIBIT 3.2 Course Schedule

Following is the course schedule for the spring semester 2017. The weeks will start on Monday and end on Sunday. All discussions will start on a Monday at 8:00 a.m. and end a week from the following Friday at 11:55 p.m. Eastern Time. Posting over the weekend is optional and will be considered when grading.

Weeks	Dates	Topic/Activities	Readings
1	1/9–1/15	Introductions, orientation to course, download syllabus, begin readings	List readings from text here. Additional readings from journals are linked in LMS.
2–3	1/16–1/29	Topic (in general, not topic of discussion) Discussion 1	
4–5	1/30–2/12	Topic Discussion 2	
6–7	2/13–2/26	Topic Discussion 3	

The exhibit shows a 7-week course as an example only. The grid can be expanded to accommodate any course length.

LMS, learning management system.

EXHIBIT 3.3 Assessment Template

Following are the assessments for the course. All assessments are due on Sunday at 11:55 p.m. Eastern Time on the dates specified. See the Late-Assignment Policy in that section of the syllabus so you are aware of what to do if something occurs and your assignment will be late. I am flexible and willing to work with you *if I am made aware via e-mail before the due date and time of the assignment*. Specific criteria for the assignments and discussions can be found in the rubrics also used for grading that can be found at the end of the syllabus.

Due Date	Assignment	Potential Points	Earned Points
2/5/17	Name of assignment	10	
3/26/17	Name of assignment	10	
^a	Discussions 1–6 (10 points each)	60	
4/23/17	Name of assignment	20	
Total		100	

^aFor dates of discussions, consult Exhibit 3.2.

Syllabus Tone

The tone of the syllabus and the language chosen are important. Slattery and Carlson (2005) point out that the tone can be “warm and friendly, formal, condescending, or confrontational” (p. 159), with a warm and friendly tone, not surprisingly, being more effective. Mager (1997) has some good advice that is useful here. He differentiates between *demand* language and *capability* language. An example of demand language is choosing words like *will*, *must*, or *should* when referring to what you want students to include in an assignment. The use of these words imparts a teacher-centered, formal, and potentially authoritative tone. Capability language, which also applies more to writing course objectives, is associated with the word *can*. When writing details of an assignment, consider using the words *include* or *please include*. Demand language is off-putting, and that is not the feeling you want to convey in your syllabus.

How the Online and Classroom Syllabi Differ

Although the online syllabus has many similarities with one used in a classroom-based course, a few important differences should be stressed. The main differences arise from the affordances that the online environment provides with regard to making information readily available to students via clickable links. First, links to reading assignments, such as journal articles in the library and websites of interest, that were once part of a syllabus are now added as direct links within the LMS, saving the step of opening the syllabus to find a link to the readings. Second, the faculty's philosophy of teaching, how the course fits in with other courses students have taken, and the *geography* of the course or how things are laid out in the LMS are not included in an online syllabus. I recommend faculty mention where this information can be found in a podcast that provides an introduction to the course and syllabus. To further stress these important points, include them in a bulleted list in the first announcement posted in the course.

Many LMSs have built-in software that can be used to create a flexible, interactive syllabus that is easily reworked when the course is copied for the next semester. Although this results in a syllabus that can easily be updated should changes need to be made, a permanent copy is not created unless faculty create one. In addition, students may not be able to download the syllabus in its entirety from the software, requiring that they enter the course to check the syllabus. This may not be a problem for students who access the LMS from a handheld device. I do recommend converting all documents you create in Word, including the syllabus, to PDF files, which is a more portable format. Students can readily download and read

this format on their handheld devices. Not having a permanent record of a syllabus for a course can be problematic for reasons mentioned in the Purpose of a Syllabus section earlier in this chapter.

Another requirement for an online syllabus that sets it apart from that for face-to-face classes is that assignment due dates must include the time and time zone (Ko & Rossen, 2010). When students upload an assignment to the LMS, a time stamp is automatically added that occurs within the time zone of the server on which the LMS resides, not the time zone in which the student resides. As an example, suppose you and the LMS server are on Eastern Time and one of your students lives in California on Pacific Time, 3 hours behind you. He uploads an assignment at 11 p.m. Pacific Time thinking the assignment has been posted on time. However, the server stamp reflects 2 a.m. Eastern Time. From your perspective, the assignment is late and the student will, most likely, lose points. Unless the time zone for when assignments are due is specified, a well-meaning student's assignment could be considered late. As the syllabus is a legal document that may be called into action to settle a student grievance, being as specific as possible about due dates and times is recommended.

Your school may have a late-assignment policy that pertains to all students and dictates how points are deducted as well as when an assignment will no longer be accepted. This should be included in your syllabus. If you have different requirements, that information should be detailed as well.

You might be tempted to include other pieces in the syllabus that can be linked in the LMS such as how-to instructions and directions where items can be found in the LMS. How and when assignments are to be uploaded and how to use the discussion board are instructions that should be linked in the LMS and not included in the syllabus. It is useful to include an "All Weeks" section in the course where information that will be used throughout the course, and that is not week specific, can be uploaded. An area to accommodate these documents should be created if one does not exist. Documents that will be uploaded to that section in addition to the syllabus might include a podcast to review the syllabus, the link to the discussion area where students will introduce themselves, and the welcome podcast. Depending on your course design, the links to upload assignments are sometimes added to this section. A more detailed description of the organization of the LMS in terms of interface design is discussed in Chapter 12.

Rubrics are sometimes included in the syllabus, which makes sense as they are grading criteria that should be part of the contract with students. However, I find it easier to include a brief explanation of the requirements of the assignments in the syllabus and mention that a rubric will be used to grade each assignment. Also indicate where the rubric can be found in the LMS. The same name should be used for the assignment, the rubric,

and the link students will click on to retrieve it in the LMS. Consistency is important.

Defining Participation

Participation in courses that meet face to face is typically loosely defined, simply because it is difficult to track and assess, depending on the number of students in the course. From the perspectives of credit-hour equivalence and student workload, participation must be clearly defined in the syllabus for online courses, as it is often a significant part of grades.

Participation in an online course involves two constructs: that of initial or first-day attendance and an ongoing presence that signifies students are active in the course. Attendance has implications for financial aid, so most institutions have a policy to ensure that all students have signed into the course initially to signify initial attendance. However, faculty are charged with monitoring student participation in academic activities that indicate their continued attendance (Electronic Code of Federal Regulations, 2016). This must be explained to students and the term *academic activities* defined. The definition of academically related activities as of August 12, 2016, according to the department of Education and Financial Student Aid, can be found in Box 3.4.

BOX 3.4

DEFINITION OF ACADEMICALLY RELATED ACTIVITIES

- Include, but are not limited to:
 - Physically attending a class where there is an opportunity for direct interaction between the instructor and students
 - Submitting an academic assignment
 - Taking an exam, an interactive tutorial, or computer-assisted instruction
 - Attending a study group that is assigned by the institution
 - Participating in an online discussion about academic matters
 - Initiating contact with a faculty member to ask a question about the academic subject studied in the course
- Do not include activities where a student may be present, but not academically engaged, such as:
 - Living in institutional housing
 - Participating in the institution's meal plan
 - Logging into an online class without active participation
 - Participating in academic counseling or advisement

Source: Electronic Code of Federal Regulations (2016).

Academic Activities and Initial Attendance

Although most of the focus from a student-aid perspective is documenting when a student ceases to attend classes, it is obviously important to determine that he or she was in class in the first place. Consequently, most schools require that after the first 7 to 10 days of a term, faculty report students who have not signed into an online class and participated in an *academically related activity* as defined in the previous section. However, most of the activities listed may not necessarily be undertaken in the first week of an online course. I recommend asking the administration to define academically related activity for that first week of class so everyone is on the same page. Note that simply logging into an online course is insufficient evidence to determine attendance. Downloading the syllabus is a reasonable inclusion in that list, in my view. Asking students to take a brief quiz regarding the functionality of the LMS, plagiarism, and the particulars included in the syllabus, for example, would be another option that would constitute initial attendance.

Academic Activities and Continued Attendance

Monitoring continued student involvement in an online course falls on faculty and can be easily forgotten once the course is in full swing. Each school must define what time frame to use. A student who is not academically active in the course for a period of time—typically 3 weeks—risks being dropped from the course. This does not happen automatically, but instead relies on faculty to inform administration of the lapse. The best approach is to contact the student via e-mail or phone to determine what the problem is before you set the course-drop process in motion. However, in order for students to participate in academically related activities, you must create them and at least one activity must occur at the interval required to meet the time frame for attendance (i.e., 3 weeks if that is the administratively determined time frame).

Implications of Attendance for Course Design

Monitoring student activity in the course can readily be done if discussion board posts are tracked. I created a discussion-tracking tool that is useful for this sort of activity *if* faculty are aware of the need to do so. This tool is discussed in Chapter 11. If discussion boards are not used in your course, another means of ensuring students' continued participation must be devised such as weekly quizzes, online journal-style posting, an assignment, or a combination of these activities. Thus, keep continued attendance in mind when choosing and timing activities in your online course.

WORKLOAD ISSUES

Course design and workload are interrelated for both students and faculty. Workload dictates course design in theory; however, in reality the relationship is less clear. Operationalizing workload hours is inconsistently done, mainly because research is lacking, and the multiple variables involved are rarely consistent among courses.

Multiple variables that can impact research on faculty workload when teaching online include class size, course design, use of technology, faculty experience teaching online, faculty knowledge regarding online pedagogy, whether the course is new or has been taught before, and if faculty are teaching the course for the first time which makes it “new” to them. Different combinations of these variables create different levels of workload, making research findings inconsistent and difficult to implement.

Faculty workload at most schools of nursing follows Boyer’s model of teaching, scholarship, and service (Boyer, 1990). All of these activities take time, but few studies examine how the time commitment is broken down for each. Mandernach, Hudson, and Wise (2013) conducted a study to understand how much time faculty spent in various online teaching activities, such as grading assignments, facilitating and grading discussions, and individual interactions with students. This study involved undergraduate online courses with 20 students in each course and each instructor responsible for four, 8-week courses simultaneously. They were, however, not required to participate in committee work (service) or research. Thus, they were responsible for 80 students during the study period, a rather large number of students, in my view. The researchers found that (a) grading papers and assignments occupied 36.93% of their time weekly or 14.77 hours (3.69 hours per course), (b) facilitating discussion threads and grading discussions accounted for 22.47% of instructional time or 9.39 hours per week (2.35 hours per course), and (c) additional contact with individual students comprised 23.53% of their workweek or 9.45 hours (2.36 hours per course).

For their 40-hour workweek, over 33 hours were spent in teaching activities in four courses, 8.4 hours for each course. However, the up-front course design, syllabus creation, and setting up the LMS should be averaged over the semester and included in the total workload hours in order to have a true picture of overall faculty workload.

Because online teaching has become so prevalent in schools of nursing, faculty workload has been a topic of much debate and an issue for faculty retention (Cohen, Hickey, & Upchurch, 2009). Blackmon (2016) synthesized the literature from 2002 until 2012 to determine whether the concerns and motivations for teaching online had changed over the years. Included in her study were 24 articles, 15 of which mentioned a concern

over workload and time constraints when teaching online. Although this specific theme was present in 63% of the studies, workload remained the most consistent concern in the literature during that 10-year period. Thus, concerns over faculty workload persist.

Overall, the faculty comments included in Blackmon's (2016) article reflected the inordinate amount of time spent preparing the course and teaching online, time spent reading posts and responding to students, and time away from other required faculty responsibilities. However, other aspects of the faculty's comments, listed in Box 3.5, focused on time spent in activities that reflected questionable good instructional design decisions. These concerns are revisited in Chapter 5 (see section Strategies to Offload Workload).

What these quotations represent, in my view, is a lack of understanding of online pedagogy that perhaps reflects the time period in which the study was done. Through additional educational research, we now have a better understanding of online pedagogy—what works and what does not—but much work remains to be done. All of the issues mentioned earlier when approached from a different perspective can be managed, in my view. This issue is addressed in Chapter 5 (see section Strategies to Offload Workload).

Course design and knowledge of online pedagogy are two areas that impact workload over which faculty do have control. My experience has been that online courses can be creatively designed with consideration to both student and faculty workload that will meet the learning outcomes without overtaxing either. Again, efficient strategies are discussed in Chapter 5.

BOX 3.5

FACULTY'S COMMENTS FOCUSED ON TIME SPENT IN ONLINE TEACHING ACTIVITIES

- “With 30–40 students, to give them each individual feedback on everything they write, every week, becomes sort of daunting . . .” (Coppola, Hiltz, & Rotter, 2002 as cited in Blackmon, 2016, p. 71).
- “Faculty had to write out comments they would usually provide verbally” (Siedlaczek, 2004, as cited in Blackmon, 2016, p. 71).
- “If you're trying to write lectures or prepare PowerPoints or activities, and keep up with the dialogue, you can't do it. I learned that early enough; you can't do both. You have to really prepare your materials whether or not they are in exact final format” (Conceição, 2006, as cited in Blackmon, 2016, p. 71).
- “. . . some faculty members compared preparing to teach online courses to writing a textbook to explain the textbook” (Fish & Gill, 2009, as cited in Blackmon, 2016, p. 71).

The Credit Hour and Workload

The Carnegie Unit has been used as the basis for faculty workload, student credit earned toward a college degree, and other administrative functions since the early 1900s (Silva, White, & Toch, 2015). Originally created for K-12 education, it was based on “seat time” or the time students spent in a classroom. For higher education, a Carnegie Unit was eventually translated into a student hour (now referred to as *credit hour* or *contact hour*), which represented “an hour of lecture, of lab work, or of recitation room work, for a single pupil, with the standard college course comprising three such hours of weekly contact between students and professors over three-and-a-half-months-long semesters” (p. 9). As most college courses are 3-credit-hour courses, this translates to 3 hours per week *in class* for 15 weeks, the typical length of an academic semester. This does not include the time students are expected to spend preparing for class. Although schools have some flexibility in defining student workload, the federal guidelines for a 3-credit-hour course are:

that the institution determine that there is an amount of student work for a credit hour that reasonably approximates not less than one hour of class and two hours of out-of-class student work per week over a semester for a semester hour or a quarter for a quarter hour. (“Program Integrity Questions,” 2016, para 6)

That means that students must, on average, devote 9 hours per week to attending class and studying in preparation for class. Thus, for a 3-hour college course this equates to 135 hours over the course of a 15-week semester (Simonson, 2008).

Online courses must be academically equivalent to classroom-based courses in terms of the same student workload. Since students taking an online course do not attend class or are not in one place at the same time for the same period of time, determining workload to fill, but not overfill, the required 9 hours per week can be a challenge. The following section provides guidelines on how to accomplish this.

ELEMENTS OF COURSE DESIGN

Elements of course design that are discussed in this section include thoughts on reading assignments, textbook choice and additional readings, and the quantity of assignments beyond small group discussions. Additional course design elements are discussed in subsequent chapters and include case development (Chapter 6), discussion questions (Chapter 7), and online

testing (Chapter 8). The goal in designing a course is to provide the needed educational resources to prepare students to successfully meet the learning outcomes without creating busywork. This is a fine line to walk and one for which direction and guidance is scarce. However, these are decisions you will need to make before you can finalize your syllabus.

Reading Assignments

The question of how much reading should be assigned is another academic legend, if you will, as little is written on this topic. What it has come down to is the speed at which students can read and type, the reading requirements of a typical discussion board, and the expectation of the number of hours that students should spend for a 3-credit-hour online course. The information I compiled helped me to gauge the reading assignments and number of discussions. This was greatly enhanced by the work of Barre (2016), which is published on the Rice Center for Teaching Excellence website.

The reading speed for college students has a wide range—from 200 to 400 words per minute, with the average being 300, the same for the average adult (Rayner, Schotter, Masson, Potter, & Treiman, 2016). I would imagine that many factors contributed to that wide range such as the complexity of the material, the student's inherent interest in the assigned reading, and the student's motivation to complete the reading. To put this into perspective, the average single-spaced, written page with 1-inch margins using Times New Roman 12-point font is approximately 580 words.

Understanding how many words comprise a typical discussion board will help correlate reading speed with the quantity of information students and faculty must read. At one point, I taught for a nonprofit university that required faculty to copy and paste an entire discussion board, randomly chosen by administration, into Turnitin™ software to check for the originality of students' work, that is, plagiarism. This particular course I was teaching was part of an online masters in nursing program with a nurse educator focus that had 25 students enrolled. For each discussion, students were required to post once substantively and respond to two classmates. Copying this discussion resulted in 92 pages of text (in the same format as mentioned earlier—580 words/page). If students read at a speed of 300 words per minute, it would take almost 3 hours to read all the posts. Given that students are to spend 9 hours each week for one 3-credit-hour online course, reading posts alone may take up one third of their time.

In addition to discussion posts, reading is typically assigned from textbooks and/or professional journals, which adds to the students' workload.

From a random selection of 10 journal articles, I found that the number of words per page ranged from 163 to 1,048, depending on the font size and whether the page was divided into more than one column of text. This averages to 531 words per page. Thus, the average adult reading at 300 words per minute will be able to complete an eight-page journal article in about 24 minutes. However, reading and understanding what was read are not the same. Understanding may require rereading certain passages, reflection, or engaging in self-directed metacognitive questions.

In terms of assigned reading in a textbook, Barre (2016) advised that the average page of a textbook contains about 750 words if about 25% of the page are images; obviously more words if the entire page is text. Again, depending on reading speed and the complexity of the material, a page in a textbook would take less than 3 minutes to read. A chapter consisting of 20 pages, for example, would then take about an hour for the average adult to read, more time if it were complex content.

Of interest is that the amount of reading assigned has been a topic of conversation on faculty blogs, but not of late that I could find. Alex (2008) posed the question to colleagues, stating that he thought the rule of thumb was assigning 100 pages per week for undergraduate students and 200 pages for graduate students. The replies were mixed, ranging from 66 to 250 pages per week with some respondents adding a caveat that they knew their students would not read everything they assigned.

That faculty assign reading based on the number of pages is telling to me, which is why I was happy not to find more discussion of this practice. I was enlightened by Wesley's (2016) perspective:

The decision requires a delicate balance between the various ability levels of students in the class, the goals and outcomes of the course, the kinds of texts being analyzed, and the methods brought to that analysis. Instead of debating whether to assign more (or less), perhaps we need to focus on how to make reading matter—that is, how to make it a more meaningful exercise in our classrooms. (para. 3)

I do hope several insights come out of this conversation. First, reading should be strategically assigned with specific goals in mind of guiding and supporting learning to meet the objectives. Second, faculty should be mindful of the amount of reading they assign, knowing the average adult reading speed that translates into time on task. Also, consider that students may be taking more than one course concurrently that has required reading. Indicating in the syllabus what reading is required and what is optional or recommended is also a good practice. Keep in mind that journal articles vary widely in the number of words per page. The best way to determine the number of words per page is to copy and paste one full page into a Word document and check the word count by highlighting the text > tools on

the toolbar > word count. Third, keep in mind that the amount of assigned reading is not an indicator or true measure of the rigor in your class (Wesley, 2016).

Assessments

Other considerations that must be part of course design are the number and type of assignments (assessments) to include in the course. This is a tough one. Keep in mind that small group discussions serve as teaching methods as well as means of summative assessment. Reading all the posts is time consuming for both you and your students, especially for you if you are assigning grades using a rubric.

To consider this from another perspective, online education is the original flipped classroom. If you are unfamiliar with this novel idea that Sal Khan has been promoting, it involves students reviewing lectures as homework and then going to class to work in small groups to apply what they have studied through projects, lab experiments, or working out a case study. Basically, students must come prepared to class in order to function in class. This is the order of business in an online course. Before students can post initially in the discussion—equivalent to going to class—they must prepare by completing the readings, synthesizing the content, and composing their post. We have already established that reading the posts can take up to 3 hours each week—a third of the time students should devote to the entire course. The take-away here is that few additional assignments may be necessary to promote learning and assess the objectives. Any assignment beyond doing so is busywork.

In some instances, weekly written assignments were a way for faculty to falsely assure themselves that students were studying. Because there are only so many hours in the day, these time-consuming assignments often distracted students from completing the necessary reading. As points were allotted to these written assignments, it is not difficult to determine what students attended to. This is especially important to consider given that most of our students in online nursing courses are nontraditional students who have work and family in the equation. The other disturbing outcome of weekly assignments is that the pace of completing them on time limits students' ability to learn from them. Their focus is getting from one assignment to the next.

Choosing a Textbook

Textbook choice can be time consuming and requires planning well in advance of a course. Depending upon the process at your school, it may

involve requesting a desk copy through someone in administration who then contacts the publisher's local representative. In days gone by, publishers would send out desk copies without question—and often without a request. I assume cost factors have driven the change that now requires faculty to list the course and expected enrollment in the course the text will be used for before a desk copy will be sent.

Googling the name of the text can help focus your search. You can typically find the publisher's or a retail site that will allow you to peruse the first few pages of a text, which includes the table of contents. Much can be learned from that if the chapters are well named. Reviewers' comments are also helpful. I am sure it goes without saying that, depending on the topic, the text may be outdated before it is printed. However, I realize that teaching a course without a textbook may be a radical thought for some faculty. I do believe that in some cases, journal articles and reading from websites will better serve your students. The other option is to ask a publisher for permission to use a few chapters from one of their texts or create a custom text for you.

THE TAKE-AWAY

When approaching course design, backward is best. Consider outcomes first, then assessments and teaching strategies. This will focus your assessments on the desired learning outcomes articulated in the objectives and not the minutiae of what was taught. The course syllabus is an important document providing a road map for students and an indication of your understanding and application of online pedagogy. Taking time to ensure your syllabus is complete and accurate will save time later, answer questions, and calm frustrated students.

Designing your course with consideration to faculty and student workload, but keeping learning outcomes in mind, will help you choose appropriate assessments that will assess the objectives while avoiding busywork.

REFERENCES

- Alex. (2008). How many pages of reading for a graduate class? [Blog message]. Retrieved from <http://alex.halavais.net/question-how-much-reading-for-a-graduate-class>
- Altman, H. B., & Cashin, W. E. (1992). Writing a syllabus: IDEA paper No. 27. Manhattan: Kansas State University, Center for Faculty Evaluation and Development, Division of Continuing Education. Retrieved from <http://files.eric.ed.gov/fulltext/ED395539.pdf>

- Barre, E. (2016, July). How much should we assign? Estimating out of class workload. Rice Center for Teaching Excellence. Retrieved from <http://cte.rice.edu/blogarchive/2016/07/11/workload>
- Benner, P., Sutphen, M., Leonard, V., & Day, L. (1984/2010). *Educating nurses: A call for radical transformation*. San Francisco, CA: Jossey-Bass.
- Blackmon, S. J. (2016). Teaching online, challenges and motivations: A research synthesis. *Education Matters*, 4(1), 66–83.
- Boyer, E. L. (1990). *Scholarship reconsidered: Priorities of the professoriate*. Princeton, NJ: Carnegie Foundation for the Advancement of Teaching. Retrieved from <http://files.eric.ed.gov/fulltext/ED326149.pdf>
- Cohen, M. Z., Hickey, J. V., & Upchurch, S. L. (2009). Faculty workload calculation. *Nursing Outlook*, 57(1), 50–59.
- Electronic Code of Federal Regulations. (2016). *Title 34: Education. Part 668—Student assistance general provisions. Subpart B: Standards for participation in Title IV, HEA Programs, section L-7-i*. Washington, DC: U. S. Government Publishing Office. Retrieved from <https://www.ifap.ed.gov/regcomps/attachments/668.pdf>
- Ko, S., & Rossen, S. (2010). Creating an effective online syllabus. In S. Ko & S. Rossen (Eds.), *Teaching online: A practical guide* (3rd ed., pp. 115–142). New York, NY: Routledge.
- Mager, R. F. (1997). *Preparing instructional objectives: A critical tool in the development of effective instruction* (3rd ed.). Atlanta, GA: Centre for Economic Performance Press.
- Mandernach, B. J., Hudson, S., & Wise, S. (2013). Where has the time gone? Faculty activities and time commitments in the online classroom. *Journal of Educators Online*, 10(2), 1–15. Retrieved from <http://files.eric.ed.gov/fulltext/EJ1020180.pdf>
- Matejka, K., & Kurke, L. B. (1994). Designing a great syllabus. *College Teaching*, 42(3), 115–117.
- Parkes, J., & Harris, M. B. (2002). The purposes of a syllabus. *College Teaching*, 50(2), 55–61.
- Program Integrity Questions and Answers—Credit Hour (CH-A3). (2016). U. S. Department of Education. Retrieved August 17, 2016, from <http://www2.ed.gov/policy/highered/reg/hearulemaking/2009/credit.html#credit>
- Rayner, K., Schotter, E. R., Masson, M. E. J., Potter, M. C., & Treiman, R. (2016). So much to read, so little time: How do we read, and can speed reading help? *Psychological Science in the Public Interest*, 17(1) 4–34.
- Richards, J. C. (2013). Curriculum approaches in language teaching: Forward, central, and backward design. *RELC Journal*, 44(1) 5–33.
- Silva, E., White, T., & Toch, T. (2015). *The Carnegie unit: A century-old standard in a changing educational landscape*. Stanford, CA: Carnegie Foundation for the Advancement of Teaching. Retrieved from <http://files.eric.ed.gov/fulltext/ED554803.pdf>
- Simonson, M. (2008). Designing the “perfect” online course (Paper 82). In *Fischler College of Education: Faculty Articles*. Retrieved from http://nsuworks.nova.edu/cgi/viewcontent.cgi?article=1081&context=fse_facarticles
- Slattery, J. M., & Carlson, J. F. (2005). Preparing an effective syllabus: Current best practices. *College Teaching*, 4, 159–164.

- Smith, T. C. (2005, July). Fifty-one competencies for online instruction. *Journal of Educators Online*, 2(2), 1–18. Retrieved from <http://www.thejeo.com/Ted%20Smith%20Final.pdf>
- Wesley, C. (2016, July 13). Do you assign enough reading? Or too much? *Chronicle of Higher Education*. Retrieved from <http://www.chronicle.com/article/Do-You-Assign-Enough-Reading-/237085>
- West, J. A., & Shoemaker, A. J. (2012). The differences in syllabi development for traditional classes compared to online courses: A review of the literature. *International Journal of Technology, Knowledge, and Society*, 8(1), 116–122.
- Wiggins, G., & McTighe, J. (2005). *Understanding by design* (2nd ed.). Alexandria, VA: Association for Supervision and Curriculum Development.
- Wilson, M., & Gerber, L. E. (2008). How generational theory can improve teaching: Strategies for working with the “Millennials.” *Currents in Teaching and Learning*, 1(1), 29–44.

10

Presence in an Online Course

THE COMMUNITY OF INQUIRY MODEL

The model most often cited when discussion turns to presence in the online environment is the community of inquiry (COI) model of Garrison, Anderson, and Archer (1999; see Figure 10.1). This model identifies three interrelated types of presence—social, cognitive, and teaching—that interact to create an online environment to promote learning. To this model, Shea and Bidjerano (2012) proposed adding a fourth presence, that of learning. In this chapter, we explore the COI model, current research, and best practices that the model suggests. We then turn to the more practical side of teaching online and operationalizing the COI in Chapter 11.

My goal in this chapter is not to strictly reiterate the seminal work of Garrison et al. (1999), but instead to provide a stronger case for two perspectives of the COI, that of students as well as faculty. I feel this is important in view of the work of Shea and Bidjerano (2010), who have underscored what the learner brings to the COI. Their suggestion to add a separate presence, that of *learner presence* as the fourth presence in the model, provided insight into the original conceptualization, and allowed me to reflect on aspects that perhaps I had not fully considered. Although the characteristics of the learner are important in terms of creating and maintaining a COI and should have a more prominent position in the model, adding the fourth presence seems to me to muddy the waters. Instead of doing so, I suggest that both learners and faculty share aspects of social, cognitive, and teaching presence that are interdependent and necessary for inquiry to occur.

SOCIAL PRESENCE

Social presence was initially defined as “the ability of participants in the Community of Inquiry to project their personal characteristics into the

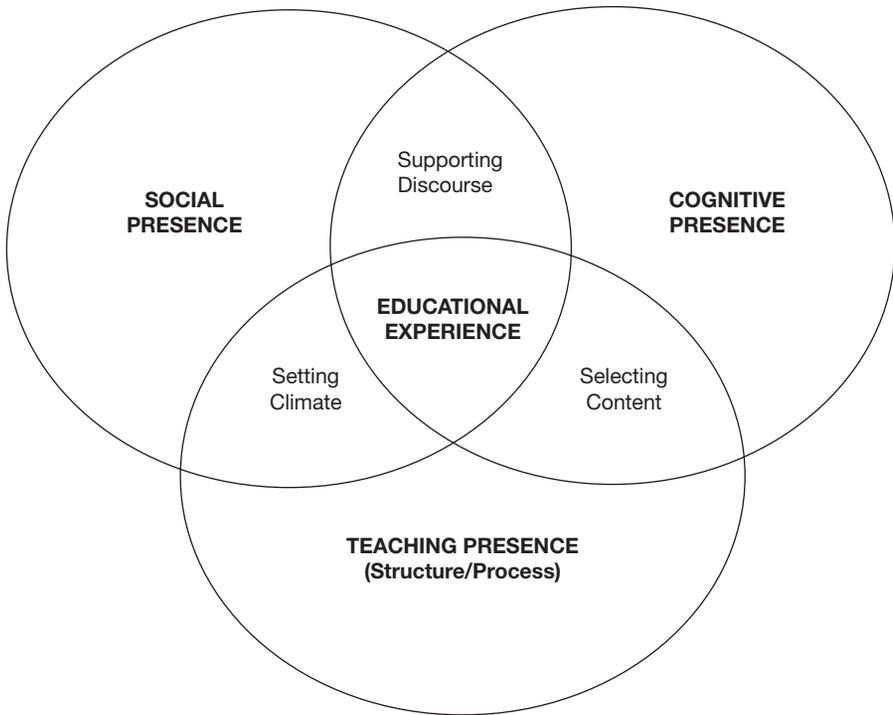


FIGURE 10.1 Community of Inquiry Framework

Source: Garrison (2007). Reprinted by permission of Dr. D. R. Garrison.

community, thereby presenting themselves to the other participants as real ‘people’” (Garrison et al., 1999, p. 89). In the early days of online education, a great deal of emphasis was placed on the social aspects of online courses. Some felt that a sense of community, similar to that developed in a classroom setting, would be difficult to replicate online because the subtle nuances that occurred in the classroom, such as eye contact, welcoming smiles, and body language, were absent in the online world (Garrison, Cleveland-Innes, & Fung, 2010; Palloff & Pratt, 2007). However, this has not been shown to be the case after all, as students and faculty found ways to communicate effectively and develop personal connections.

Three indicators of social presence were identified in the COI model according to Garrison et al. (1999, p. 100) and are listed in Box 10.1. The indicators were discussed in this order in the literature, and I believe many felt the order indicated a progression toward social presence—almost a formula of sorts:

Emotional expression + open communication = group cohesion

BOX 10.1**THREE INDICATORS OF SOCIAL PRESENCE**

1. Emotional expression (humor and self-disclosure)
2. Open communication (mutual awareness and recognition)
3. Group cohesion

This progression indicated that emotional expression was a precursor to open communication, which was required to develop a sense of group cohesion. However, over time and based on continued research, the relationship of these three indicators shifted, a different temporal relationship emerged, and emotional expression took somewhat of a backseat to open communication and the understood common purpose of learning. Garrison, Cleveland-Innes, et al. (2010) subsequently redefined social presence as “the ability of participants to identify with the community (e.g., course of study), communicate purposefully in a trusting environment, and develop inter-personal relationships by way of projecting their individual personalities” (p. 32) to situate the purpose of the community, that of shared learning, in a prominent place. This corresponds with work of Rogers and Lea (2005), who found that students first identified with the purpose of the course and personal relationships developed as a product of that shared purpose.

The relationship among the three presences—social, cognitive, and teaching—has not been researched as often as each presence separately (Garrison, Anderson, & Archer, 2010), but generally speaking it is the faculty's responsibility to initially set the tone for social presence to develop and support learning (cognitive presence). Strategies to do that follow.

It is easy to forget that in the COI model the term *participant* includes both students and faculty in terms of developing and maintaining social, cognitive, and teaching presence. The three indicators of social presence, expression of emotion, open communication, and group cohesion have different and interdependent implications for students and faculty. The roles students and faculty have in developing social presence differed, however, in timing, focus (monitor vs. monitored), and relationship to cognitive presence.

Most nursing students returning for the RN to bachelor of science in nursing (BSN) degree or entering graduate school instinctively understand why they were there. They are adults who have educational goals in mind and most are self-directed—two assumptions of andragogy (Forrest & Peterson, 2006). Nevertheless, some need guidance in adjusting to the online environment and working collaboratively in groups. The role of faculty in creating social presence has therefore shifted from promoting social

relationships to that of creating a safe space where open communication and critical discourse can occur (Garrison & Arbaugh, 2007). For faculty, modeling caring, professional, collegial behavior that creates a *we are in this together* atmosphere underscores the fact that learning is not a one-way street. Modeling also helps to create a safe space in which students are not afraid to post their understandings or make mistakes, allowing them the freedom to learn.

Indicators of Social Presence

Emotional Expression

In the online environment, emotions are expressed by introducing humor and self-disclosure. Faculty must find the balance between sharing too much personal information or humorous anecdotes as if trying to make friends, and seeming too distant, taking the *sage on the stage* stance. Millennial learners relate more effectively to faculty who share who they are, how and why they became educators, and how they balance work and life responsibilities (Roberts, Newman, & Schwartzstein, 2012). In addition, Price (2010) notes that millennials do not do well in an authoritarian power structure, relating better to faculty they perceive as “down-to-earth, informal, relaxed, and flexible” as opposed to those who are “uptight, strict, intimidating, or condescending” (p. 3). They describe their ideal professor as one who is “approachable and easy to talk to” (p. 4).

Another fairly uncommon occurrence in online discussions, but one that deserves mention, involves students whose posts remain strictly of a social nature that do not contribute to the development of critical discourse. Janssen, Erkens, Kirschner, and Kanselaar (2012) studied the relationship between task and social regulation to overall group performance on a task. They found that task regulation and coordination of group processes and progress positively affected group performance, whereas dialogue of a purely social nature, such as joking, personal disclosure, and indicating agreement or lack of understanding with what the student had posted, had a negative effect. Although this supports what I said earlier, it also underscores the importance of faculty oversight to ensure that social presence in terms of emotional expression tapers off so that cognitive presence can become the prominent feature in online discussions.

Open Communication

Garrison and colleagues (1999) characterized open communication as “reciprocal and respectful exchanges” (p. 100) whose indicators were mutual awareness and recognition. Given that online education is basically a

text-based medium, the tone and wording of not only faculty posts and announcements, but also individual e-mails should be approached with care. Phrasing should be upbeat, informal, and begin with a personal salutation (with an individual's name or "For all" in online posts) included. Keep in mind that every piece of written communication is permanent and is an opportunity for faculty to model appropriate online behavior. Although you cannot control how another person perceives something you have written, rereading any written communication will often pick up nuances that could be misunderstood.

Mutual Awareness

Mutual awareness is part of open communication and occurs when responding to students in the discussion, particularly who you choose to respond to and how often you respond. As responding to all students' posts in every discussion is not recommended (see Chapter 11), rotating your replies so that you respond to all students equally throughout the discussions in the course demonstrates awareness of all. If you do not track this, you may find yourself consistently replying to a few students and not to others. A tool to track your responses to students is discussed in Chapter 11.

When a student replies to another student's post, the subtle message is that this student's post has been deemed worthy of reply over the others in the thread. This adds a sense of camaraderie and can be a motivating factor. Students should be instructed to personalize the reply by starting out the post with "Hi, Jane," for example, or adding "Response to Jane" in the subject line, emphasizing the personal connection. This practice, which should be encouraged, is helpful not only to display a sense of mutual awareness, but also to organize the discussion thread so it is clear who is responding to whom. Faculty should do the same when replying to students.

Whenever possible when replying to a student, mention or directly quote something a student has posted that piqued your interest or is particularly relevant to the topic, and expand upon the idea or associate it with content from another student's post. Although this is good practice for faculty, students can overuse this approach and avoid contributing to the discussion, essentially becoming "stuck" in the mutual awareness aspect of social presence. This becomes evident when a student's reply to a classmate includes only direct quotes from his or her post or paraphrases what they had posted. Although this is an excellent means of showing mutual support, without the replier adding additional content or asking a question to advance the conversation, the discussion will stagnate. Students who repeatedly use this approach may be disengaged in the discussion, lack preparation, or do not have an understanding of course content. For that reason, discussion posts, especially early on in the course,

must be carefully monitored for ongoing social behavior, as some behaviors are useful, whereas others can impede the discourse from shifting to collaborative critical inquiry.

Recognition

Recognition, the other aspect of open communication, is demonstrated when students acknowledge the value of others' contributions and show agreement with and appreciation for their perspectives. Faculty can demonstrate recognition by starting their posts with "I so appreciate that you mentioned . . ." or "I agree with your comment regarding . . ." which provides encouragement that will impact motivation and persistence. Although this aspect of presence is important to the development of a cohesive community, sustaining it is more important (and perhaps essential) if the content of the discussion relates to the affective domain rather than the cognitive. However, if the goal of the discussion is knowledge construction, continued reliance on this approach when replying to a post can be deleterious to the outcome for the entire group. Without adding a substantive comment, additional related content, or asking a probing question, posts that only reiterate what the other student has said or are strictly complimentary do not move the discussion forward. Do keep in mind that this type of behavior may indicate that the student does not understand the content being discussed, a red flag that his or her zone of proximal development has been encountered. In this instance, scaffolding from faculty may be the best choice of action (see Chapter 11) from a pedagogical perspective.

Posts indicating that the student is stuck in the open communication phase of social presence are easy to miss, but perilous to the outcome of the discussion, as well as the potential learning of the responding student. The concern is that other students will follow suit and take up this rather easy means of getting credit for posts. The best approach for faculty is to privately e-mail any student who demonstrates continued and *exclusive* use of mutual awareness and/or recognition when replying to a classmate's post to problem solve, clear up any misconceptions regarding the quality of postings, point out exemplars of "good" posts within the discussion, and reiterate that the goal of knowledge construction requires substantive posts—or whatever wording is included in your grading rubric that addresses the quality of student's responses. From my perspective, the term *substantive* refers to the depth of the post and demonstrates higher cognitive functioning of application, analysis, synthesis, or evaluation of course content.

Students who persist in demonstrating this type of social behavior will require continued and close monitoring, and perhaps continued private feedback, until they move on to more of a collaborative type of knowledge

construction. My experience in teaching graduate students indicated that this behavior is not common, but I did not want to overlook it. The discussion-tracking tool is useful in helping me remember which student is exhibiting continued social presence so I can intervene as necessary.

Group Cohesion

Faculty's role in promoting group cohesion relies, in part, on that of monitoring the quality of students' posts and on the art of facilitation that is discussed in detailed in Chapter 11. Frequent monitoring allows you to guide students so that a discussion is what occurs rather than a series of unrelated narratives. Connecting contents of posts noting either similarities or contrasting features and mentioning student's names and perspectives will help to promote the idea that this is a collaborative effort. Also, bringing in your own perspective and examples from your experience may help students connect and function as a group.

Group cohesiveness is essential if a collaborative group project is the deliverable from the discussion, and necessary if coconstruction of knowledge is the goal. However, achieving these ends is also a function of faculty presence in the course (teaching presence), facilitative abilities, and being aware of and understanding the cognitive level required to complete the activity (i.e., knowledge, comprehension, application, analysis, synthesis, or evaluation). I have witnessed instances in which discussions did not involve any integration because the discussion question was written at the knowledge or comprehension level of Bloom's taxonomy. Because of this, students simply paraphrased information from their textbooks, resulting in every post containing the same content—a series of monologues as noted by Garrison et al. (1999). When this occurs, there is simply nothing to discuss, and students struggle to find ways to contribute to and maintain a discussion. Discussion questions aimed at the lower cognitive levels of Bloom (knowledge and comprehension) actually increased cognitive load (Chapter 1).

Course Design to Promote Social Presence

Features of course design that can promote development of social presence early on include an online forum (discussion group link) dedicated to introductions within the assigned small discussion groups if the class is large, or for the entire class if the number of students is more manageable. A class of 25 to 30 students can all introduce themselves in one link. If separate discussion forums are set up for this purpose, allowing members of other groups to peek in and join the introductions if they so desire is a good plan. The forum for introductions should be opened when the class starts, as

students are often eager to get started and may feel a bit intimidated by posting online if the course occurs early in their academic program. Faculty should be active in this area and welcome students one by one or by grouping names in one post. It is essential to respond to the student by name, starting your post with “Hello, Mary,” “Hi, Mary,” or just “Mary,” although the latter seems a bit harsh. In large-enrollment classes where this approach is not feasible, periodically posting how much you are enjoying learning about each student and thanking them for introducing themselves will transmit the message that you are reading the introductions. Remember to use emoticons effectively to transmit feelings if the words alone do not capture them.

Although this forum provides a place for students and faculty to get acquainted, it also gives students a chance to experiment with posting in a discussion where no evaluation of their post will occur. If your course occurs early on in the academic program, structuring the introductions by providing questions for students to respond to will be welcomed. In my experience, I have not witnessed much interaction in the introductory postings, but students do share information about their personal and professional lives, so that other students have a sense of who their classmates are in terms of nursing specialty, experience, and personal interests.

Keep in mind that introductions are not an element of academic achievement (Chapter 9) so no points should be allotted to this activity. This is one course activity that is optional. However, in my experience, most, if not all, students do take the time to post an introduction.

Although the defining factors of the social aspect of online education have changed somewhat over the years, its relationship to cognitive presence remains foundational. Learners who cannot collaborate or cooperate and do not share a common goal will have difficulty developing a sense of community, where inquiry is central (Garrison, 2007).

COGNITIVE PRESENCE

Cognitive presence has been defined in a number of ways over the years, but the most meaningful definition, in my view, was offered by Garrison (2007) as “the exploration, construction, resolution and confirmation of understanding through collaboration and reflection in a community of inquiry” (p. 65). This is based on Dewey’s practical inquiry model as conceptualized for teaching online by Garrison and colleagues (1999). The four steps in the inquiry process model are listed in Box 10.2.

In the first step of Dewey’s inquiry model as conceptualized by Garrison and colleagues (1999), a triggering event starts the discussion and is often posed in the form of a question to be answered or a problem to be solved.

BOX 10.2**THE FOUR STEPS IN THE INQUIRY PROCESS MODEL**

1. Triggering event
2. Exploration
3. Integration
4. Resolution or “application of an idea” or “hypothesis” (Garrison et al., 1999, p. 99) recognizing that not all discussion topics lend themselves to resolution

Whatever the format, dissonance, or a sense of imbalance, occurs that must be resolved (Garrison et al., 1999). Although faculty typically start the discussion with a triggering event, as the discussion evolves students may post questions to faculty or in reply to classmates that stimulate a new and appropriate direction of inquiry. Indicators of this phase are posts that reflect “puzzlement” or “recognition of the problem” (Akyol & Garrison, 2011, p. 240).

The exploration phase is signaled by “divergence, information exchange, suggestions, and brainstorming” (Akyol & Garrison, 2011, p. 240). During this phase students search the literature and ideally analyze, synthesize, and evaluate what they have found, reflecting on it in order to formulate a post and reply to classmates to compare and contrast perspectives.

In the integration phase, students reflect on their ideas and the ideas of others to arrive at a perspective that makes sense to them. Indicators of this phase are “convergence, synthesis, and solutions” (Akyol & Garrison, 2011, p. 240). As students post their understanding, the dialogue continues and additional insights may be gained. Depending upon the nature of the discussion topic, question, or problem, faculty may decide to end the discussion at the end of this phase with each student then submitting an assignment that provides his or her perspective toward resolution. This approach is often taken in discussions of clinical cases, where faculty prefer that each student develop his or her own plan of care as a summative assessment.

The resolution phase (or application of an idea) and final phase of the practical inquiry process is one in which “apply, test, and defend” (Akyol & Garrison, 2011, p. 240) are indicators. How the process of resolution occurs is once again dependent upon the nature of the triggering event. Many cases in nursing are ill structured and messy (terms discussed in Chapter 2) and no resolution or final answer is sought. Learning occurs during the *process* of discourse as divergent explanations are discussed and students defend their ideas. The result is often an off-line reflection on the conversation with students arriving at their own conclusions. In this type of situation and after the discussion ends, it is often helpful for faculty to summarize the points

made, compare and contrast their validity, and offer an opinion as to what he or she would have done to address the situation or resolve the problem presented.

Although this process certainly appears to be linear, I propose that it is circuitous or resembles a spiral, as students respond to the original discussion question posted by faculty and work through the steps, but then raise questions of their own during discourse, which then go through the same step-wise inquiry process. Early studies demonstrated that discussions did not reach the integration and resolution phase, which was thought to be due to the type of question posed (in terms of levels of Bloom) and the level and frequency of teaching presence (Garrison, Anderson, & Archer, 2001).

Faculty Roles

The faculty role in cognitive presence is difficult to separate from that of teaching presence, so perhaps reviewing the student-focused definition of cognitive presence again will be helpful. Recall that Garrison's (2007) definition involved "the exploration, construction, resolution and confirmation of understanding through collaboration and reflection in a community of inquiry" (p. 65). Here the faculty role relates to cognition as well, and is one of monitoring the discussion, reflecting on students' posts, and devising responses that will validate, encourage, and move the discussion forward. This occurs via facilitative strategies and perhaps direct instruction that falls under teaching presence, which is discussed in the next main section (Teaching Presence).

The role faculty plays in creating the *triggering event*—the discussion questions or cases—cannot be overemphasized, for it is the type and level of questions that will engender a certain level of response and will determine the type and depth of learning that will occur. Developing engaging discussion questions or cases that not only help to assess the objectives, but also provide context and content that lead to coconstruction of knowledge become the main source for learning and assessment. Even in discussions in which students will lead, faculty should be involved in developing the discussion question or problem—the triggering event—so that it contributes to assessing the course objectives. Chapter 7 is devoted to the process of writing these high-level discussion questions and Chapter 6 to writing cases.

During the exploration phase, faculty's role is to simply lurk in the background of the discussion, observing the direction the discussion is taking, at least until all students in each small discussion group have posted initially. If faculty intervene too early, they risk hijacking the discussion

with students developing expectations that faculty now have the lead in providing answers and direction. This is a time when faculty should sit on their hands, so to speak, and simply observe or what is referred to as *lurk* in the discussion.

During the integration and resolution phases, teaching presence takes over. At this juncture, the role of faculty is to monitor the quality of the discussion and be sure students progress through the three subsequent stages of the critical inquiry process, remain on topic, and stay on track to achieve the desired learning outcomes. Skillfully facilitating the discussion as it progresses becomes a balance of lurking, posing probing questions, asking for clarification, teaching directly when needed, and providing encouragement. Knowing which strategy to use is discussed in Chapter 11.

Student Roles

As mentioned earlier, the definition of *cognitive presence* describes what the learner will do, which relies somewhat upon faculty's ability to facilitate the process. The roles students play in cognitive presence can be seen as aligned with the ideas of Shea and Bidjerano (2010), who have conceptualized a fourth element of the COI, that of learning presence.

In order for students to explore, construct, resolve, and confirm understanding, they must have some level of skill to self-regulate, which requires planning, monitoring, and reflection, as well as metacognitive and motivational strategies. Students in any given online course will, of course, vary in these skills, but the nursing students most likely taking online courses—RNs seeking a bachelor degree in nursing or enrolling in a graduate program—have already demonstrated these skills to some degree. Thus, an interdependent role of students and faculty plays out in online discussions.

TEACHING PRESENCE

Teaching presence has been defined as “the design, facilitation, and direction of cognitive and social processes for the purpose of realizing personally meaningful and educationally worthwhile learning outcomes” (Garrison et al., 2007, p. 163). Teaching presence is comprised of the three categories listed in Box 10.3. Although this definition is teaching-focused, it is not necessarily teacher-focused. Elements of facilitating discourse and direct instruction are not restricted to faculty assigned to teach the course. Students can, and often do, take on these roles (Garrison et al., 1999).

BOX 10.3 CATEGORIES OF TEACHING PRESENCE

1. Instructional design and management
2. Facilitating discourse
3. Direct instruction

Faculty Roles

Instructional Design and Management

Research has shown that providing clear and consistent course structure is the most reliable predictor of successful online courses (Garrison & Arbaugh, 2007). *Instructional design and management* encompasses planning activities before the course begins and throughout the duration of the course. Precourse design includes (a) structuring the course by identifying outcomes (course objectives), assessments, and teaching strategies (Backward Design, Chapter 3); (b) organizing the online course management system (Chapter 12) so it is intuitive, aligns with the course syllabus, and navigation does not interfere with learning; and (c) assuming leadership in organizing faculty if the course is cotaught. From an instructional design perspective, management during the course involves continual monitoring and rapid response to unanticipated technical problems. After the course is completed, grades must be posted, and both students' end-of-course survey results and faculty's reflection on the course itself must be considered in terms of identifying potential areas for revision before the course is taught again.

Facilitating Discourse

Facilitating discourse is the process of guiding students through the four phases of the critical inquiry process (Garrison et al., 1999), shaping the discussion without being at the center of it, and ensuring that outcomes are met through indirect and unobtrusive assistance. In this definition, the words indirect and unobtrusive are key. *Indirect* differentiates facilitation (taking the role of guide) from that of direct instruction in which information or the answer is given. Guidance can be provided in the form of a probing question, linking content together, or connecting the ideas in two or more student's posts, all done with the intention of allowing students to *uncover* the right path or information (see Backward Design, Chapter 3). The term unobtrusive speaks for itself and what it implies has been mentioned previously. Faculty's role in discussions must remain fairly transparent.

I think the term *catalyst* applies here in that faculty's role should be that of moving the discourse forward without taking control or really being noticed. Facilitation, I believe, is an art that can be learned. Specific facilitation strategies are discussed in Chapter 11.

Direct Instruction

Direct instruction occurs when faculty "provide intellectual and scholarly leadership and share their subject matter knowledge with students" (Anderson, Rourke, & Garrison, 2001, para. 25). This can be accomplished by using techniques from the cognitive apprenticeship model of Collins, Brown, and Holum (1991) such as modeling, scaffolding, fading, and coaching. Chapter 2 discusses the model in greater detail.

Direct instruction can also be delivered by lecture in addition to and outside of the discussion. Suffice to say that lengthy, content-laden lecturing does not translate well to the online environment. Mini lectures have a place when teaching online to cover important or complex topics, but should be short and to the point. Carefully crafted discussion questions in which students can *uncover* the knowledge and understandings through collaborative discussions, independent research, and reflection, mindfully facilitated by faculty will allow most content to come to light, especially if faculty are guided by the cognitive case map for the discussion (see Chapter 6).

According to Garrison and Arbaugh (2007), the timing of feedback and whether facilitation or direction instruction is employed is of utmost importance to meeting students' needs. Knowing when to facilitate and when to teach will come with online teaching experience. Facilitation, in my opinion, encourages construction and coconstruction of knowledge more effectively than direction instruction *unless* the student has entered his or her zone of proximal development, and it is obvious that asking the student a probing question will not help. When sensing students' frustration, it is essential that the emotion is recognized and faculty voice their understanding and willingness to help in order to calm them and provide customized direction to help them move forward and learn.

The frequency of facilitation or direct instruction in an online discussion is a rather hot topic in educational circles. By frequently and consistently reviewing students' posts and posting at fairly regular intervals, faculty will let their presence be known without taking over the discussion. This topic is discussed in greater detail in Chapter 11.

Student Roles

Although students typically are not given a role in course design, asked to coteach unless assigned to facilitate a discussion, or expected to direct

cognitive and social processes, these activities sometimes naturally occur. Nursing is such a heterogeneous profession that I am continually amazed at the variety of nursing roles and the vast years of experience of some of my students. Reading their introductions at the onset of the course is often enlightening—and sometimes intimidating. Nursing is frequently a second career choice; thus, students taking an online graduate course may already hold an advanced degree in another field. Also, some students have decades of nursing experience in a variety of roles, whereas others have just graduated with a BSN. Both novices and experts could and most likely will be in the same course and in the same discussion group. I mention this because it is relevant, as students can inadvertently take on elements of teaching presence when it is not a part of your course plan, such as suddenly taking over and leading a discussion.

Students will often pose a probing question in the discussion in response to something another student had posted. Although this will often move the discussion forward or expand it, sometimes it becomes a tangent—a road you do not want students to go down—as it is not a desired outcome of the discussion. Also, students may occasionally provide answers to questions posed by faculty or another student that instead of continuing the dialogue stops it in its tracks. This may be a situation in which direct instruction was used when facilitation would have been a better approach. Responding to these attempts to promote knowledge and encourage discussion will require a fair amount of finesse on your part to remedy the situation without offending or embarrassing the student involved. Sometimes simply redirecting the discussion by asking students to postpone discussion on a topic or mentioning that you would rather have them focus their attention on another aspect is sufficient. And, sometimes a private e-mail to the well-intended, yet offending, student is required.

INTERSECTION OF THE PRESENCES

Although the three types of presence—social, teaching, and cognitive—can be discussed as separate entities from a theoretical perspective, they are intertwined in practice. Clearly, some level of social presence in terms of comfort with one another must be established in order for students to feel safe putting their thoughts out in the open in a discussion for critique. Faculty can help to make the learning space feel safe through open and honest communication, providing clear expectations of students, and becoming a real person in the students' eyes by sharing aspects of his or her life. Garrison and Arbaugh (2007) took the interaction of the presences a bit farther, describing the relationship among all three: "Social presence lays the groundwork for higher level discourse; and the structure, organization, and

leadership associated with teaching presence creates the environment where cognitive presence can be developed” (p. 163).

THE TAKE-AWAY

The COI model provides the framework for online course design as well as guidance for faculty to help students reach the desired learning goals. Inherent in the model is the idea that both students and faculty can take on the three types of presence, creating somewhat of a dance of teaching and learning.

REFERENCES

- Akyol, Z., & Garrison, D. R. (2011). Understanding cognitive presence in an online and blended community of inquiry: Assessing outcomes and processes for deep approaches to learning. *British Journal of Educational Technology*, *42*(2), 233–250.
- Anderson, T., Rourke, L., & Garrison, D. R. (2001). Assessing teaching presence in a computer conferencing context. *Journal of Asynchronous Learning Networks*, *5*(2), 1–17. Retrieved from http://auspace.athabascau.ca/bitstream/2149/725/1/assessing_teaching_presence.pdf
- Collins, A., Brown, J. S., & Holum, A. (1991). Cognitive apprenticeship: Making thinking visible. *American Educator*, *15*(3), 6–11.
- Forrest, S. P., III, & Peterson, T. O. (2006). It's called andragogy. *Academy of Management Learning and Education*, *5*(1), 113–122.
- Garrison, D. R. (2007). Online community of inquiry review: Social, cognitive, and teaching presence issues. *Journal of Asynchronous Learning Networks*, *11*(1), 61–72.
- Garrison, D. R., Anderson, T., & Archer, W. (1999). Critical inquiry in a text-based environment: Computer conferencing in higher education. *Internet and Higher Education*, *2*(2–3), 87–105.
- Garrison, D. R., Anderson, T., & Archer, W. (2001). Critical thinking and computer conferencing: A model and tool to assess cognitive presence. *American Journal of Distance Education*, *15*(1), 7–23.
- Garrison, D. R., Anderson, T., & Archer, W. (2010). The first decade of the community of inquiry framework: A retrospective. *Internet and Higher Education*, *13*, 5–9.
- Garrison, D. R., & Arbaugh, J. B. (2007). Researching the community of inquiry framework: Review, issues, and future directions. *Internet and Higher Education*, *10*, 137–172.
- Garrison, D. R., Cleveland-Innes, M., & Fung, T. S. (2010). Exploring causal relationships among teaching, cognitive and social presence: Student perceptions of the community of inquiry framework. *Internet and Higher Education*, *13*, 31–36.

- Janssen, J., Erkens, G., Kirschner, P. A., & Kanselaar, G. (2012). Task-related and social regulation during online collaborative learning. *Metacognition and Learning, 7*(1), 25–43.
- Palloff, R. M., & Pratt, K. (2007). *Building online learning: Effective strategies for the online classroom*. San Francisco, CA: Jossey-Bass.
- Price, C. (2010). Why don't my students think I'm groovy?: The new "R"s for engaging millennial learners. *Essays From Excellence in Teaching, 9*, 29–34.
- Roberts, D. H., Newman, L. R., & Schwartzstein, R. M. (2012). Twelve tips for facilitating Millennials' learning. *Medical Teacher, 34*, 274–278.
- Rogers, P., & Lea, M. (2005). Social presence in distributed group environments: The role of social identity. *Behavior & Information Technology, 24*(2), 151–158.
- Shea, P., & Bidjerano, T. (2010). Learning presence: Towards a theory of self-efficacy, self-regulation, and the development of communities of inquiry in online and blended learning environments. *Computers & Education, 55*, 1721–1731.