The Transition From Classroom to Online Teaching

Norma Cuellar, RN, DSN, CCRN

TOPIC. Online teaching.

PURPOSE. To describe the pedagogical transition that needs to be considered before putting a class online.

SOURCES. Published literature.

CONCLUSIONS. Advances in technology will continue to alter teaching strategies. The changing paradigm of online education needs further research to advance the science of nursing education.

Search terms: Nursing education, online strategies, online learning, pedagogy, transition

By 2002, 2.2 million college students will be taking online courses, an increase from 710,000 in 1998, and this number is predicted to continue rising by 30% annually (Tang, 2001). Presently, 84% of public 4-year institutions are offering online courses (Growth in Online Programs, 2001; Tang). Faculty and administrators are feeling pressure to meet the demands of students requesting online courses and to provide quality education in nursing programs across the country. Many faculty have stepped in to online teaching ill prepared, not knowing what is involved in the development and implementation of an online course, with negative outcomes for students and faculty. Converting a successful classroom course to an online course is a decision that has not proved to be a simple process.

The resources for faculty on the technological how-to's of online course development are readily available. However, there is a step to this process that is lacking—the pedagogy, or “art of teaching” online. The literature does not address the changes that faculty and administrators must undertake to make the transition from classroom to online courses. A smooth transition can allow faculty to become skilled online teachers, develop comprehensive online courses, enhance relationships with students, and decrease stress involved in the process. Administrators may benefit from a smooth transition with less conflict from students and faculty, successful outcomes, positive program evaluations and some financial gains.

For the purpose of this article, a classroom course is defined as the traditional normative teaching style in which students sit in a room and listen to a teacher, with face-to-face interactions. An online course is defined as one that is taken through a Web-based learning platform using interactive teaching strategies. This involves no face-to-face interaction with classroom time, with students doing course work at a place and time convenient to the student.
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Theoretical Principles of Online Teaching

Andragogy. The differences in classroom courses and online courses can be applied to andragogical principles of learning. Andragogy describes a self-directed learning theory easily adaptable to online teaching and learning (Knowles, 1992). In andragogy, the learner qualifies as being an "adult learner" when the learner becomes self-directed in learning (not associated with age) (Knowles, 1980). The assumptions are that students are self-directed, come with life experiences that are valued as educational experiences, are ready to learn because of life tasks or problems, and are motivated internally. Online education traditionally has been directed toward the self-directed, nontraditional, adult learner, and is synonymous with andragogical principles. This theoretical perspective differs from approaches used in many nursing programs, where the learner is dependent on the faculty, the experience of the student is gained in the curriculum, readiness to learn is uniform by age and curriculum, orientation to learning is subject centered, and motivation is through external rewards and punishment (Gibbons & Wentworth, 2001).

Pedagogy. Before deciding to teach a course online, personal reflection and understanding of educational philosophies need to be considered. Online courses require specific strategies in presenting content, interacting with students, and evaluating completion of course requirements. The approach to teaching used by faculty will be decided by a personal philosophical belief about teaching and learning, as well as philosophy and tradition of the college and university.

Faculty may have a variety of teaching styles. Figure 1 describes 14 pedagogical concepts used in teaching and learning based on a continuum (Curtin, 2001). The right column of the continuum, consistent with online teaching styles, describes dimensions that require more student involvement and gives students more responsibility for their own learning. This description of learning has been described as students and faculty being colearners (learning from each other), previously termed "emancipatory learning" (Bevis & Watson, 1989). Cur-

Figure 1. Pedagogical Dimensions

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Range of Pedagogical Styles</th>
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<tbody>
<tr>
<td>Epistemology</td>
<td>Objectivism → Constructivism</td>
</tr>
<tr>
<td>Pedagogical philosophy</td>
<td>Instructivist → Constructivist</td>
</tr>
<tr>
<td>Underlying psychology</td>
<td>Behaviorist → Cognitive</td>
</tr>
<tr>
<td>Goal orientation</td>
<td>Focused → Unfocused</td>
</tr>
<tr>
<td>Experiential value</td>
<td>Abstract → Concrete</td>
</tr>
<tr>
<td>Teacher role</td>
<td>Didactive → Facilitative</td>
</tr>
<tr>
<td>Program flexibility</td>
<td>Teacher proof → Easily modifiable</td>
</tr>
<tr>
<td>Value of errors</td>
<td>Errorless → Learning from experience</td>
</tr>
<tr>
<td>Motivation</td>
<td>Extrusive → Intrinsic</td>
</tr>
<tr>
<td>Accommodation of individual differences</td>
<td>Nonexistent → Multifaceted</td>
</tr>
<tr>
<td>Learner control</td>
<td>Nonexistent → Unrestricted</td>
</tr>
<tr>
<td>User activity</td>
<td>Mathemagenic → Generative</td>
</tr>
<tr>
<td>Cooperative learning</td>
<td>Unsupported → Integral</td>
</tr>
<tr>
<td>Cultural sensitivity</td>
<td>Nonexistent → Integral</td>
</tr>
</tbody>
</table>
ently, educators refer to many of these definitions as interactive learning principles, also used in adult learning theories. Faculty must be comfortable with these teaching styles in order to develop and teach successful online courses.

Disparity in generations. Much has been documented in the literature about differences in generations in knowing and learning. How faculty learned in their basic education is often the most comfortable way for faculty to teach. This presents a disparity in teaching methodologies by generations. The nursing education workforce is aging. In 1997, the average age of full professors of nursing who might soon be retiring was 55 years, and the average age of assistant and associate professors was 49 (American Association of Colleges of Nursing, 1998). The baby-boomer educators have certain styles and strategies used for teaching; the majority of students are in their late teens or early 20s. Many young people are choosing nontraditional education to start and advance careers. Almost half of Generation X and Nexter students consider taking courses online (Tang, 2001). A dichotomy develops between how comfortable nursing faculty feel teaching and how the younger generations want to learn. Table 1 describes the differences in how generations teach and learn (Codrington, 1997).

Steps in the Transition

How to transition. Faculty may question whether a course being taught should go online. Two things must be considered: (a) The vision of the course, and (b) the process or the transition from the classroom to the Web.

Table 1. Generational Differences in Teaching and Learning

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<thead>
<tr>
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<tbody>
<tr>
<td>Age range</td>
<td>56–75</td>
<td>40–55</td>
<td>24–40</td>
</tr>
<tr>
<td>Nursing workforce</td>
<td>Average age of full nursing professors (currently retiring faculty)</td>
<td>Majority of faculty (average age of nursing faculty)</td>
<td>Some students, future students, future faculty</td>
</tr>
<tr>
<td>How did they learn (basic education)?</td>
<td>Classroom, chalkboard, emphasis on concrete learning, multiple grades in one class, limited telephones, radio as media, no computers</td>
<td>Classroom, films, segregation by race/education/sex, conceptual knowledge, telephones, tape and audio as media (8-track tapes), microfiche, mainframe computers, challenge everything</td>
<td>Classroom, beginning of Internet access, multimedia (color, sound, interactive activities), CD-ROMs, databases, personal computers, secondary education seen as tertiary rather than end (lifelong learners)</td>
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Table 2 identifies some questions faculty need to consider in this decision process (Palloff & Pratt, 2001). Implementing true principles of adult learning will assist in the transition to online learning. Curtin (2001) identifies three levels of transition from classroom to online classes: transfer, translation, and transformation.

Transfer. During the transfer period, faculty must consider many ideas before planning the course. The behaviorist method of teaching by concrete objectives should be restructured toward a more cognitive approach. Faculty members will move from a didactive teaching role to a facilitative role of learning. Faculty must decide how the content that has been developed in the classroom will change for online materials. This includes how lecture notes or audiovisuals (e.g., PowerPoint slides) will be published, how students will communicate with each other and with faculty, and how tutorials and multimedia will enhance the online course. Interactive activities such as online scavenger hunts, guided research, guided analysis, case studies, role-playing, and group critiques should be considered to keep learning stimulating and fun, motivating the student intrinsically (Horton, 2001; Wilson, 2001). Flexibility of the course also should be decided in relation to due dates of assignments, attendance, time spent in the course, and test-taking issues.

The transfer time period is often the most labor intensive (up to 6 months). Much like the planning phase of a research project, this transfer period requires faculty to begin the process of self-education, application of learned materials, and extensive searches of materials that can be used with Internet access. The creativity and talent of a faculty member will be challenged during this stage. Artistic expression of teaching can be used in online learning with the benefits of audiovisual materials such as movie clips, videos, music, pictures, and animation—all activities that younger generations thrive on. Multifaceted activities are encouraged to accommodate different learning styles of students. Cooperative learning is enhanced through online communication efforts. It may take up to two to three times longer to develop an online rather than the traditional course, depending on how much of the course has been developed for classroom or if the course being taught is new. Table 3 reviews questions that may be helpful during the planning period. It is strongly recommended that a faculty member take an online course before teaching one.

Translation. During translation, a trial time is used to determine if activities planned for the online course will work, and these activities are tested in the traditional classroom. The class can now be called a hybrid or Web-enhanced course—a course that offers a combination of face-to-face classroom meetings and Web-delivered online strategies. Students may give feedback on the workload and activities as well as the technological evaluation of the platform and hyperlinks.

Transformation. Transformation begins when materials are placed on hypertext Web modules. This process is technologically challenging and time-consuming, taking up to 3 to 6 months to complete. Collaborative efforts with university technological resources are needed in this stage. In Web-

![Table 2. Questions to Consider Before Going Online](image)

- Who are my students? Are they expected to have online/technological competencies?
- Can I accomplish what I want by teaching the class online?
- Will the content of the course support online learning?
- Can the course objectives be met through online learning?
- Will this course successfully transfer from face-to-face classroom to Web-based course?
- Can I deliver the content that promotes online learning using multimedia, interactive learning styles?
- Do I feel comfortable using collaborative learning, personal interaction, and promotion of adult learning principles?
- Am I a facilitator of learning? Can I let go of the traditional teacher role and release “control” of the classroom?
- Can I develop my own course?
- Have I decided how students will be evaluated in the Web-based course?
- Can the requirements of the class be explained in the syllabi, including attendance requirements, rules, and roles?

Source: Adapted from Palloff & Pratt, 2001.
Table 3. Questions to Ask at the Planning Stage of Online Course Development

- What platform will I be using?
- What classes are available to me to learn about the platform?
- Whom can I go to on campus to help me with the development of my online course? What do I know about online education? How much education do I need to know before I can develop a successful online course?
- How will I structure my course? (in modules by topics, by chapters from a textbook, in weekly format)
- What copyright permission must I obtain to use materials in my course?
- How will I communicate with students, making it a social environment? Will I use chat rooms, bulletin boards, forums, e-mail?
- What interactive assignments can I include? What will I need to develop? What can I find online that will support interactive assignments? What interactive assignments will I need to pilot in a hybrid course before going online?
- What have other people done in a course like this that can be interactive?
- What assignments will I require? How will the students turn them in?
- What will be required or optional in relation to attendance?
- How will I set up exams?
- How will the course be evaluated? Internal and external evaluations

Interactive learning is essential for the course to be successful. Demonstrations may be experienced through interactive simulation, often more valuable than classroom exhibitions. Learning resources can be hyperlinked easily to resources unimaginable in a classroom setting. Questions and answers may be promoted through bulletin boards, chat rooms, listserves, or private e-mails between student/student or faculty/student. Many students may feel more comfortable asking questions online, which removes barriers that may be perceived in a traditional classroom.

Distinction in course syllabi. Information in the online course syllabus (not included in face-to-face classes) must include additional information like computer requirements, where students go for technological help, whom students contact for assistance, communication options (e-mail, discussion groups, listserves, chats, bulletin boards), proctor testing requirements, learning

Table 4. Pros and Cons of Online Courses

<table>
<thead>
<tr>
<th>Pros</th>
<th>Cons</th>
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<tr>
<td>Interaction with students</td>
<td>Cost: time in development, programs, training</td>
</tr>
<tr>
<td>Flexibility for students</td>
<td>Putting responsibility of learning on student</td>
</tr>
<tr>
<td>Freedom to communicate without barriers</td>
<td>Technology</td>
</tr>
<tr>
<td>related to age, race, or sex</td>
<td>Equipment</td>
</tr>
<tr>
<td>Can meet all learning styles</td>
<td>Computer knowledge</td>
</tr>
<tr>
<td>No geographical barriers; saves time</td>
<td>Lack of support for online learning and teaching</td>
</tr>
<tr>
<td>Global access. Latest up-to-date information</td>
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<tr>
<td>Personalized learning</td>
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<tr>
<td>Collaboration and interactions among students</td>
<td></td>
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<tr>
<td>Instantaneous or delayed communication</td>
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materials specific for online learning, resources available, library resources/assistance, frequently asked questions, and specific expectations of students related to technology. Links can easily be accessed for students to reach needed resources, like a “help” Web page, library resources for distant learning, university offices, and faculty directories. Using adult learning principles, students want to be directed what to do without unnecessary information to confuse the process.

Without their concerns being addressed, discussed, and decisions made in writing, faculty may be leery of taking on the venture of online course development.

Learning platforms. Faculty must be knowledgeable about educational platforms that support online learning, like WebCT and Blackboard. Platforms have a variety of tools to help faculty organize the online course. Calendars can be used to assist with course requirements, due dates, exams, and schedules. Online examinations are available in the learning platforms. The platforms will immediately give students grades and averages as programmed by the faculty. Faculty easily may average student grades, immediately grade exams, and perform item analysis for test construction. Using the learning platforms appropriately may facilitate communication with students, which is imperative (Cuellar, 2001). These things must be thought about and planned in advance. Students from Generation X and the Nexter Generation appreciate the variety of learning media that many platforms provide, meeting the learning needs of this generation. The younger generations also appreciate prompt feedback when handing in assignments or taking tests, both positive features of online learning.

Problems. The teaching of online courses is still in its infancy, especially in many nursing programs. In the classroom setting, faculty are comfortable with the routine of beginning a course and know what to expect in relation to problems that arise. This is not the case with online courses; many problems will arise. It is expected that students will have problems logging on, technology problems will occur, hyperlinks may not work, and assignments may not get posted correctly. As online educators, faculty must be aware of these problems and be prepared to troubleshoot them. A proactive faculty member, organized and prepared, will be able to handle these situations without reacting to them. The attitude of the faculty member is critical in the evolution of crises that may arise.

The first 3 to 4 weeks are considered the “panic stage” of a Web-based course, much like a regular course. Not only are the students going through new-semester jitters, but they also have to learn how to navigate a learning platform that may be unfamiliar to them. Students new to online courses will not know what to expect, so anxiety may be heightened. Again, faculty communication is imperative during this time, displaying a proactive, calm, supportive, flexible attitude. Organization of the course will help alleviate some of these issues.

Faculty Concerns

Many faculty concerns exist that hinder the progression of colleges to teach courses online. Without these concerns being addressed, discussed, and decisions made in writing, faculty may be leery of taking on the venture of online course development. Questions concerning workload are often a big concern, including time developing a course and teaching the online courses. It may take 6 to 12 months to develop a quality online course. Some colleges give release time while the course is being developed; others give the release time the first semester the course is being taught. Unfortunately, some colleges give no release time. Faculty may spend at least double the amount of time they would if teaching the same course in a traditional classroom setting.
Incentives should be given to reward faculty for being progressive in their scholarship of teaching. Stipends or developmental fees could be given to faculty for their efforts. Some faculty are willing to put courses online but need faculty development. Faculty development should include not only the technological how-to's but also the education on how to develop courses and strategies to promote interactive online learning. Colleges and universities committed to online teaching should provide opportunities for faculty to learn how to be excellent scholars by providing classes through the university or giving financial support to faculty who wish to attend courses to assist in the development of online teaching and learning.

Evaluation of online courses should be a priority. It is at this time that evaluations are imperative to determine improvements and ensure quality of courses being delivered. Evaluations should be internal and external. Internal evaluations come from students and faculty who are involved in the course. Students evaluate the course, the faculty, as well as the technological support that the university offers. Faculty course evaluations should include the student’s perceptions of the course and the response to online learning, which often may come through as negative outcomes in the evaluation of the course and faculty. External evaluations come from peers, technology resource center, and curriculum committees.

The scholarship of teaching an online course should be considered in relation to yearly faculty evaluations, promotion, and tenure. In the event that faculty choose teaching as scholarship (rather than research or service), online development of courses must be valued and respected as a scholarly activity as well as a specialty area in nursing education. Along with this, the impact of annual evaluations must be agreed on. If a faculty member is dedicating an increased amount of time to the development of online courses, this should be considered in the overall evaluation process.

Many faculty continue to fear that online courses will replace the need for traditional faculty in the classroom. This often causes conflict among faculty members. In reality, more faculty may be needed as online education expands. The ratio of faculty to online courses is less than the traditional classroom. It is advisable that no more than 20 students be in an online course to promote interactive learning. Classes of 20 or fewer promote interaction in chat rooms and dialogue on bulletin boards and forums; also, faculty interaction is enhanced. The need for online educators will increase as the demand for this teaching strategy grows. Flexibility of faculty members to be prepared to teach in both modalities is beneficial for all.

Course enrollment should not be competitive. Competition between online and classroom courses should be discouraged. An example of this may be a research course that is offered online and in the classroom. If there are enough students to have both sections, online and classroom courses could be offered simultaneously. Enrollment in courses can be capped to meet the minimum number of students. If there are not enough students, the teaching methodologies should be rotated each semester, research being taught online in the fall and in the traditional classroom setting in the spring.

University Concerns

Some of the issues of online courses that universities are dealing with include intellectual property, accessibility, usability, security, and privacy. There is much in the literature on these issues. Despite the fact that these issues have been discussed, few universities have policies to address them. Nursing education administrators should consider policies that can deal with these questions at the college level, including the constraints, demands, and administrative choices of the transition to online courses (Paulson, 1998). Constraints that limit the opportunity for online use include geographical issues, technological resources and equipment, workload of faculty, and the budget. The demands from students and faculty for online learning and quality programs also must be addressed. The community, faculty, staff, and students all should have input on the need for online courses. Administrative choices identify the who, what, when, and where of the online courses being taught,
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including how faculty development will take place and the technological support that the college will have. The budget, accreditation of courses, faculty workload, decisions on which courses go online, number of students in online classes, and scheduling issues should be decided by committees (curriculum or technology) or administration. Online teaching and learning will definitely fail without administration strongly supporting the program, addressing concerns of faculty and students, and overcoming barriers (Berge, 1998).

Future of Online Education in Nursing

No one really knows where online education will go. Will it bust or boom? A growing field, online course development cannot be ignored. Nursing cannot afford the luxury of simply maintaining the status quo in education with the traditional classroom setting. As educators, we must be progressive and continue to change as the market demands. The following implications of online education should be considered.

- Research in the design, implementation, and evaluation of online courses will be needed. What are the outcomes of online learning? How do students learn best? What are faculty needs in relation to online learning/teaching? What are faculty fears? How can we decrease the resistance that is felt? How does online learning affect NCLEX outcomes?
- Collaborative partnerships with other faculty, colleges, and universities will be necessary to avoid duplication of services. College and universities will be charged with the task of meeting the needs of the future student, who will be working in the ever-changing, technologically growing healthcare market. Developing online courses will be a collaborative team effort. Working collaboratively with other universities in the state or region to develop courses that can be academically accepted in other curricula would benefit students, faculty, and universities in relation to cost, time, and resources. Interdisciplinary collaboration also will be seen in a variety of health-related courses. This will allow students as well as faculty to network, a growing demand seen in students in Generation X and Nexters.
- Strategic plans will be used to plan the development of distance learning. A distance-learning plan should be included in strategic plans at the college and university levels. Where do you want your college of nursing to be in 5 years in relation to online learning? What will you need to get it where you want it to be (e.g., faculty education, technological resources, money, technological grants).
- Through online learning, critical thinking skills will be enhanced. These enhanced skills will promote independent learning, not rely on faculty to teach everything or spoon-feed them. As Generation X and Nexters, lifelong learning is expected; online education will be a practical way to meet this goal.
- Nursing programs will be versatile and flexible. A variety of online learning options will be used in curriculum design. Students will be able to select an assignment that fits their learning style and still complete course requirements. Being creative and productive will be a measurement of success in nursing programs. Learning will be controlled by the learner more than the faculty member. Motivation will be intrinsic for the student.
Faculty will reexamine the evaluation process for promotion and tenure in nursing education. The scholarship of online education will be valued and respected. Teaching and learning grants that are not research oriented must not be excluded as scholarship. Time investment to promote online education should be considered. The scholarship of education will be transformed to include online education considerations.

A balance of online and traditional classroom courses will be available to students. Students will have an option as to whether they want to get their degree totally online or partially augmented with online courses without having to go out of state for these degrees.

Technical training will be embedded in nursing curriculum for students and faculty. This training will be a seamless blend with the curriculum—simple and straightforward. Curriculum will be developed to address the different styles of learners, anticipate the needs of the learners, and provide integration of learning opportunities with a variety of technological skills.

Conclusion

It is obvious that advances in technology will continue to alter the nursing profession. The transition that faculty will need to make to provide online courses will become easier partly as a result of the experience of putting courses online and younger nurse educators who may be more comfortable with technological advances in education. The changing paradigm of online education in nursing needs further research to advance the science of nursing education.

Author contact: Norma.Cuellar@usm.edu, with a copy to the Editor: juall46@bellsouth.net

References


