A. Distance Learning:
The Future is Now

The advent of Web-based communication opened a new world of possibilities for education. Technology has enabled innovations in teaching and learning that not too many years ago may have seemed like futuristic fantasies.

Distance learning has one simple and critical defining feature: That teacher and student NOT be face-to-face (AACN, 1999). With continuing advances in communication technology, faculty can map out learning experiences and give feedback to students without face-to-face encounters. Distance learning shows promise as one means to address the nursing shortage and the nursing faculty shortage – by offering courses in which students and faculty can participate remotely and on a more flexible schedule than on-campus courses permit. It helps to “fight the brain drain from rural areas” (AACN, 2000).

For students who seek practicum experiences, distance learning affords the possibility of securing a practicum site close to home, or perhaps at a facility that is distinguished in the student’s particular specialty, without regard to the proximity of the practicum site to the campus. Faculty can call upon guest preceptors who might be located anywhere in the world.

Examples of distance learning opportunities for nursing students abound. Neuman (2006) describes technologically enhanced faculty roles at the University of Maryland, the University of Kansas, Walden University in Minneapolis, the University of St. Francis, and a cooperative program between Villanova University and the National League for Nursing. She cites a statewide consortium in Oregon which includes shared curricula, simulations, and distance learning activities, and one in Wisconsin in which sixteen technical colleges share a curriculum and offer an online option for completing course work. She states that faculty may function as “learner case managers” when they communicate with clinical preceptors only by electronic means.
Web-based instruction has come into wide use, but other tools support distance learning as well. Some examples include:

- Expanded features of web-based Learning Management Systems (LMS)
- Cellphone enhancements
- Personal digital assistants (PDA)
- E-games
- Virtual reality
- Electronic healthcare delivery
- Audioconference by telephone and audiocassette tape
- Videotaped instruction
- Courier service
- Electronic mail
- Telex
- Mixed computer media – CD ROM, floppy disks, Internet list-servs, interactive TV, desktop videoconferencing

Some credit the work of pioneering educators at Frontier School of Midwifery and Family Nursing/Community-based Nurse Midwifery Education Program (FSMFN/CNEP) with starting the trend in 1989 that has led APN education into the 21st century (Haas, 2000; Osborne, Stone, & Ernest, 2005). The NONPF Guidelines for Distance Learning in Nurse Practitioner Education reports a survey found that more than 100 masters-level Nurse Practitioner programs offered distance learning. Results showed great variability among survey respondents in development and monitoring of student clinical experiences (NONPF, 2005). More than 40% of respondents indicated that clinical evaluation was adequate in their distance learning arrangements, but could be improved. Respondents varied in their practices regarding requiring students to return to campus, selecting and evaluating clinical sites, and evaluating clinical performance. Today, most masters-level programs in nursing offer distance learning options and allow completion of core courses online. Taken from a personal communication with D. Billings, (June 2007). Learning outcomes have been demonstrated to be comparable to traditional methods (Baldwin & Burns, 2004; Cooper, Taft, & Thelan, 2004; Larsen, Logan, & Pryor, 2003).
Technological developments continuously create new possibilities in distance learning. Costs are coming down to some extent, but initial implementation still requires significant expenditures of funds and resources. The expansion of distance learning raises concerns about competition among institutions of higher learning for both students and faculty, since geographic boundaries do not limit affiliation possibilities. Concerns also arise about the funding implications of virtual universities and state funding. Some express concern as to whether distance learning gives sufficient opportunity to develop the social and behavioral skills essential in our humanistic, practice-oriented discipline (AACN, 1999). State guidelines, such as Texas’s requirement of a maximum of six students per clinical graduate course, may need reconsideration given the possibilities that distance learning presents (Baldwin & Burns, 2004). However, no one questions that institutions that offer flexibility enjoy a favored

A few basic distance learning terms . . .

In synchronous distance learning experiences, all students and course faculty participate together at a pre-arranged time. The format may be student presentations with questions and answers, round robin discussion of a topic or case, or other learning activity. The learning experience may take place online with or without audio capability, as a telephone conference, a video conference, or other form of electronically-mediated conference. The key feature is that all participants engage in the conference at precisely the same time. Often, courses feature certain synchronous activities, such as a weekly conference, and also include asynchronous activities.

Asynchronous learning experiences include communication among students and between students and faculty, but the communication does not occur in real time. Instead, students and faculty post items at intervals. Postings include announcements by faculty, assignments posted by students, response to discussion threads by both students and faculty, and other communications. In most asynchronous learning experiences, the faculty member enters the online course at least daily and students may enter a few times weekly. However, the structure and expectations of particular courses may vary the frequency of postings by students or faculty. When students and faculty enter the course they read the postings, e-mails, responses to discussions, and other communications posted by those who are participating in the course. They also respond to postings and post items of their own.

Blended learning approaches may include any combination of synchronous, asynchronous, and face-to-face learning situations.

Learning Management System (LMS) – The LMS is the platform upon which the Web-based learning course is built. Systems typically include communication tools, forums for posting assignments and discussion threads, a grading system, various tracking features, and the opportunity for the faculty to create various learning activities. Some of the LMSs frequently used in nursing education include Blackboard®, WebCT®, and eCollege.com®. Some universities have created their own unique LMSs, such as Indiana University’s Oncourse®.
position in the marketplace (AACN, 2005).

Because the distance-learning student functions in relative isolation, the students who succeed best are highly motivated, disciplined, and committed. Adequate support systems for students and faculty are crucial to effective distance learning.

Organizations which accredit nursing education programs, the National League for Nursing (NLN) and the American Association of Colleges of Nursing (AACN), stress the importance of both clinical and technical competency, and develop standards and criteria to help assure quality in distance learning. The National Organization of Nurse Practitioner Faculties (NONPF) has developed guidelines that among other recommendations urge that faculty apply the same standards to both distance and on-site learning experiences.

B. A Sampling of Distance Learning in Nursing Education

Most schools of nursing offer distance learning options. Fewer clinical courses are available online than courses that have no clinical component. Many graduate programs offer all of their core courses online. However, schools must consider many issues when designing clinical courses in a distance learning format. Concerns include malpractice and contractual issues from the school’s point of view, and travel issues related to meeting the off-site preceptor in person and gaining a first-hand understanding of the preceptor’s practice setting.

In the nursing literature, faculty are describing many examples of distance learning, but to date, few authors have concentrated upon the ingredients of successful, effective preceptorship-at-a-distance. Now is the time for faculty involved in these experiences to publish and share their research findings, lessons learned, and recommendations.

A few distance learning examples selected from the literature include courses with no clinical component, such as:

- A Clinical Enquiry Course in New Zealand (Lewis & Price, 2007)
  A Masters Programme in New Zealand introduced a course, Clinical Enquiry: Evidence for Practice, which blended classroom experiences with e-learning. The course presented background questions regarding specific content and critical appraisal of research articles. Students were provided with tutorial support, technical support, structured content, online journals, quick links, and a library catalogue. Students were required to contribute to online discussion, participate actively, and collaborate with one another. As the course progressed, the students’ potential concern over public mistakes dissipated. The blended format offered students an opportunity to strike a realistic balance between personal and professional commitments; however some found the postings overwhelming and daunting. One-third of the students did not like the e-learning format and the mature students experienced considerable technical difficulties.
• A CNS Expert Panel (Owens, Jacobson, Hughes, & Thornton, 2005)
Kent State University offers most of its non-clinical CNS courses online. The faculty authors presented students with an opportunity to explore beyond parochial points of view and gain access to specialties and CNS role issues outside of the region. They created an online panel with five expert CNSs, “cyberspace adjuncts,” who represented different regions of the country and different specialties. Themes discussed included certification and title protection, developing a career trajectory, tips on interview and negotiation, current and future trends in the CNS role, and issues such as the blended CNS/NP role.

Recommendations included: keep the format simple, focus on communication and participation, set a timetable and hold students accountable for contributions to the discussion board and for reading and responding to postings of others.

• Post-Graduate Certificate Programs at Loyola University Chicago
The Marcella Niehoff School of Nursing offers certificate programs for post-baccalaureate nurses and other health professionals looking to advance their knowledge and skills in their practice areas or to expand their career options. Post-master's nurse practitioner certificate programs are also available for those master's-prepared nurses who wish to gain needed content expertise to prepare for a nurse-practitioner national certification examination. Specialty areas include: cardiovascular nursing; oncology; acute care; adult, family, women’s health NP; health systems management; and population-based infection control and environmental safety (PICES).

A few distance learning examples selected from the literature include clinical courses taught via distance learning, such as:

• A Nurse-Midwifery Program (Osborne et al., 2005)
All courses in the Midwifery Institute of Philadelphia, formed by the union of the Institute of Midwifery, Women, and Health with Philadelphia University, are offered via a Web-based format and are completed asynchronously.

• A Medical-Surgical CNS Program (Baldwin & Burns, 2004)
The authors described the process of designing and implementing a Med-Surg CNS program at Texas Christian University (TCU). They explain their choice of a LMS and their use of electronic learning resources including electronic library services via personal digital assistants (PDAs). Library services included online databases, e-journals, and interlibrary loan.

TCU’s program emphasized preparation for distance learning including a mandatory on-campus orientation for students, which was the only on-campus time required. They prepared preceptors using the first edition of this book, and required preceptors to orient with faculty. Faculty visited the preceptors once per semester. They also emphasized the importance of academic support services.
They found that socialization was a great plus for the students, in that they interacted significantly with facility personnel. Other strengths of their program included the professional role models available in the selected settings, environmental support for learning, and very positive overall evaluations. A major impediment to their progress was a time lag of up to 6 months to complete negotiations of agreements with their preceptors’ facilities. When the first cohort of seven students graduated, all received the job of their first choice and most received multiple job offers.

- **An APN Program in Southeastern Louisiana** *(Larsen et al., 2003)*

Four regional state universities in Southeastern Louisiana collaborated to increase access to educational opportunities in advanced practice for the location-bound RNs. Their distance learning format included videoconferences, computer-assisted instruction (CAI) modules, interactive discussion groups, e-mail, and Web-links. They redesigned a course that had consisted of 12 didactic lectures and a clinical component. They created five videoconference sessions, six online learning modules, and one virtual chat. The format gave students additional practice with formal presentations.

The authors identify thirty-seven performance behaviors in direct and indirect care. They oriented preceptors to their role expectations and to the evaluation tool. A close relationship between student and preceptor was critical to success in the course. Preceptors gave the students entrée to interact fully with the CNS network.

Students experienced initial timidity due to lack of face-to-face contact, but this diminished as the course continued. Some experienced technical difficulties when home computers lacked adequate capacity, or computer networks in the work settings had security measures in place that interfered with access to certain course components.

Southeastern Louisiana University also blends asynchronous with synchronous approaches such as videoconferencing in their health assessment and pharmacology courses *(AACN, 2000).*

- **Masters and Doctoral Programs from the University of Phoenix**

The University of Phoenix offers both masters and doctoral programs in fully Web-based formats. Three-fourths of University of Phoenix students reside outside of Arizona *(AACN, 2000).* “The University of Phoenix offers the MSN program on-ground and online. The practicum course consists of 60 hours in which the student is required to submit documentation and evidence of the practicum experience through a learning contract. The learning contract is reviewed and approved by the faculty members for appropriate level of objectives and evaluation of the identified project. For students who are taking the online modality, a local preceptor is identified by the student. The faculty member gives the student permission to utilize the local preceptor. Students are responsible for providing the preceptor with the learning objectives, the learning contract, and an overview of the intended project. The faculty member touches base with the student during the 60 hours and prior to the formal presentation of their practicum experience through the online classroom environment. Communication between faculty and student, student and preceptor, and faculty to
preceptor is done electronically through e-mail and as frequently as needed. The faculty is responsible for the evaluation of the student experience” (P. Fuller, personal communication, 2007).

Two key precepting activities, conferencing and questioning, take place in written form. “Conferencing is achieved by the written word through the online environment. The advantage of conferencing by the written word is that the preceptor and the student have an opportunity to reflect on their communication, give thoughtful insight to the communication, and research relevant material before hitting the ‘enter’ button. Faculty and preceptors frequently state that they communicate more frequently with students online than in person, sometimes daily. Questioning, occurs in distance learning in many ways: discussion questions, threads, dialogue, chat groups and chat rooms. Expert faculty or preceptors learn to ask the probing questions that get to the essence of the learning” (P. Fuller, personal communication, 2007).

C. Advantages and Concerns in Distance Learning

Cooper et al. (2004) compared clinical conferences online with face-to-face clinical conferences. They found that mean scores for all 11 items on the clinical evaluation tool were higher for students who had conferences online than those in face-to-face conferences. Differences on four of these 11 differences reached statistical significance, reflecting greater convenience and participation for online. Students
experienced greater opportunities to reflect on ethical issues before responding.

In the study conducted by Cooper et al. (2004), students discussed three cases with imbedded questions and reported their thinking-in-action online after reflecting on their experiences. The use of e-mail allowed students to take time for reflection and thinking, and to process and clarify their thoughts before responding. The result was deeper and more diverse discussions in a more relaxed and informal communication style. Students who conferenced online chose the time to contribute and could therefore be more eager and energetic than their peers who were involved in face-to-face conferences.

Those who participated in the online conferences gave significantly higher ratings to “other students’ descriptions of their cases helped me learn.” Because all students in the online conferences were required to contribute, but those in the face-to-face conferences were not, students in the online conferences produced more indepth discussion. Students in the online group commented that they offered support to one other, learned from each other, and felt that they expressed their feelings openly.

Despite these advantages, Cooper et al. (2004) noted barriers to conferencing at a distance. Face-to-face conferencing is a familiar mode and some students missed the opportunity to evaluate nonverbal communication and receive immediate face-to-face instructor feedback. For students who lack self-discipline or are reluctant to accept independence and responsibility in learning, distance learning is difficult. Lack of familiarity with technology also presents a barrier – while students are oriented to the procedures they need to use, those who have more computer and Internet experience are better able to problem-solve and remain calm when glitches occur.
Strengths and Limitations of Distance Learning in a CNS Role Course

Larsen et al., 2003.

Strengths

- Decreased travel required
- Opportunity to know students on other campuses
- Enhanced ability to use technology in the workplace
- Expanded use of Internet and websites, which is helpful in the practice setting
- Greater ease with use of the Internet
- More self-motivated in completing individual modules
- Productive online interactions
- Videoconference discussions
- Rapid faculty feedback
- Ease of access
- Flexibility in completing modules
- Increased confidence in approaching future online courses
- Flexible time frames
- Opportunity to include a wider student audience

Limitations

- Need for orientation to courseware and mandatory practice
- Initial uncertainty of direction of online course
- Initial lack of face-to-face interaction with classmates
- Frustration with technological glitches
- Lack of everyone in one place at one time
- Discomfort when on camera and the feeling of “being on TV”
- Initial apprehension about own technological ability
- Fear that unstructured time might be used poorly and deadlines not met
- Preference to be in same room with faculty

Strengths and Limitations of Distance Learning in a CNS Role Course
Larsen et al., 2003.
D. Precepting at a Distance

When precepting a student who is engaged in a practicum course conducted in a distance learning format, your primary responsibility is to assist the student to begin to develop role competencies in your setting. Standards for the student’s performance and your relationship with the student should not differ from more traditional arrangements just because the student is distant from the campus, the faculty, and fellow students. However, we have a few special recommendations for precepting at a distance.

Establish a relationship with the faculty member and remain in communication throughout the course. Findings of a study of a continuing education course with a clinical component involving 20 faculty in 9 states underscored the need to monitor preceptor and student involvement (Souder, O’Sullivan, Staab, & Dobbins, 2005). The researchers identified “red flags” indicating risk for unsuccessful completion of the course: lack of interaction between faculty and preceptor, and absence of discussion by students online. They recommended that preceptors receive a video orientation to the course and that faculty and preceptors interact regularly.

• Receive orientation to the distance learning course. If the school does not require – or the faculty does not offer – an orientation, request one. You will gain insight into what the student experiences in the course. You may have suggestions that will enrich the learning experience for the student. The course may or may not include planned preceptor participation in conferences or other learning activities. However, you might wish to participate in a conference on a particular topic and faculty would likely welcome your expertise and perspective.

• Explore confidentiality issues with the student, talk through example situations, and assure that the student understands what information may be shared without violating confidentiality. Confidentiality is an ever present concern in student clinical experiences. In graduate student roles, students become privy to much private information about patients, professional colleagues, and staff.
members, as well as potentially politically sensitive organizational information. In the student role, students confer with fellow students and faculty members concerning the particulars of their practicum experiences. In face-to-face learning settings some information may be shared orally with a guarantee of confidentiality by fellow students and faculty. Even with the confidentiality guarantee, a student may wisely decline to share certain information. When conferences and discussions occur in an electronically mediated environment, confidentiality concerns become even more acute. In the online environment, students are creating written documents that may be subject to misinterpretation and unintended distribution. Help the student learn to contribute to conferences and discussions in a meaningful way without jeopardizing confidentiality.

- **Inquire about the student’s electronic communication with the faculty and other students.** It is not your responsibility to help the student troubleshoot technical difficulties. But, as pertains to the electronic communication requirements of the practicum, **do encourage the student to seek technical assistance early and often**, before frustration builds and the student falls behind. NONPF has recognized the potential for students to become marginalized in distance learning and has specifically recommended customer service at various levels of expertise. Mindful of the essential nature of technical support in effective distance learning, most colleges and universities have created accessible help services ready to respond in the affirmative to “Hello, hello, is anybody out there?”

- **If approached to precept a student who is also an employee in your work setting, consider carefully the possible implications and complications that can arise.** AACN (2000) recommends that students seek preceptorships in settings other than their work settings.

### E. Conclusion

This chapter has briefly summarized background information about distance learning in nursing education. The chapter identified examples of distance learning experiences and enumerated advantages and disadvantages of distance learning. The chapter concluded with recommendations to assist the preceptor who is precepting a student at a distance from the campus.
When precepting puzzles you…
or you have a question, just

Ask the Preceptor’s Preceptor

I’m really enjoying this student. She’s SO enthusiastic – just can’t get enough of working with my patients, my committees, and my projects. She’s even become involved in some committees and projects that I’m not working with. I get great feedback on her contributions. My concern is about her connection with the university. We’re located almost 1,000 miles away from the campus. We sure fit the concept of distance learning! She came here because of our research reputation and because she has family here.

Before the practicum began, I communicated with a faculty member via e-mail. She told me that there would be weekly synchronous conferences online in addition to required postings. She sent me a schedule of the conferences and topics. Somehow my student seems to manage to schedule herself to be doing other things at these conference times. I’m disappointed in that myself, because the faculty member said there might be opportunities for me to participate too and that really interests me.

When I ask the student about the conferences, she’s pretty consistent in telling me that what’s going on here in the medical center is more important to her and to her development in her role. She also says that the LMS that the school uses is too complicated and unreliable – that it’s not worth it.

I’m concerned about this because she’s a bright young woman and is doing a fine job as a novice in my role – BUT, I know that she’s not participating in the online portion of the practicum. The faculty member must know, and is probably not talking with me about it so as to maintain the student’s privacy and avoid biasing me against the student.

Where do I go with this?

A. Mind your own business. The student is performing well and you can report that when the time comes. This is not your problem.

B. Share your perceptions with the student. Tell her just what you have stated here, including your own interest in participating in online conferences.

C. Confront the student. As a preceptor-at-a-distance you have added responsibilities. You are supposed to be making sure that the student meets all course requirements.

D. Report to the faculty. Maybe the faculty member isn’t aware. The student may be reporting that you are scheduling her for other activities at conference times. And, for the other requirements it’s possible that students are simply required to submit all requirements by the end of the term rather than on scheduled deadlines within the course.

B. is the best answer. Let the student know that you are concerned because you see such promise in her and don’t want her to jeopardize her progress. Ask her to tell you more about why she’s not getting involved. Ask her to think about and plan how she could take advantage of what your setting offers and at the same time meet course expectations. Although her course responsibilities outside of the practicum with you are not really your responsibility, it sounds as though she needs some wise counsel. She is preparing for a leadership role and while it is desirable for leaders to be energetic and think outside the box, effective leaders need to learn how to work within constraints and modify situations in order to meet goals. Encourage her to seek whatever technical support and guidance the university offers if technical difficulties are truly the problem. You might also let her know that if she doesn’t become more actively involved in the online requirements, you may raise this concern with the faculty member at mid-term.