Part I
Theory and Concepts

ONE

Challenges for the Nurse Educator

■ INSTRUCTIONAL GOALS

Upon completing this chapter and the nurse educator learning experiences, the learner will be able to:

- Write a personal philosophy of nursing education
- Try out a teaching/learning strategy and share results
- Conduct an experiment about finding uniqueness in learners
- Complete an empathy experiment with at least three learners
- Try out an ethics/moral development program
- Produce a written plan for enhancing classroom management skills
- Write in a journal about the process of becoming a nurse educator

The more advanced nurse educator will be able to:

- Debate the importance of learning styles
- Put into action a plan for enhancing the moral development of a group of learners
- Work in concert with a more seasoned nurse educator to build an environment for creative learning

- Test a helping model with three or more learners
- Devise a problem statement for a study of learning challenges for nurse educators or learners
- Take a leadership, legislative, or policy role using feedback principles
- Partner with an advanced doctoral learner from a related discipline to develop a problem statement and research design for transfer of learning

Key Terms

Andragogy
Cognitive complexity
Constructivist school of learning
Critical thinking
Dependency/authority processes
Developmental theory of helping
Educator-centered environment
Educator/learner identification
Empathy
Formative & Summative assessment
Helping model
Helping process
Humanism
Humanistic classroom
Inquiry model
Learner-centered environment
Learning challenges
Learning role model
Learning styles
Manager of classroom learning
Mastery through overfamiliarity
Moral development
Novice educators
Philosophy of nursing education
Professional self-image
Transfer of learning

Introduction

The legendary Florence Nightengale lived out the importance of the teaching role in nursing (Attewell, 1998). Since then, the teaching/learning process has become a top priority for nurses working with clients. Teaching is not inborn—it is a challenge requiring special knowledge and skills. This chapter explores challenges nurse educators must meet and suggests ways to be successful. These challenges are reflected in the instructional goals for this chapter and include developing a philosophy of nursing education, meeting expected nurse educator competencies, examining and intervening in professional self-image, developing teaching materials based on adult learning principles, enhancing critical thinking abilities in learners, creating learner-centered environments, using classroom exercises to

encourage transfer of learning to the clinical area, identifying learning challenges and preferences, using self-directed learning, and enhancing cognitive complexity and moral development.

The information in this chapter applies whether the learner plans to function in an academic, staff development, or client* education setting. All of the concepts discussed must be addressed to provide a positive learning experience. In all three settings, a philosophy of nursing education is developed as a beginning step.

A Philosophy of Nursing Education

Part of taking on the role of nurse educator includes developing a **philosophy of nursing education**. The example that follows shows how one novice nurse educator learned about a philosophy of nursing education and its purpose.

> Mary C., a new learner in a masters degree nursing education program, came to class one evening with a question. "I've been asked to develop an infection control program for employees at the hospital where I work on weekends. Where is the best place to start? Should I look up articles or devise an outline?" Mary's instructor told her, "The best starting point is a philosophy of nursing education. A philosophy guides learning objectives and learning strategies. Once you have a philosophy, you will have a direction for developing learning experiences."

A philosophy of nursing education is an evolving process that guides learning objectives and learning strategies.

Developing a nursing philosophy is an ever-evolving process that grows as nurse educators gain classroom skill and experience. This book espouses one philosophy of nursing education. Within this philosophical framework, learning challenges, the helping relationship, and a humanizing learning environment are crucial to the development of the professional identity of the nurse educator and the nurse. Classroom experiences will have greater transfer value to client situations when learning is focused on:

- Being free (within the constraints of legitimate structure and classroom experiences),
- Taking responsibility for learning,

*Client is used throughout to refer to someone who participates in care and is not just a passive recipient. This is only appropriate because active and interactive learning is proposed in this book.

- Fusing cognitive, affective, and perceptual-motor skills into an integrated whole, and
- Actively examining and practicing helping skills.

This philosophy further espouses the belief that learners can increase cognitive complexity, decrease helping/learning problems, and clarify their values by actively participating in structured classroom experiences. As a testament to this philosophy, structured classroom exercises appear at the end of each chapter.

A manager of classroom learning assesses student learning styles, preferences, and problems and from there devises a host of learning exercises to use, sets the climate for learning, and offers explicit goals and directions for classroom behavior.

In accordance with this philosophy, the nurse educator is viewed as a **manager of classroom learning** who assesses learning styles, preferences, and problems, and devises or has at hand a host of learning exercises that can be used, depending on the outcome of the assessment. Being a classroom manager requires a very active presence from the nurse educator. The example below shows some of the dilemmas novice nurse educators may encounter when they consider the idea of being a classroom manager.

Josh D., a continuing education instructor, shared his feelings of discomfort with a colleague about being a classroom manager. "I've been using lectures to teach material for so long, I don't want to switch to another method. Might as well just hand out materials and not even show up for class."

■ Nurse Educator Challenge

What answers could Josh receive about being a classroom manager to allay his discomfort?

A classroom manager requires more human contact, not less, than an educator who conducts a lecture or discussion. Lectures and discussions can be taped, and they can be presented without the presence of an instructor. Managing a classroom requires a great deal of preplanning and a high level of assessment and intervention skills. A climate must be set and learners given specific learning goals and explicit limits of behavior in the classroom. Within these limits, creative learning efforts are encouraged. This requires that educators and/or learners plan alternative ways of learning each

concept or skill. At least some of these alternatives are chosen to fuse cognitive, affective, and/or perceptual-motor skills into a whole experience.

A manager of classroom learning creates a climate for learning, sets explicit limits and goals for behavior, fuses cognitive, affective, and perceptual-motor skills into a whole experience, and allows for individualized learning, repetition, and reinforcement of concepts.

Juliana R., a new nurse educator, opened the next class with a short video that ended at a crucial decision point. She invited the class to discuss the best nursing response to the situation and then to break into small groups and role play various reactions. After the role-playing situation, she brought the class back together to discuss what worked, what didn't, and why; what concepts they identified; and how they planned to use what they learned in the clinical area.

■ Nurse Educator Challenge

What evidence is there that Juliana managed the class?

Variety and alternative learning experiences allow for individualized learning as well as repetition and reinforcement of concepts. Variety and wholeness are basic to real-life situations and are used to increase transfer to clinical situations. Neophyte nurse educators struggle with their own anxiety about performing and have not yet developed a strong professional identity as teachers. The best way to increase learner involvement, yet decrease anxiety about losing control of the classroom, is to choose activities that provide built-in control. For example, if the class is divided into small discussion groups, structure needs to be tight and should include specific written directions such as:

- How to proceed,
- Step-by-step actions to be taken to complete the exercise,
- How to discuss the exercise upon its completion, and
- How the group leader can lead the group to keep on task.

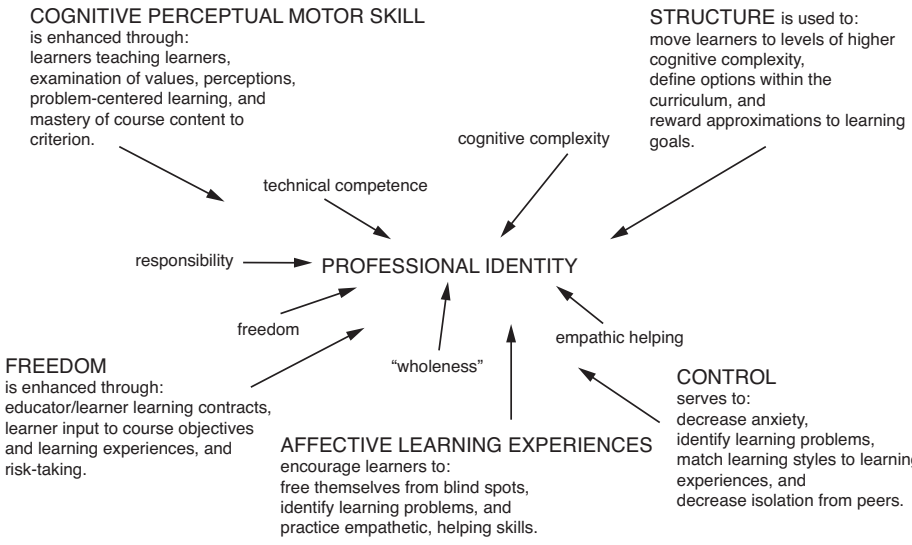
Some classroom learning is self-paced when this philosophy is implemented. Learners work at their own rate until they meet a criterion or cutoff point that the nurse educator has set as essential for learning. More about how to do this appears in Chapter 2. Brighter learners are motivated in this criterion-based system by being able to move

onto tasks that are continually challenging; the less apt learner is given confidence by attaining success (Valiathan, 2002). Figure 1–1 is a visual representation of the philosophical approach presented in this book. This philosophy in action consists of learners, both free and responsible, whose professional identities are moving toward a fusion of their own unique selves with the problem-solving, technical, and helping skills of a professional nurse. This outcome occurs when freedom and control are in balance; and perceptual-motor, affective, and cognitive learning are available in equal parts.

At first glance, it may appear that the implementation of such a philosophy would require an even smaller educator/learner ratio. Most of the skills and techniques found in Chapters 3–6 can be used even with a large lecture group. Some exercises require more space than others. For example, some of the simulation games and most of the small-group exercises require that chairs be moved and enough moving space or additional rooms are available to enable groups to work without distracting one another.

This philosophy requires that the nurse educator be skilled in designing effective learning systems. Chapter 2 focuses on how to accomplish that. Hand-in-hand with the development of a philosophy, nurse educators must develop knowledge and competencies to help guide educational programs.

Figure 1–1 Development of a professional identify in learners: Nursing philosophy in action



Nurse Educator Competencies

As the concern for adequate numbers of well-prepared nurse educators grew, the Council on Collegiate Education in Nursing, an affiliate of the Southern Regional Education Board (SREB), took notice. They selected and charged an ad hoc task force to identify and validate competencies that reflect the knowledge, skills, and abilities needed by nurse educators whether they attain a master's or doctoral degree, and regardless of the settings in which they practiced (Southern Regional Education Council on Collegiate Education in Nursing, 2002; Davis, Stullenbarger, Dearman, and Kelley, 2005).

The task force developed a blended competency model to guide the preparation of the nurse educator at the master's and/or doctoral level using three roles: teacher, scholar, and collaborator. Nurse educator graduate education ideology included:

- Advanced preparation in a field,
- Mastery of a core of knowledge,
- Independent study,
- Active scholarship and research/lifetime inquiry, and
- Critical understanding of issues in the field (Davis et al., 2005).

Core knowledge and skills within the teacher role included:

- Application of learning theories and instructional strategies,
- Use of technology,
- Curriculum and program development,
- Use of evaluation/measurement tools,
- Knowledge of legal standards and cultural influence,
- Mentoring and effective communication skills, and
- Incorporation of professional nursing and nursing education values (Davis et al., 2005).

Graduate nursing education values include leadership, open-mindedness, independence in thinking, accountability, competency, and an interdisciplinary approach. Core knowledge and skills within the scholar role include inquiry and research in education; mentoring; awareness of trends, issues, and needs in nursing education; and using an intuitive, creative, analytical thinking, and caring attitude. The collaborator role for nurse educators includes leadership, communication, negotiation, organization, change theories, problem-solving/decision-making, and legislative/policy development (Davis et al., 2005).

Because educators and learners bring beliefs, habits, and the memory of experiences to the classroom, nurse educators must focus not only on instructional content and strategies, but also on the process of what is occurring in the classroom. One way to begin this learning process is to examine professional self-images.

Professional Self-Image

The **professional self-image** of the novice nurse educator and the professional self-image of the learner develop along parallel lines. Each moves forward to take on a new professional identity and each is confronted with a number of inner processes that may be reflected in outer processes with each other (Cottrell, 2002; Callaghan, 2006; Eckstein and Wallerstein, 1971). Professional identity as a nurse is not synonymous with professional identity as an educator. Great clinicians or researchers are not necessarily great teachers, especially when they tend to teach the way they were taught (Stuart, Hoge, & Tondora, 2004).

The professional self-image of the nurse educator develops along parallel lines with the learner's self-image, and includes both inner and outer processes.

Novice nurse educators are frequently hired as teachers without being told that there are identifiable learning processes and phases. Nurse educators must expect specific teaching and learning challenges, but realize that they can be overcome. Blending technical and human relationship skills is one way to begin.

Blending Technical and Human Relationship Skills

In the classroom, learning is the goal and the development of the educator is inextricably woven into the development of the learner. One aspect of the process to be mastered through learning is the knowledge and application of technical and human relationship skills.

The novice learner is at first apt to carry out nursing or learning procedures in a mechanical way. The focus is on technical skill and not on how the procedure is affecting the client. Likewise, novice nurse educators are often too busy paying attention to the mechanics of presenting material to learners to pay attention to what effect the information is having on them.

In this early phase, educators and learners often complain that the new skills they are learning seem alien or foreign to them. With practice and with effective feedback,

both groups come to understand how to blend technique with self and how to use the skill to enhance the nurse/client or nurse educator/learner relationship. Another process nurse educators must address is the integration of values and rules in the classroom.

Integrating Values and Rules

Another aspect of the professional self-image that needs to be learned involves taking in and integrating the appropriate values and rules of the profession. At first, both learners and novice educators may rebel. Learners may question professional values, avoid taking responsibility for their own actions, or view nurse/client confidentiality as trivial.

Some classroom values, such as humanism, active learning, and structured learning experiences based on learner needs and preferences, may seem difficult to implement and questionable in purpose. The relevance of working out possible solutions, given the constraints of the work environment and of meeting deadlines for class and work, can seem trivial in early phases of professional development. It may just be easier to teach as one was taught, which is often to lecture.

Bob W., a beginning nurse educator, struggled with the content of his first classroom teaching experience. He had planned to allow for class participation, but he felt pressured to provide a large amount of material, and that left no time for class discussion. He ended up lecturing the whole time and felt frustrated that he hadn't been able to cover everything that was in the textbook.

■ Nurse Educator Challenge

What phase of professional development has Bob reached?

When professional values and rules are internalized, there is a deeper understanding of the meaning and purpose of values and rules for conduct. The next example demonstrates an internalization of professional nurse educator values and rules.

Julie X., a seasoned nurse educator, subscribed to the philosophy espoused in this book. She felt the same pressures to provide content, but reminded herself that learners had an excellent textbook and must begin to take responsibility for their own learning by reading the book. Julie planned her classroom activities so they always included at least one interactive activity and allowed time for a debriefing

period so learners could identify the concepts they'd learned and discuss how to use them with clients. At the end of class, Julie felt invigorated and several learners stayed after class to tell her how much they'd learned from the interactive exercise.

A third, perhaps overriding, aspect of professional self-image is the development and use of a conceptual framework when working with clients.

Developing a Conceptual Framework

Learners must know the client with whom they are dealing. A conceptual framework can guide this journey. Some conceptual frameworks to use include:

- Personality theory,
- Illness/wellness concepts,
- Cultural differences,
- Learning styles, and
- Nursing process.

Without a conceptual framework within which to view the process of helping clients, procedures and techniques remain mechanical. The nurse educator too must have a conceptual framework within which to view the process of how learners grow and become self-directed. Such a framework enables the educator to prepare effective learning experiences and adapt them based on learning needs, styles, and preferences, not on educator preferences.

As conceptual frameworks are developed, professional self-images become clearer, teaching/learning problems often decrease, and learners and educators begin to see that teaching or helping consists neither of forcing the other to comply nor of leaving the other alone without direction as to how to proceed to attain the goal. As the conceptual framework deepens and becomes enriched, interrelated patterns and processes take on added meaning. While working on this challenge, the nurse educator must also observe for any sign of homogenizing the class, clients, or staff.

Moving Past Homogenization

In early phases of professional development, both learners and educators tend to categorize or homogenize target populations based on (ideal) textbook descriptions, on their anxiety about their own roles, or on their earlier interpersonal learning. Exam-

ples of homogenization include learner statements such as, "The clients...such and such," or "The staff...such and such," or "The learners...such and such." Nurse educator statements to use to help learners move beyond the homogenization stage include:

- "Tell me about one client who..."
- "Tell me about one staff member who..."
- "Tell me what you need to know to work with this client."

Homogenization can also occur when nurse educators speak to the entire class as if it is not composed of individuals with different learning styles and preferences. It may be easier for educators to read from notes or present slides to learners than to think about how to lead learners to identify and use concepts, solve problems, and come to their own conclusions about data so they can apply it in the clinical area.

According to one study, classroom experiences that engage learners in active learning is precisely what is needed. In fact, it may be the only way to help learners develop critical thinking skills (Sharif and Masoumi, 2005).

Sharif and Masoumi (2005) used focus groups (an organized discussion) to obtain baccalaureate nursing learner opinion and experiences about their clinical practice. They identified the following themes: the theory-practice gap, clinical supervision, professional role, and clinical anxiety. Learners reported seeing their instructor's role as an evaluative person, not a helping educator. Nearly all learners reported the lack of integration of theory into clinical practice.

Neglecting active engagement of learners in learning can lead to more learning problems, increased educator and learner frustration and apathy, and decreased attainment of learning goals. However, not all learners need the same amount of structure to make the connection between theory and practice. For example, if the nurse educator expects all learners to be self-directing, frustration may result with some learners. These feelings are most likely to occur when the educator homogenizes the class and refuses to see that some learners need structure and assistance to learn how to be self-directing.

> Sara J., a new nurse educator, immersed herself in her lecture notes and when learners started to nod off in class, or whisper to each other, she just talked louder. When Sara gave them an assignment to interview three people before the next class, she heard a lot of grumbling. She thought to herself, "They're just unmotivated. I have to talk to them after class and see if they're not understanding me."

When the need for structure and assistance is not diagnosed, it is easy to become angry with learners, to view them as spiteful or unmotivated, or to assume that if only the nurse educator's communication were clearer, difficulties would disappear. The educator may then focus on clarifying general communication rather than on assessing and intervening in individual learning problems.

The novice nurse educator must begin to identify learner issues so that their professional self continues to be developed and organized. Lack of professional self-development will inevitably interfere with attempts to be helpful to clients.

■ Nurse Educator Challenge

Explain how lack of professional self-development could interfere with attempts to help clients. Give specific examples and a rationale for your answer. *Hint:* Study the reactions of Sara in the previous vignette for clues.

Developing each of these components is best viewed by the nurse educator as an interrelated and ever-evolving process. The ideal is never completely attained and challenges in helping, teaching, and learning require continual vigilance and attention. Lack of progress in the development of these aspects signals that assistance from more skilled educators is needed. At the same time, nurse educators can begin to keep a classroom diary of events. The diary can help the nurse educator begin to identify classroom situations that can or should be remedied. See the following example of one nurse educator's entry in her diary.

Today a couple of learner questions got lost in the shuffle and I didn't get to answer them. I've got to remember to allow time for classroom discussion. For now, I'll just bring up the questions at the next class and see how that works.

While examining classroom process, the nurse educator will grow in the ability to diagnose and intervene in problematic situations. Tuning into the nurse educator/learner process is an important step.

Tuning into the Nurse Educator/Learner Process

One factor that prevents nurse educators (and learners) from being more free to develop creative learning environments is the incorporation of undeveloped aspects

of the professional self, including unorganized and undeveloped potentials. These aspects of self have an effect on the helping relationship.

People both need and fear others. One of the manifestations of these mixed reactions to others is that while participants in interactions sense each other on many levels, they acknowledge only a limited range of what they send or perceive. This tuning-out process is apt to occur in neophyte educators who are deeply immersed in thinking about what they will say or do next and how it will be received by the class, rather than concentrating on learner feedback and learner needs and challenges (Cashwell, 1994; Kagan, 1975).

Both nurse educators and learners develop their professional selves and demonstrate the use of technical and human competence within a consistent conceptual framework. Over the years, educators and learners, as human beings, have developed characteristic patterns of relating to others and of learning in social environments. These affective components of the learning process can be assessed and intervened in to achieve a development in the professional self of both educator and learner. Yancey (2004) described the use of Dr. Rosemarie Rizzo Parse's teaching-learning processes to provide a framework for identifying and changing learner processes. Journal writing, reflection, and participation in dialogue helped nursing learners discover new meaning for themselves. While the nurse educator continues to write in a classroom diary, learners can be assigned a similar task of journaling daily to identify successful and not so successful teaching/learning processes. The result can be kept private for reflection, discussed in class, or become the basis of an assigned paper on one of the concepts identified.

Leenerts (2003) described the use of knowing self with nursing learners. Personal knowledge or awareness of self was conceptualized as a fundamental pattern of knowing in nursing. Personal knowledge is essential for learning the artful use of self in nurse/client and educator/learner relationships. The caring relationship is based on the nurse's therapeutic use of self to help clients fully use their potentials in physical, psychological, spiritual, and social challenges.

The reason this is such a pivotal concept is that unknown aspects of self can interfere in learner ability to be caring. The example that follows demonstrates how one nurse educator tuned into learner feelings and used them to be a role model for the class.

> When the nurse educator showed a short video on hospice care, Jennifer B., a nursing learner, told the class that she'd been unable to talk to a dying client in the nursing home clinical the previous day. "I don't know what happened to me. I just started crying and ran out of the room." With assistance from the educator

and her peers, Jennifer was able to see the connection between her mother's death six months ago and her inability to help the dying client. With classroom support, Jennifer began to problem solve about how to handle the situation. The next day, Jennifer went back to see her client and was able to hold his hand and sit with him. She also apologized for leaving so abruptly the previous day and told him her leaving had nothing to do with him.

Learning or relational challenges that occur in the nurse/client relationship are frequently mirrored in the educator/learner relationship. Common learning problems that nurse educators can begin to identify include:

Learning challenges include dependency/authority processes, educator/learning identifications, and mastery through overfamiliarity.

- Dependency/authority processes,
- Educator/learner identifications, and
- Mastery through overfamiliarity.

Dependency/Authority Processes

Learners are dependent on nurse educators just as educators are dependent on learners as participants in developing a teaching/learning process. Both may try to appear competent and expert as a way of covering their insecurity about their capabilities. As professional identity grows, there may be less need for this process. The learner example below focuses on **dependency/authority** issues.

Without intervention, dependency/authoritarian processes can lead to under- or overstructuring class activities.

Sally Z. often cut class and made derogatory comments about the nurse educator. When the nurse educator reminded Sally that her assignment was handed in late, she reported the nurse educator to the administration, claiming she'd been treated unfairly.

Learners who resist regulations, refuse to accept the learner role, do not attend class, or compete with the nurse educator are all exemplifying challenges related to legitimate limits of authority. This process can also be played out by nurse educators.

Dr. Evans, a new nurse educator who just obtained her doctorate, wanted to establish rapport with learners so she spoke extemporaneously to the class, and shared personal information about herself with learners.

Nurse educators who plan to speak extemporaneously or spend the class speaking informally with learners, exemplify a need to set legitimate limits of authority.

> Ms. Debussy, a nurse educator, insisted learners remain quiet in class and quaffed discussions when learners tried to bring up points they needed to be clarified. Whenever learners showed evidence of spontaneity or creativity, the nurse educator reminded them she had a lot of information to cover that day and suggested perhaps they could discuss their questions among themselves or come to her office during office hours.

Educators who allow for no interaction between themselves and learners, and between learners and other learners, or who do not encourage spontaneity or creativity in the classroom, may need assistance in how to share authority, responsibility, and control for learning.

It's not unusual for inexperienced nurse educators to vacillate between insufficient classroom structure and direction on the one hand, and authoritarian dictums on the other. With experience and requisite skills, nurse educators can provide adequately balanced amounts of structure and freedom in classrooms. The more time spent in developing classroom exercises, in planning for different ways of reinforcing the concepts for that class period, and in thinking through how to anticipate and handle classroom happenings, the more time will be available to allow for freedom and flexibility during the actual class period.

It is often the educator's uncertainty and anxiety about how things will progress during a class period that leads to vacillation between insufficient classroom structure and authoritarian control. Just as learners need structure to decrease their anxiety about learning, so do nurse educators.

Nurse educators must learn how to structure learning experiences not only for the sake of learners, but also in order to allay their own anxiety. Without adequate structure in the classroom, novice educators may label learners as unwilling to learn, unable to relate to authority, or unable to receive help.

Upon examination of their professional selves, nurse educators may believe that they can maintain authority only through authoritarian devices or when receiving support and assistance from administrators. The other side of the coin of authoritarianism is dependency. Educators or learners who have unrealistic expectations of being taken care of or being loved by others are carrying around undeveloped professional selves. Another version of the dependency issue is exemplified by learners who pretend that the classroom does not fit within the larger school system, where

administrative rules and limitations add constraints. These learners are apt to be disappointed when they find the educator is not omnipotent and cannot change administrative policies.

The educator's version of this struggle is to react with guilt and overexplanation when learners point out this lack of omnipotence. In either case, refusal to acknowledge larger system constraints results in teaching and learning difficulties. A variation of this theme occurs when educators join forces with learners against the administration. Such an action may be based on a need to be liked by the learners or to be their friend. The result is not unlike the disorganization that occurs in families when one parent crosses generation lines and sides with the children against the other parent. For stability to resume, authority lines must be maintained. The example below exemplifies this issue.

> Jacob, a baccalaureate nursing learner, frequently complained to a nurse educator about the hospital administration and tried to convince her to sign a petition he'd generated in support of changes to make the work environment more healthy. The nurse educator told him she understood his position but she doubted a petition would work. She suggested they brainstorm ways Jacob could achieve his goal. Together, they came up with a plan to have Jacob research possible actions he could take that might bring about change.

■ Nurse Educator Challenge

Come up with at least three actions Jacob could take to achieve his goal.

As shown in the example above, one solution to this dilemma is for the educator to refuse to work against the hospital administration, and to find ways to work together with learners within the existing framework to solve a problem. This solution allows learners to take more responsibility for their own learning and shows cooperation, not confrontation, is more apt to get a positive response. When a problem is structured in this way, learners can view it as solvable rather than as external and unsolvable.

Other examples of dependency by learners are: "I'm helpless, spoon feed me," or "I need therapy, not learning." The parallel experience that occurs between nursing learners and their clients becomes apparent through such statements as "I can't help this client because I'm too much like her," and "I had to take total care of the client because

he's not able to do anything by himself." Educator/learner identification is a process of importance to nurse educators. Sometimes it's a healthy process that can enhance learner growth. When the process goes awry, the nurse educator intervenes.

Educator/Learner Identification

Developing **identification** is a process that can benefit both nurse educators and learners. Educators can receive a deep sense of gratification when they feel that they have taught successfully. Learners can be helped to develop independent thought and action and to grow to be coworkers with nurse educators. When the identification process is used this way, nurse educators are eternal learners who help their learners to identify with the process of continual learning rather than with static ideas or theories (Callaghan, 2006; Cashwell, 1994; Ekstein and Wallerstein, 1971).

Educator/learner identification is probably operating when students become attached to and take on the qualities of the nurse educator.

Nurse educators are learners too. The obvious example of this is shown by how much educators learn about a topic when they are asked to teach a course. Being able to assimilate content and convey it in an understandable way to learners requires a much deeper level of familiarity than is achieved by taking a course in the subject. Learners can provide valuable learning for nurse educators who must be ready to receive the information. When an educator is open to suggestions and cues from learners, much learning on both sides can occur. When the identification process goes awry for the nurse educator, learners may be viewed as extensions of nurse educators and as proof of their competence.

Learner identification processes can also go awry. Learners who idealize educators may come to devalue them once their own professional competency increases, almost as if they were thinking, "If I can achieve this, it must be valueless." Other learners, who mystify the learning process, may feel they cannot learn because to do so would be trampling on forbidden ground. Learners who place educators on a pedestal are more likely to dominate clients. To them, relationships may be conceptualized as hierarchical, with the educator at the top, the learner next, and the client at the bottom. This learner domination may be noted in behaviors such as giving advice prior to properly understanding the situation, doing "for" client, and being unable to acknowledge the healthy, independent characteristics of the client.

Nurse educators can help learners use healthy identification by praising their attempts to operate in a professional manner. Nurse educators can intervene in unhealthy identification processes by asking learners to brainstorm ways to work in the classroom and with clients in egalitarian relationships. **Mastery through overfamiliarity** is another process that can impede learning.

Mastery through Overfamiliarity

The new and different creates anxiety in everyone, including both educators and learners. Both may seek to master new teaching and learning situations by casting the new in the mold of older situations (Callaghan, 2006; Cashwell, 1994; Ekstein and Wallerstein, 1971). Beginning where the learner is and progressing from simple to complex, or from known to unknown, learning situations are examples of constructive use of past experiences.

When educators or learners underreact to new learning situations by pretending that "there is nothing new here," this is a signal that self-image is underdeveloped. For example, nursing learners who have worked as nursing aides frequently complain that relearning the taking of vital signs is unnecessary because they are already familiar with it. Upon investigation, it often becomes evident that their skills or theoretical knowledge is shaky, yet to cover their fear of being exposed as inadequate, they seem outwardly blasé. Educators who do not read this learning challenge correctly may be intimidated by learners and tend to wonder, "Maybe they are right, and I am wrong. Maybe I have underestimated them."

Mastery through overfamiliarity is covering a fear of being inadequate by underreacting to learning situations and claiming there is nothing new.

The educator's version of this situation is exemplified most clearly by neophyte teachers who prepare classroom materials at or above the educational level at which they were taught. Frequently educators have one degree more than their learners; thus, teachers with master's degrees may teach at that level to baccalaureate learners. Because their latest learning experience is most familiar, nurse educators may assume that because they know the material, they can breeze through it and get on to more difficult material. This results in the educator assuming learners are more knowledgeable or sophisticated than they actually are.

Some educators even prepare material above the level at which they were taught in an effort to decrease their anxiety about being inadequately prepared to teach. Such reactions are probably due to an undeveloped self-image as educator as well as to an error in confusing inadequate content knowledge with inadequate teaching skill. Part of the

difficulty may even be a lack of conceptual framework for working with adult learners. Juanita exemplifies a nursing learner who needed additional learning experiences.

> Juanita, a new RN-to-BSN learner had many ideas to contribute to classroom discussion. When asked for a conceptual framework, she was unable to provide one. She also asked the nurse educator to coffee or lunch several days in a row, and neglected to turn an assignment in on the required date, claiming she needed more time.

■ Nurse Educator Challenge

How would you handle Juanita's behavior? Give a rationale for your answer.

Nurse Educator Tips

Use these questions to help identify learners who may need additional learning experiences.

Does the learner:

- Neglect to use a conceptual framework?
- Ask for or imply the need to be a friend, child, or foe?
- Need more structure to be self-directing?
- Need more freedom to be self-directing?
- Resist regulations and class rules or other appropriate limits?
- Devalue the content or learning process?
- Place the nurse educator on a pedestal?

Use these questions to identify areas that require change in classroom structure.

Do I . . .

- "Feed" learners by always lecturing?
- Talk informally with learners rather than set adequate amounts of classroom structure and freedom?
- See some learners as spiteful and unmotivated?
- Join forces with learners against administration?
- Let some learners "off the hook" from meeting classroom rules?
- Prepare learning materials that are either too easy or too advanced for learners?

Adult Learning Theory and Principles

Teaching nursing learners involves teaching adults. Teaching methods must be appropriate for adult learning. As Stuart, Hoge, and Tondora (2004) remind us, teaching is not the same thing as learning. Following adult learning principles means structuring learning that must:

- Be active, not passive,
- Be driven by the need to know,
- Take place in the context of solving a problem or in daily activities and is immediately relevant to the learner,
- Activate prior knowledge and experience,
- Have an element of self-direction and self-responsibility,
- Provide a bridge and/or support to help learners develop independent problem-solving skills, and
- Be an egalitarian, two-way process between educator and learner and not a "handing down of knowledge" by the educator (Davies, 2000; Knowles, Holton, and Swanson, 1998; Knowles, 1990).

A school of learning that may be most apropos for educating nursing learners is the constructivist approach.

Constructivist School of Learning

The **constructivist school of learning** holds that knowledge is best remembered in the context in which it is learned, uses problem solving to find a solution to a situation that is relevant to the needs of the learner, is self-directed yet interactive, and is a negotiated process between educator and learner (Stuart, Hoge, and Tondora, 2004).

The constructivist school of learning holds that knowledge is best remembered in the context in which it's learned, uses problem solving in a relevant situation, is self-directed, interactive, and negotiated.

Knowles is another theorist whose work is very applicable to nurse educators who work with adult learners.

Andragogy Learning Theory

Knowles (l990, 1998) used the term **andragogy** to describe his adult learning theory. He contended that what drives adult learning are: learner readiness, the need to know,

what the learner brings to the learning situation, and a problem-based approach in an atmosphere of mutual support and respect. The main motivation of adult learners is to learn something they can apply in an immediate situation.

Nursing learners attend class so they can learn something they can apply in the clinical situation. If the information presented is not relevant to the clinical situation, motivation to learn may be low. Because nursing learners are adults, they may question the benefit they will derive from the subject being taught.

Novice nurse educators may struggle to deal effectively when learners try to have input into their learning. A common solution is to quell classroom discussion and try to maintain a steady stream of one-way information giving. Adult learners must be active in other ways. They need to participate in diagnosing their own needs, formulating learning objectives that are relevant to their needs, and evaluating their own learning. To enhance learning, nurse educators should:

Andragogy theory includes Knowles' belief that learner readiness, need to know, learner characteristics, and a problem-based approach in an atmosphere of mutual respect drive adult learning.

- Find ways to evaluate learner readiness and build on previous learning,
- Actively engage learners in the learning process,
- Provide information that has meaning to learners, and
- Help learners integrate information in an understandable way.

Learning domains can guide nurse educators in constructing learning objectives to engage learners.

Learning Domains

Bloom created a learning taxonomy in 1956 that was revised by Anderson and Krathwohl in 2001. According to this theory, all learning can be classified into one of three broad categories or **domains**.

- The cognitive domain is known as the "thinking" domain. Learning in this category involves acquiring information. Learning strategies used to stimulate learning in this domain include lecture, computer-assisted instruction, and one-to-one instruction.
- The affective domain is also called the "feeling" domain. Learning in this domain enhances the internalization or commitment to feelings expressed as attitudes, emotions, values, and/or beliefs. Learning strategies that are believed

to enhance learning in this domain include role-playing, case studies, simulation, games, and group discussion.

- The psychomotor domain is known as the "skills" domain. Learning in this category involves acquiring motor abilities and capabilities to perform nursing procedures. Learning strategies most often used to enhance learning in this domain include demonstration, return demonstration, and practice. (Forehand, 2005; Su, Osisec, and Starnes, 2004, 2005; Stuart, Hoge, and Tondora, 2004; Anderson and Krathwohl, 2001).

This taxonomy can help nurse educators develop learning objectives. Chapter 2 provides more specifics on how to use learning domains to make sure learning systems are effective.

The cognitive domain is prominent in most classrooms, as educators may be more confident giving information than focusing on feeling or skill-building. This is true despite the fact that affective learning is most important when developing a value system and evaluating ethical issues in health care situations (Ginsburg, 2004).

Learning domains are categories of learning that include cognitive, affective, and psychomotor behaviors.

In addition to using learning theory and principles and learning domains, nurse educators must enhance learner critical thinking skills.

Critical Thinking Skills

Sometime in the late l980s, interest in education shifted from evaluating curriculum processes to evaluating learner outcomes (Walsh and Seldomridge, 2006). The focus of evaluation shifted from what was being taught to what learners were learning when the National League for Nursing Accrediting Commission (1997) and the American Association of Colleges of Nursing (1998) identified **critical thinking** as an expected program outcome. Faculty and administration of nursing programs, anxious to be accredited, hastened to find reliable and valid ways to demonstrate an increase in critical thinking in their learners as a result of their teaching. Nurses must learn to use critical thinking by:

- Conceptualizing,
- Applying,
- Analyzing,
- Synthesizing, and/or
- Evaluating information to guide their action.

Mere acquisition of information or possession of a set of skills alone is not enough to qualify as critical thinking.

Critical thinking is the process of actively conceptualizing, applying, analyzing, synthesizing, and/or evaluating information to guide action.

Why is critical thinking important? Nurses must not use biased, distorted, partial, uninformed, or prejudicial thinking in their approach, which is why learning to think critically is mandatory for all nursing learners. Noncritical thinking is costly in money and in quality of life. Scriven & Paul (2004) propose that a critical thinker:

- Raises vital questions and problems in a clear and precise manner;
- Gathers relevant information and comes to well-reasoned conclusions and solutions by testing them against relevant criteria and standards;
- Assesses assumptions, implications, and practical consequences; and
- Communicates effectively with others to figure out solutions to complex problems.

Measures of Critical Thinking

Two instruments widely accepted for measuring critical thinking skills are available. They were selected by the task force at one northeastern university because of their wide acceptance and use as sound psychometric measures (Walsh and Seldomridge, 2006). They focus on the ability to infer, recognize assumptions, deduce, interpret, and evaluate arguments, and as a result allow for comparison across settings. Both are relatively inexpensive, can be scored by hand, and take less than an hour to administer.

The first instrument is the Watson-Glaser Critical Thinking Appraisal, Form S (WGCTA) (Watson and Glaser 1994). This instrument was selected for its ability to evaluate critical thinking dispositions such as open-mindedness, truth-seeking, systematicity, confidence, analyticity, inquisitiveness, and maturity. The other instrument is the California Critical Thinking Dispositions Inventory (CCTDI) (Facione, 1992).

Several researchers have used one or the other instruments in their work. Walsh and Seldomridge (2006) found only modest gains in critical thinking in their population of undergraduate learners as they progressed over the years of their nursing studies. This led the authors to question their definition of critical thinking (knowing what to believe or do) and the usefulness of standardized measuring instruments.

Other researchers also had inconsistent results measuring critical thinking abilities probably due to lack of standardization of dependent measures and failure to clearly identify the critical thinking skill that would be improved due to the intervention

(Rosignol, 1997; Beckie, Lowry, and Barnett, 2001; Spelic et al., 2001; Profetto-McGrath, 2003; McCarthy, Schuster, Zehr, and McDougal, 1999; Stone, Davidson, Evans, and Hansen, 2001). Because the research findings have been inconsistent, Walsh and Seldomridge (2006) concluded it is time to rethink the problem.

■ **Nurse Educator Challenge**

What would you do to improve critical thinking in learners in your classroom? Give a rationale for your answer.

Insights Gained About Critical Thinking

Many years of research and discussion about critical thinking have led to some insights, including:

- Understanding what facilitates and stifles critical thinking may be a more apt focus. Several nurse educators concluded learners need to be taught how to think critically (Allen, Rubenfeld, and Scheffer, 2004), while Diekelmann (2002), Valiga (2003), and Ironside (2004) claimed faculties should debate *how* to teach content, not *what* should be taught.
- Resistances and barriers work together to keep the status quo of lecture as the main approach in many nursing programs. Learner resistance to active learning, inadequate class time, the need to cover content, and insufficient time to prepare critical thinking activities mediate against integrating critical thinking activities into the curriculum (Shell, 2001).
- Other classroom activities work against critical thinking, including the use of multiple-choice questions to prepare learners for licensure exams, which are still graded as correct or incorrect (National Council of State Boards of Nursing, 2006).
- Class size may also dictate against interactive learning, but there are ways to work creatively with large classes. Chapter 4 provides ideas for interactive learning with larger classes.

Yancy, a BSN learner, was shocked to find she failed her last test. When she made an appointment to speak with her instructor, she said, "I can't believe my grade. Are you sure you didn't make a mistake? I studied hard for hours on end."

> "How were you studying?" asked the instructor. "It's possible to memorize the material and still not do well on a test. To do well, you need to understand the concepts, not just memorize them."

The research on critical thinking in nursing may help explain what's lacking in some nursing classrooms.

Critical Thinking Research

Attempts to show which classroom strategies have a positive effect on critical thinking have been mostly inconclusive. Walsh and Seldomridge (2006) state that these findings may be due to lack of standardization of dependent measures and failure to clearly identify the critical thinking skill that would be improved due to the intervention.

Web-based interventions have demonstrated that learners learned as well as or better than learners receiving traditional instruction, but critical thinking skills were not examined (Anderson and Mercer, 2004; Billings, Connors, and Skiba, 2001; Kearns, Shoaf, and Summey, 2004; Leasure, Davis, and Thievon, 2000).

Kautz and associates (2005) evaluated the development of clinical reasoning skills among nursing learners enrolled in a medical-surgical course. They used teaching-learning strategies associated with self-regulated learning and the application of the Outcome Present State Test (OPT) Model of Clinical Reasoning to structure learning with junior-level baccalaureate learners. Learners made gains in learning associated with the OPT model. Qualitative analysis of self-regulated learning journal data showed learners made significant gains in self-observation, self-judgment, knowledge, and use of health care resources.

Shin and colleagues (2006) found that senior nursing learners in baccalaureate programs scored statistically higher in critical thinking skills as measured by the California Critical Thinking Disposition Inventory (CCTDI) than learners in the RN-to-BSN group. The learners who scored the lowest on the CCTDI belonged to the associate degree learner group. The senior baccalaureate learners scored significantly higher on critical thinking, especially truth-seeking, open-mindedness, self-confidence, and maturity of judgment, analysis, evaluation, inference, deductive reasoning, and inductive reasoning. The nurse educators for the baccalaureate program must have been doing something right when teaching critical thinking skills.

Teaching Critical Thinking Skills

> Wanda was teaching a class of master's degree learners using classroom case studies. She separated the class into dyads: one assumed the role of the client and received a full client chart, including history, physical examination information, results, and laboratory data. The other learner in each dyad assumed the role of the nurse and was given 20 minutes to gather client data, analyze it, make a diagnosis, and come up with treatments. The "clients" were advised only to divulge the information specifically accessed. Wanda used the last ten minutes of the class to synthesize what was learned, discuss any issues uncovered, and generally debrief the participants.

Oral questioning shows promise as a way to teach learners critical thinking, but only if higher-level questions are used (Sellappah, Hussey, Blackmore, and McMurray, 1998). Logic client concept maps and models that contain an account of an illness or health issue can lead to using inductive and deductive thinking to examine alternate actions nurses should take. A qualitative analysis of learner reactions to logic models provided evidence that learners found them helpful in making decisions about client care, predicting outcomes of their interventions, and thinking critically (Ellermann, Kataoka-Yahiro, and Wong, 2006).

Many methods can promote learners' critical thinking, including written or simulated case studies, concept mapping, journal reading, and role play/simulation (Ellermann, Kataoka-Yahiro, and Wong, 2005; Baumberger-Henry, 2005; Reising, 2004; Tomey, 2003; Cote-Arsenault, 2004; Jeffries, 2005; Phillips, 2005; Akinsanya and Williams, 2004; Luckowski, 2003; Staib, 2003; Ibarreta and McLeod, 2004; Wagner and Ash, 1998). For specific uses of these approaches with large classes, see Chapter 4.

Although lecturing may be the most comfortable for many nurse educators, does it enhance critical thinking?

Dilemmas Related to Teaching Critical Thinking

Packaged lectures produced via computer software may give learners the idea they are in class to be entertained and that they should sit back and not participate. Walsh and Seldomridge (2006) cautioned that packaged lectures leave little room for learners to take active roles in classroom activities and reinforce passive

learning. Although such approaches may be urged by administrators, feeding learners with facts will not help learners to think critically or retain information. For example, in a typical 50-minute lecture class, learners retain 70% of what is conveyed in the first 10 minutes, but only 20% for the last ten minutes (Montgomery and Groat, 1998).

Because critical thinking has not been adequately defined to date, it may be wise for educators to decide which kinds of critical thinking to promote, and then define and operationalize them for various learner levels. For example:

- Problem-solving allows learners to transfer theory into practice;
- Decision-making helps learners anticipate potential problems;
- Diagnostic reasoning helps learners settle on a client's condition by ruling out improbable conclusions (Walsh and Seldomridge, 2006).

■ Nurse Educator Challenge

Decide on one kind of critical thinking and suggest ways to operationalize a teaching program for that aspect.

Nurse Educator Tips

Walsh and Seldomridge (2006) suggest ways to promote critical thinking in the classroom:

- Change a "content coverage" philosophy; total coverage of a content area is the job of a textbook, not a nurse educator.
- Avoid spoon-feeding facts; instead, provide or demonstrate principles that will assist learners to develop critical thinking habits.

For more ideas about ways to enhance critical thinking, see Chapters 3–6 in this book. In addition to enhancing critical thinking, nurse educators put emphasis on learner-centered environments and curricula.

Learner-Centered Environments and Curricula

Educator-centered environments focus on a one-way transmission of knowledge. Most nursing curricula are content-heavy. To become learner-centered means deleting, not adding, content (Candela, Dalley, and Benzel-Lindley, 2006).

Educator-centered environments include lectures and other one-way transmissions of information.

Learner-centered environments pay careful attention to the knowledge, skills, attitudes and beliefs that learners bring with them into the classroom. Learner-centered environments are culturally appropriate, culturally compatible, and culturally relevant.

Carlos, a learner in the master's degree nursing education specialty, planned to teach in the continuing education department of a nearby hospital once he got his degree. He brought many ideas to class about how to adapt learning materials for the Hispanic-speaking population they served.

His professor, a devotee of learner-centered environments and curricula, encouraged his efforts and suggested he write a paper detailing his ideas. When Carlos finished his paper, he decided to use the materials in his thesis research.

Educators who used learner-centered environments and curricula focus on using knowledge to address problems in real-life contexts. To be learner-centered, educators must focus on what learners need to know and be able to do in order to be effective. This requires using multiple assessment strategies in the classroom and clinical setting (Candela, Dalley, and Benzel-Lindley, 2006).

■ Nurse Educator Challenge

Come up with three ways Carlos's professor could use to assess his knowledge of three common clinical nursing situations using multiple assessment strategies.

Learner-centered environments build bridges between the subject matter and the learners, use informal ideas learners bring to the classroom, and help develop alternate viewpoints.

An educator must find an appropriate balance between activities designed to promote understanding and those designed to promote skills necessary to function in the clinical area. Feedback from nurse educators, peers, and self should occur continuously, but not intrusively, as part of instruction.

Research on Learner Preferences

Walker and colleagues (2004) examined the different expressed learning preferences for 134 junior and senior nursing learners enrolled in a 4-year baccalaureate-nursing program. Twenty-five subjects represented Generation X (born between 1965 and 1976, highly independent, willing to challenge authority and the status quo, multi-taskers with parallel thinking processes, technologically-literate, concrete thinkers) and 105 represented Generation Y (born since 1982; most culturally diverse generation of all times, with 36% being non-white or Hispanic; self-reliant; questioning; technologically advanced beyond any other age group; linear thinking analytical ability and addicted to visual media.)

The researchers used a descriptive survey design to compare the generational differences among nursing learners to their perceived preferences in teaching methods. The reliability coefficient for the survey, Cronbach's alpha, was .82. Other statistical tests used included the Whitney Mann U, Chi-Square, the Pearson Product Correlation, and the ANOVA. Findings included:

- 85% preferred skill demonstration and return demonstration rather than lecture before skill performance in the clinical area.
- The majority of both age groups indicated a stronger preference for case study or group work when they encountered difficult to understand material.
- 90% preferred to have at least some class meetings, not a totally web-based method of study.
- 71% of both age groups indicated an interest in hearing stories from faculty of actual clinical events.
- 96% indicated strong preference for handouts that followed along with the lecture material and coincided with visual screen or overhead.
- 100% indicated they always wanted to know why they were learning the material.

■ Nurse Educator Challenge

Based on these findings, what kind of teaching strategies would you use for a class of primarily Generation X learners? Generation Y learners?

Bear in mind the findings of the Walker and colleagues study may only pertain to the population under study.

Nurse Educator Tips

Some ways to decide on appropriate content and allow for a move toward learner-centered environments are:

- Study the literature for the latest information on essential concepts and skills needed by nurses in current and future practice settings—for example, current publications of the American Association of Colleges of Nursing and the Pew Health Professions Commission.
- Decide if nursing learners will use this information in general practice with a majority of clients; if not, delete it.
- Question a tendency to include content because it is favored; it may not be necessary.

Deciding on content is only half of the struggle. Other barriers to moving from educator-centered to learner-centered environments may arise, including administrative and self-imposed restrictions. Fear of losing academic rigor may rear its head. When entire faculties agree to move in the direction of learner-centered environments, faculty development programs must be in place to support and encourage educators who may be learning new strategies (Candela, Dalley, and Benzel-Lindley, 2006). An important procedure for learner-centered advocates is formative assessment.

Formative and Summative Learner Assessment

Dr. Carter, a professor in the doctoral nursing education program, and a master's degree learner in another specialty area were completing research on formative assessment. Several of her doctoral learners also collected and helped analyze data. They compared learning outcomes for learners who wrote a final paper for a grade versus learners who took a series of mini-written and hands-on exams throughout the semester. They also collected data on learner reactions to the two methods of assessment. The learners who participated in mini-tests claimed they learned more from their mistakes on some mini-tests than from attaining higher grades.

Formative assessment is evaluation that occurs throughout the course.

Formative assessment (throughout the course) is preferred to **summative assessment** (a paper or test at the end of the course). Formative assessment offers opportunities for learners to revise their thinking and

behavior before the final grade. Learner-centered environments build in the expectation that everyone, including the nurse educator, is there to learn and everyone can learn from mistakes (Bransford, Brown, and Cocking, 1999). For specific examples of how to provide a learner-centered environment, even with large classrooms, see Chapter 4.

Summative assessment occurs only at the end of a course.

Because nurse learners must be able to provide care for clients or lead other nurses, transfer of learning from the classroom to the clinical area is mandatory.

Transfer of Learning

Transfer of learning is the ability to apply knowledge or procedures learned in one context to another setting (National Science Foundation 2003). Transfer is one of the major criteria used to assess the relative effectiveness of different instructional procedures. Nurse educators are concerned with the correlation between practice of classroom exercises and their effect upon performance of those tasks in the nursing learner/client relationship. Educator/learner interactions and specific classroom exercises practice, learners can come up with novel solutions to problems (Mester, 2003).

Transfer of learning occurs when nursing learners apply knowledge or procedures they learned in the classroom to clinical practice.

The study of transfer in nursing education is an important goal. Findings from the National Science Foundation may be of benefit (Mester, 2003).

Research Findings about Transfer

Research findings about transfer that can drive future nurse educator research include the following:

- Transfer is enhanced when the learner abstracts the deep principles underlying the knowledge being learned; and that abstraction is facilitated by opportunities to experience concepts and principles in multiple contexts.
- To facilitate transfer, instruction may need to be structured in ways counterintuitive to both educator and learner.
- When learners are asked which method of practice is better for their own learning, they often have erroneous perceptions.
- Transfer is more apt to occur when learners must provide a significant amount of active processing of materials. (Mester, 2003).

Transfer explains the use of school nursing laboratories, where learners practice making hospital-style beds, giving bed baths to manikins or fellow learners, and so on. Through this kind of simulated situation, learners practice skills they will use in the future with real-life clients. A spin-off effect of learning through this practice seems to occur concurrently with the development of skills, strategies, or problem-solving modes. Learners can test various approaches; this decreases trial-and-error learning in the real situation and enhances learner confidence. The more lifelike the practice situation is, the more tendency there is for transfer to occur. Transfer is also more apt to occur when there is practice on a variety of related problems and when there is sufficient time to practice. Concepts and principles lend themselves more easily to transfer than does specific information (see Box 1–1).

This may be why learners whose training in how to act in the clinical situation is mostly based on lectures may perform quite poorly with clients. The first place to practice transfer of learning is in the classroom (Clark, 2000). For transfer to occur, learning tasks need to be carefully selected, and learners need to be guided during initial learning. They should also be expected to have read assigned texts prior to coming to class.

Box 1–1 Research Questions Regarding Transfer

Research questions suggested by a recent National Science Foundation conference (Mester, 2003) that could fuel research by nurse educators include:

- What remains invariant from the learning context to the transfer context?
- What are the cues and strategies that trigger appropriate knowledge to be applied in a referent (clinical) situation?
- How important are learner expectations during original learning and transfer?
- To what extent do future employers want nurses with narrowly defined skills as compared to broad abilities to solve problems and learn new skills?
- What are the contextual factors (especially socio-cultural factors) that shape attitudes when entering new contexts that involve transfer?
- Teaching to test is a common educational technique, but how can tests be devised that assess transfer to clinical situations so that nurse educators prepare excellent practitioners?
- What is the relationship between learner behavior in in-class simulations or simulation games and real-world action in a clinical area?

Nurse Educator Tips

To enhance transfer from classroom to clinical area:

- Teach by concept, not content.
- Assist learners to identify concepts by becoming immersed in a situation similar to the clinical situation by using role playing, simulation, and simulation gaming.
- Allow time for learners to feel confident by testing various approaches.
- Note there is a brief slowdown in the learning curve when a new approach is introduced; overlook the confusion some learners may show and watch for the strengthening of previously acquired skills and knowledge.
- Make classroom activities lifelike to enhance transfer to the clinical situation—for example, what if the concept for today is infection control? Instead of learners walking into a classroom with all the chairs facing the front, they found chairs in small groups with signs such as ICU, nurses' station, treatment room, infection control, and so on, and learners were given a situation straight out of the television show *ER* to deal with?
- Instead of identifying the concept for the day, ask the learners at the end of the activity, "What concept did you learn today?" This approach will promote even more transfer.

Teaching Dilemmas

Corrine, a new member of the education department at Everest Medical Center, came to work with high expectations about what she planned to accomplish. She soon became caught up in the bureaucratic and political climate. Without a mentor to guide her, she began to lose her excitement and focus. Every evening she went home feeling depressed and fatigued, unable to feel good about the little she'd accomplished. When she saw an article in the medical center's newsletter about a mentoring program for new employees, she signed up. She was paired with an experienced nurse educator who took her to lunch and explained some of the ways to work through or around bureaucratic and political structures. Corrine started to feel better about her job and herself. She had an ally and a friend whom she could turn to for wisdom and support. Her work productivity increased and she eventually became a mentor for a new nurse educator who joined the staff.

Corrine could just as well have been a nurse educator in an academic setting. No matter the setting, novice nurse educators are faced with a complicating factor in their professional identity: there may be minimal assistance available for the new teacher from seasoned educators (Foley, et al., 2001). Experienced faculty are involved in designing their own course content or meeting administration requests. They may not be available as role models for ways of structuring and conducting classroom activities to achieve a balance between structure and freedom and a fusion of cognitive, affective, and perceptual-motor learning.

Acquiring high-level, complex classroom skill is no easy task even with support, direction, and demonstration. When no systematic attempt is made to assist novice nurse educators in evaluating their teaching strengths and weaknesses and to provide remedial experiences at the point of entry into a teaching/learning system, teaching dilemmas can result.

Anxious and confused **novice educators** may feel that they should be experts. This, in turn, may result in grandiose thinking, in feelings of guilt, or in mental self-punishment for not being more successful with learners. The latter defense may at first result in frantic attempts to please learners or to be approved of by administrators, and may eventually result in apathy, just as Corrine had experienced. The young educator, emotionally and physically drained by the position, may leave. Some fortunate nurse educators like Corrine may find a mentoring program by chance, enroll, and learn new skills. Other nurse educators may seek out a nurse educator they admire and request a mentoring relationship. Still others may revert to the comfort of teaching by the method that they were taught—usually the lecture method—or to blaming learners for their lack of motivation.

Common teaching dilemmas can include a situation where novice nurse educators may experience anxiety and guilt if they're unable to maneuver the complex and difficult waters of the classroom without an adequate role model in place.

Even though the philosophy of this book runs counter to the lecture method of teaching, it is important to discuss situations for which it may be appropriate.

Lecturing

Lecture is a method of transmitting information that is meant to serve specified purposes. It not meant to be used to repeat facts or to restate what other authors (textbooks, journal articles, and so on) have already stated. Lectures are meant to present:

- A synthesis of information,
- The lecturer's view of the topic,
- Special material that has not been published,
- Motivation or inspiration for learners, and
- Expected learning outcomes.

Box 1–2 Disadvantages of the Lecture Method

1. *Because of educator inabilities, the learner may experience boredom and inattention* —many learners do not have the requisite knowledge to benefit from the prompts and guidance the lecturer hopes to provide. With no active part other than note-taking, many learners become bored or inattentive. On the educator side, it is the rare lecturer who is entertaining or interpersonally effective enough not to feel frustrated with the lecture method.
2. *Inability to develop complex cognitive and creative skills*—the lecture may not provide for the development of complex cognitive and creative skills of learners. Greater flexibility of thought, breadth of perspective, openness to experience, autonomy and integrity do not necessarily follow because the learner hears in a lecture that these are important attributes. As with other skills, complex thinking and creative ability are learned in a sequential way through *practice*.
3. *Likelihood of learner distortion*—learners may distort what the educator is saying during a lecture. The lecturer may talk on without checking to ensure that information has been understood, and possible distortions in information sent and received will not be corrected. Because learners usually are given reading assignments in addition to lecture material, these distortions may be either rectified or compounded.
4. *Misunderstanding and decreased self-esteem*—an even thornier problem occurs in the lecture situation, and one or more learners present their discordant views to what has been verbalized. From the learner perspective, the expression of their ideas is a creative effort. From the educator perspective, discordant views may be interpreted as misunderstanding, interruption in the flow of the lecture, or even attack. Because the traditional lecture method does not lend itself to feedback from learners about how messages are being heard and understood, frustration and decreased self-esteem can result on both sides.

The lecture is meant to be a novel presentation and must be organized to meet clear end goals, or it will most probably end in failure. Unfortunately, many nurse educators may not be interesting lecturers, and may end up stating textbooks verbatim; this is a waste of instructor time. Even when lectures can be presented clearly and as a synthesis of information, they have several disadvantages (see Box 1–2).

One way that offers the potential for novice educators to get a grip on learning needs is an assessment of learning challenges.

Learning Challenges: Assessment and Interventions

Box 1–3 shows an assessment tool nurse educators can use to assess learning challenges. For best results, nurse educators fill out the tool prior to administering it to learners. It is important to provide sufficient time for nurse educators to identify their own challenges and plan interventions.

The first class period is a critical time to use this assessment with learners, because it can reveal how they will both learn and oppose learning. Once nurse educators can identify their own learning challenges and those of their learners, problem-solving efforts can be used to rectify them. If a learning challenge is the nurse educator's, it is

Box 1–3 Assessment of Learning Challenges

Directions: Novice nurse educators and learners will most surely have a number of different learning challenges; some are more likely to occur at particular phases in the teaching/learning process. Learning challenges can be thought of as potential growth experiences if educator and student are open to their examination. Look at each item below and its examples.

Check those that apply to you, and make a note to yourself to begin work to overcome them. It is suggested that you use this guide to assess your learning challenges at the beginning, middle, and end of each semester. Note where growth has occurred and where you wish to improve. It may help to ask a trusted colleague to sit in on your class to give you feedback on the impression you give, since it is not unusual for people to be unaware of some of their learning challenges.

(continues)

Box 1–3 Assessment of Learning Challenges (continued)

❑ 1. I find myself trying to prove that the educator/learner/client is wrong, and I am right/expert.

Examples:
- I get caught up in how people say things or in the words they choose, rather than in the issues.
- I feel the educator/learner/client can't teach me anything.
- I feel very stubborn about changing my mind on issues.
- I am reluctant to admit that I don't have all the answers.

❑ 2. I have difficulty setting/accepting legitimate limits of authority.

Examples:
- I have difficulty deciding when to remain firm on a standard and when to be flexible in the means of reaching it.
- I allow too many people to interrupt me.
- I can't say "no" when it is helpful to do so.
- I don't start or end/attend class on time or structure/focus on learning tasks.
- I am unable to give supportive negative feedback for fear of hurting others' feelings.
- I do not allow others who have authority or knowledge to teach me.

❑ 3. I tend to overly expose or overapologize for my limitations.

Examples:
- I find myself beginning statements with phrases such as, "I may be wrong, but..."
- I tell people about my weaknesses or problems when I first meet them.
- I always take the blame when something goes wrong.
- I punish myself for not being perfect.

❑ 4. I expect that others will take total responsibility for learning.

Examples:
- I assume that all students know their strengths and limitations and how to structure their own learning experiences.
- I find that I refuse to think of ways in which I can participate in learning, such as finding out what learning resources are available or trying out new situations or solutions.
- I wait for others to take the lead.
- I do not think of myself as a self-directed learner.

(continues)

Box 1–3 Assessment of Learning Challenges (continued)

❑ 5. I tend to be uninvolved, devaluing, or avoiding in relation to a course/learner/educator/a client.

Examples:
- I tend to smooth over disagreements or conflicts without teaching/learning how to resolve them constructively.
- I don't complete assignments/class presentations until the last minute.
- I daydream in the class a lot.
- I tend to neglect the updating of course materials/learning needs.

❑ 6. I am overinvolved or overinvested in learners/grades/educator/client.

Examples:
- I feel that my personal esteem rises and falls according to others' evaluation or their ability to perform effectively.
- I tend to check up on others too frequently, and I am overly critical of them.
- I am more concerned about grades than about learning.
- In my spare time I think about or spend time helping educators/learners/clients.

❑ 7. I may confuse knowledge of course content with knowing how to apply or implement it.

Examples:
- I grasp theory and concepts, but I don't notice when I'm not using them with learners/clients.
- I tend to assume that if I know something, I should magically be able to teach it to others.
- I spend minimal time planning how to apply or implement concepts in class/clinical settings or in seeking out ways of evaluating what I need to know about teaching/learning.
- I tend to believe that educators and great nurses are born, not made.
- I hesitate to use questions that evoke critical thinking processes.

❑ 8. I am overly skeptical and/or question the use of this class/material/experience.

Examples:
- I question the relevance of this course.
- There is nothing in this course that will contribute to my career or personal objectives.
- I doubt whether this class can provide meaningful information.

Box 1–3 Assessment of Learning Challenges (continued)

❑ 9. I try to get learners/educators/clients to take care of me.

Examples:
- I continually look for reassurance, understanding, or thanks.
- I like others to become involved in my personal problems.
- I expect exceptions to the rules to be made for me when I'm not feeling well or because of my personal difficulties.
- I assume I can't do anything on my own.

❑ 10. I idealize or overidentify with the educator/learner/client.

Examples:
- I feel very inadequate when I compare myself with others.
- I assume that designated authorities or peers know more than I do.
- I overquote "experts" and make extensive use of quotes rather than paraphrasing or adding my own ideas.
- I accept everything others say or do without questioning it.
- I am preoccupied with the person rather than with the learning or helping process.

❑ 11. I automatically assume the role of well-intentioned, controlling, wise parent with others.

Examples:
- I quickly give advice.
- I do "for" rather than "with" others.
- I interpret things without understanding the facts.
- I assume I always know what's best for others.

❑ 12. I have difficulty accepting criticism or views that are different from mine.

Examples:
- I feel hurt, depressed, embarrassed, angry, or ashamed when others point out my limitations.
- I cannot own up to my mistakes and tend to make excuses.
- I take the offense and attack or blame others before they can criticize me.
- Theories or learning experiences that are new to me often seem to be far-fetched or impractical.

(continues)

Box 1–3 Assessment of Learning Challenges (continued)

❑ 13. I wait until situations reach crisis proportions before seeking assistance or collaborating on a solution.

Examples:
- I pretend I have no learning problems even though I know everyone does.
- I avoid setting learning objectives for myself.
- I expect others to read my mind and know when I need help.
- I tend to hope problems will go away or I wait for someone else to step in and deal with them.

❑ 14. I homogenize the class/client/group and treat everyone the same.

Examples:
- I refuse to structure/fully immerse myself in different learning experiences for learners/clients based on their differences in learning styles.
- My attitude is: all educators/learners/clients are the same and should be treated as such.
- I find myself referring to "the class" or "the clients" rather than to individuals with unique characteristics.

Developed in collaboration with Susan DiFabio and Judith Ackerhalt.

Nurse Educator Tip

Learners fill out the learning challenges assessment and hand it back to the nurse educator for analysis. Having a composite picture of learner challenges can provide clues to structuring class materials and activities to help learners overcome their self-identified learning issues.

his or her responsibility to rectify it. For example, nurse educators who have difficulty conveying enthusiasm or using nonverbal communication can take an assertiveness training course or a course using video replay to help participants learn a more useful presentation of self in a group.

Dr. Gonzalez, a new nurse educator in the master's degree nursing program, filled out the Learning Challenges Assessment. Although she'd never thought much about it before, she realized that she had difficulty setting legitimate limits of authority because the learners were so close in age to her. She also apologized frequently, making her think that maybe she overapologized. Those were the only learning challenges she identified for herself, but she remembered several situations where learners had difficulty accepting peer criticism or tended to wait until situations reached a crisis point before seeking assistance.

If the learning challenge is the learner's, it is the educator's responsibility to help the learner identify and accept it. Such an approach to learning responsibility is in line with Ekstein and Wallerstein's classic definition of learning: "a growth that finally becomes self-initiated by learners and is not left to immature devices of indoctrination or the chance of running into a teacher to whom one happens to take" (1971, p. 99).

Nurse educators must continuously and systematically examine, modify, and create educational practices to increase certain kinds of learning. Such an approach leaves the choice of how and when to use specific educational strategies up to the individual educator. It presumes a particular technique or strategy will be used only after having systematically evaluated its use.

Nurse Educator Tip

Examine discrepancies between intentions and actual practices.

1. Explicitly state the kinds of learning to be cultivated—for example, increasing learner helping skills or developing learner problem-solving skills.
2. Videotape a classroom segment.
3. Critically analyze the videotape to identify those aspects of educator/learner interaction that inhibit achievement of the goal.
4. Learn alternate strategies or techniques to attain the learning goal.
5. Anticipate the consequences of each strategy or technique.
6. Choose and test the strategy or technique that is most useful in attaining the learning goal via a simulated classroom or actual work with learners.
7. Re-analyze the Learner Challenges Assessment to find potential nurse educator issues that haven't been resolved.

The Helping Relationship and Humanism

The nurse/client relationship is a helping relationship; so is the nurse educator/learner relationship. Being helpful, seeking help, and accepting help are all components of the **helping process**. One way for learners to enhance their helping ability is to develop appropriate help-seeking and help-accepting behaviors in relation to nurse educators. When there are problems in learning the helping relationship, they are evident in both the nurse/client relationship and in the educator/learner relationship.

The helping process is important to both nurse educator and nursing learner and includes being helpful, seeking help, and accepting help.

Research has shown that, overall, nursing faculty tend to be teacher-centered. Associate degree faculty may be more teacher-centered than baccalaureate and higher degree faculty, who, in turn, split between teacher-centered and learner-centered instruction (Papes, 1998).

■ **Nurse Educator Challenge**

What one thing should be done to make learning more learner-centered? Give a rationale for your answer.

Learning methods based purely on the transmission of technical knowledge (teacher-centered) will obscure learning problems. Such methods will prevent the nurse educator from substantially affecting the helping aspects of learners in their relationships with clients. Since neither educators nor learners can hope to be fully actualized, both must attune themselves to aspects of themselves that may interfere with positive learning (see Box 1–3). Nurse educators must begin to focus more attention on learning challenges, because if they do not, these aspects of behavior will be replicated in learner relationships with clients.

Helping Models

Ekstein and Wallerstein (1971) developed a helping model by studying the helping relationship between supervisor and psychotherapist. In 2006, Callaghan revisited the earlier model. He agreed that help does not consist of taking over the problem and dealing with it by giving advice or doing for the client, but of intervening in

one's own helping weaknesses and strengthening others so they can learn to cope with the problem.

This model has relevance for nurse educators, especially when presenting theory and concepts. It is important not to assume nursing learners will be able to make the gigantic leap from theoretical conceptualization to clinical application. It is in this bridging period between providing theory and showing learners how to apply theory to practice that nurse educators can provide helpful assistance. It is also a truism that the nurse educator/learner relationship is a relationship and as such, has characteristics of other communicational systems, which include the following:

- The need to communicate,
- All messages are potentially ambiguous and different learners will derive different meanings from the same message,
- All communication refers both to the content and to the relationships between participants,
- Punctuation is arbitrary, adopt the other's point of view to increase empathy and understanding,
- It is important to be aware of and respond to both content and relationship messages,
- Noise is the inevitable physical, physiological, psychological, and semantic interference that distorts a message,
- Competence is the knowledge and ability to use your own communication system, and
- Messages can quickly overload channels making meaningful interaction impossible (DeVito, 2005).

■ Nurse Educator Challenge

Consider each of the communication tenets above and tell how each affects the nurse educator role. Give examples.

Stock-Ward and Javorek (2003) developed a **development theory of helping** that can also be beneficial to nurse educators. At level one of Stock-Ward and Javorek's developmental model, learners have limited experience with their role and experience confusion about rules and procedures. They want to know, "Am I

Developmental theory of helping includes three levels of help nurse educators can provide depending on learner level of professional development.

doing this right?" They want to be liked and may be quite dependent on supervisors, for structure, information, and support. They try to find the "one right way" to do things. They show high motivation and appear eager to learn, but also have low self-confidence and can be easily discouraged.

> Sherry, a beginning BSN learner, frequently came to class looking anxious and overwhelmed. "I don't know if I took care of all the client's needs," she might say to the course instructor, or "I hope I did everything right."

At level two of the developmental model, learners shift their focus from themselves to focus on colleagues. They show more empathy and understanding of others, but may be "sucked in by" colleague problems. They vacillate between being autonomous and asking for assistance.

> Tom, a new graduate of the master's degree learner program in the nurse educator specialty, came to work one day and explained that he hadn't been able to sleep. "I kept worrying about my new learners and whether they'd be all right," he confessed over coffee to more seasoned nurse educators. "The learners had their first experience on the unit and I remember how harrowing that can be. Did you feel that way at first?"

At level three of the developmental model, learners become comfortable in their roles, balance their focus on self with focus on others, and appear more self-confident. They accept their professional strengths and weaknesses and begin to trust themselves more, but still seek consultation when needed.

■ Nurse Educator Challenge

What level of development are Tom and Sherry demonstrating?

Some situations that are crucial to applying theory to practice occur when requesting learners to:

- Initiate interaction with others,
- Request assistance from others, or
- Work out conflicts with others.

When using this helping model, nurse educators provide specific guidance, helping learners to think through the situation prior to facing the clinical, social, or administrative situation involved. The BSN nursing learner may be thought of as level one, the master's learner as level two, and the doctoral learner as level three. These levels may not always hold as there are exceptional learners at all three levels of education.

For learners at level one, nurse educators take a prescriptive role and:

- Review direct samples of learners' work,
- Provide direct and specific feedback,
- Discuss potential courses of action,
- Set up role-playing situations,
- Provide opportunities to observe staff perform the duties of the job, and
- Talk learners through action step-by-step (Stock-Ward and Javorek, 2003).

For learners at level two, nurse educators step back a bit and work in a more collaborative role and:

- Generate possible alternatives with the learner by brain storming ("What are some other ways to deal with this?"),
- Explore values and personal reactions that may be interfering with competent practice ("You handled this fine yesterday, but today you seem to be having difficulty."),
- Clarify issues of human diversity by providing support, empathy, and encouragement and to normalize concerns ("Yes, many learners feel that way,"),
- Prime learners to think through the situation ("What would happen if you do that?"), and
- Gently confront learners who are avoiding tasks ("I noticed you aren't taking action; let's discuss what's preventing you.") (Stock-Ward and Javorek, 2003)

For learners at level three, nurse educators use a collegial model that implies:

- Confronting more freely because the learner has a solid foundation of skills and confidence,
- Using self-disclosure to facilitate modeling and mentoring,
- Allowing the learner to participate in setting structure for the relationship,
- Avoiding the thought that the learner is so advanced the nurse educator has nothing to offer, and
- Continuing to provide sufficient stimulation and challenge to facilitate professional growth. (Stock-Ward and Javorek, 2003)

■ Nurse Educator Challenge

Describe three ways to help learners by strengthening them. Provide specific, real, or hypothetical situations.

Elements of helping and influencing are important to the nurse and are crucial to the nurse educator. In teaching, there can be no escape into procedures, no hiding behind equipment.

The helping model focuses on strengthening others so they can learn to cope with the problem.

Learners will often force the issue to provide help for their learning challenges. They will confront the nurse educator again and again with comments that require helpful responses if the learner is to understand how to deal with the problem. By receiving helpful responses, the learner learns (though modeling) how to help clients.

Jeff, a nursing learner in the master's teaching specialty program, constantly raised his hand to correct the nurse educator or other learner's comments. Even when data was presented to back up their statements, he refused to change his mind. Dr. Kneff, the instructor in the course, smiled bravely and tried to overlook Jeff's comments, and continued on with her lecture.

After class, Dr. Kneff referred to the Learning Challenges Assessment and that alerted her to the fact that Jeff exhibited the first challenge, "I find myself trying to prove that the educator/learner/client is wrong, and I am right/expert." She made a note to check Jeff's assessment and see if he had self-identified the issue. When she found he hadn't, she decided to speak to him after class the next day and bring up the issue, providing the data of her observations in class. She also reminded herself that Jeff might not be aware of how he was presenting himself in class. She decided to suggest he run a little experiment and keep track of the comments he made in future classes, analyze them, and see which of the learning challenges they best described. It took Jeff a few weeks to identify the dynamics of his behavior. At that point he sought out Dr. Kneff. Together they came up with a plan to rephrase his statements, using the same ideas he'd expressed, but removing the challenging quality of his words. Jeff eventually changed his behavior in class with the help and encouragement of Dr. Kneff, and decided to use the learning challenges format as the basis for his master's research project with clients.

Nurse educators must listen to the problem as verbalized or watch for them to be acted out by the learner, without becoming caught up in only providing information. When nurse educators pay attention to verbal and nonverbal learner requests, their behavior indicates the issue is valid. The next step is to assist in delineating the problem, gathering information about it, and formulating and testing out alternative solutions to the problem. This demonstrates how the helping relationship is a joint problem-solving endeavor. Box 1–4 illustrates some helpful and unhelpful responses to learner comments.

Box 1–4 Helpful and Unhelpful Responses to Student Comments About Problems

	Nurse educator responses	
Student comments	**Helpful**	**Non-helpful**
Staff practices poor nursing care.	I guess you're beginning to notice that ideals are rarely met in practice; let's take a look at minimum standards for practice. What staff practices have you noticed that are not up to standard? What ideas do you have?	Things are more complex than you know. You're very critical of nurses. Maybe they're fed up with the system.
I'm afraid of that client.	What is fearful for you? What ways have you overcome your fear before? What have you read about how to deal with clients who frighten the nurse?	You can do it; go on. I'm afraid too, but there's nothing to be afraid of.

(continues)

Box 1–4 Helpful and Unhelpful Responses to Student Comments About Problems (continued)

	Nurse educator responses	
Student comments	**Helpful**	**Non-helpful**
I gave the wrong medication to Mr. Smith	What did you give? When did you give it? Sit down with me and we can decide what to do.	What? Oh, no. You should have checked with me before you gave it. He might die because of you.
I don't think I want to be a nurse, anyway.	Has something happened to change your mind? How come?	Why not? Nursing is a good profession. With your performance, you might not make it anyway.
I think I'm the only one who cares about my client.	What's been happening in your relationship with your client? Let's discuss what you mean by caring.	We all feel that way sometimes. You probably are; that unit is so understaffed.
I don't know how to handle the family; they're always asking questions.	What questions are they asking? Which questions are hard for you to answer? Let's role play some questions and try out alternate responses.	Families can be a bother. Just answer their questions and they'll leave you alone.
I don't think you graded me/ evaluated me fairly.	In what way do you think I'm unfair? You could be right; what is your evaluation of your learning?	You're not meeting the course objectives. You're probably right; I often jump to conclusions. That's the way things are.

Box 1–4 Helpful and Unhelpful Responses to Student Comments About Problems (continued)

	Nurse educator responses	
Student comments	**Helpful**	**Non-helpful**
My other instructors didn't make me do that.	What is your reaction to being asked to do things differently? I'd like to work this out with you; in what way are my requirements different?	This is a different course. I run things my way. They didn't?

Some of the ways to strengthen learner ability to cope with clients are humanizing the classroom, demonstrating creativity and problem-solving skills, risking failure, timing increases in freedom and responsibility, giving appropriate feedback, and teaching respect for others.

The qualities of caring must be part of the educational climate in which nurses learn. Since nursing is a helping profession, the educational climate needs to be a humanizing one; learners cannot be expected to be human with clients without role models for the helping relationship. The humanistic philosophy and its use in the classroom is explored next.

Humanistic Approach

Humanism is a philosophy that recognizes the uniqueness and individuality of each person.

As a philosophy, **humanism** recognizes the uniqueness and individuality of people (Hesook and Kollak, 2005). This implies that when a humanistic approach is used, educators work to evoke creativity, spontaneity, and distinctiveness of learning style in individual learners. It also suggests that nurse educators themselves demonstrate these same qualities in the classroom.

■ **Nurse Educator Challenge**

Name three ways to bring humanism to the classroom. Give specific examples.

Nurse Educators as Role Models

Another way educators can create a more humanistic learning environment in addition to becoming role models for learners is by demonstrating their own cognitive, perceptual-motor, and affective nursing skills. By doing so, they take a risk that criticism will be forthcoming from learners. By serving as a **learning role model**, the educator conveys indirectly to learners that it is all right to try, that the environment is safe, and that even expert educators can benefit from skill practice and feedback.

Being a learning role model means nurse educators demonstrate their own skills, or lack thereof.

Errors in skill demonstration may be especially helpful in the humanization of the classroom. In fact, when nurse educators are able to present themselves as less than perfect, their humanism emerges.

■ **Nurse Educator Challenge**

What words might nurse educators use to convey that they may need additional skill practice?

Another way to role model appropriate nurse educator behaviors is to use an inquiry model of instruction.

Inquiry Model of Instruction

Educators can provide indirect practice in problem-solving for learners by using an **inquiry model** about their own classroom instruction. An inquiry model is one in which nurse educators ask for feedback from learners. Educators can tell learners they are struggling to improve their own skills, and may be enlisted in the process. Such an approach conveys to learners a willingness and interest to try alternate solutions, and to learn and benefit from input. This provides a strong role-model message that even educators can learn and benefit from. One

An inquiry model in the classroom includes a willingness and interest in trying alternate solutions and benefiting from input.

way to implement an inquiry model of instruction is to ask for feedback from learners. A simple way is to develop a form that contains important feedback questions such as:

- What did you like about class today?
- What did you dislike about class today?
- How could the instructor be more helpful to learners?
- What else would you like your instructor to know about the class today?

The forms are filled out anonymously, providing a greater likelihood of truthful responses. Nurse educators can analyze responses and modify classroom procedures based on learner input. This is not only useful information for previous and future classroom activities, but by asking for feedback, the nurse educator role models effective nurse educator/learner behavior.

Taking Risks

Much of nursing education focuses on doing things correctly and not allowing for failure. Such a focus tends to reinforce stereotypes rather than creative thought and practice. Since everyone makes mistakes, by being willing to risk failure in front of learners, nurse educators can teach them that omnipotence is unrealistic; they also demonstrate how to own up to one's mistakes.

For example, while a new teaching strategy is being tried in class, it may become clear that the method is not working. In this case, nurse educators can use a number of alternative ways to teach learners about how to take advantage of seemingly negative or failure experiences. A humanistic way is to proceed with the strategy but then to lead a discussion, encouraging learners to evaluate the difficulties they encountered and to suggest ways in which the strategy might be made more effective.

> Professor Allenway decided to take a risk in class. She stopped a learning activity midpoint and said, "I don't think this exercise is working; I'd like your help brainstorming about how to use what we've learned from this experience." She paused. "Did you see what I just did? I just pointed out what I did wasn't working? That's something you can do when you're working with learners and either of you notices it's not working."

Taking risks is just one of the many procedures nurse educators can use in a humanistic classroom. Timing changes is another approach that may be especially important when learners are resistant to change.

Timing

Timing may be crucial to the humanistic classroom. When learners have had years of passive, cognitively-oriented learning experiences, there may be initial resistance and unrest when they are offered a freer atmosphere. It is important to reduce classroom structure gradually in order to decrease learner anxiety about increased freedom. Steps to take for a slowed introduction of a humanistic model include:

- Give specific information about how the group will proceed.
- Repeat directions until the class is able to verbalize congruent understanding.
- Give feedback that moves learners to a level at which they can become more effectively involved in learning.

Nurse Educator Tip

Feedback is effective when the following principles are used:

1. Messages are clear, concise, and focused on observed behaviors, not on learner motivations; for example, "I noticed you omitted Step 2 in the procedure."
2. Lack of understanding is clearly expressed at the time information is given; for example, "Before you go on, I'd like to clarify what you meant by . . ."
3. Value or moral judgments are avoided; for example, there is no attempt to shame, threaten, or make the learner feel guilty.
4. Focus is on the present and future. Behavior over which the person has no control is avoided.
5. At least one strength is identified when weaknesses are discussed; for example, "I liked what you said, but let Ginny finish her comment before you talk."
6. Feedback can be verbal or audiovisual; skills that are videotaped during practice can be used to provide feedback to learners that verbal statements cannot.

Nurse educators must focus intensely on role modeling effective feedback to teach learners appropriate ways of giving feedback to clients. Providing feedback is a crucial skill in the helping relationship and one that must become part of the professional identity of nursing learners. Structuring a humanistic classroom is another way to help nursing learners grow into self-directed learners.

Self-Directed Learning

A **humanistic classroom** is a place where learners are trusted as self-directing individuals, divergent ideas are accepted, and individual differences and means toward goals are encouraged. The classroom is a safe place where nursing learners not only learn the facts, but also learn about each other and the implications of the facts they've learned. Learners must feel free to explore and grow in living communion with the subjects they study (Marino, 2000)

In the humanistic classroom, nurse educators feel secure enough to reveal themselves as people, autonomy and freedom are encouraged, feedback is honest, the process (rather than the product) of learning is important, empathy is conveyed, and learners are not discouraged from expressing their feelings and perceptions.

A humanistic classroom encourages self-directed learning, honest feedback, empathy, and feeling expression.

■ Nurse Educator Challenge

What one thing would you do to make your classrooms more humanistic? Give a rationale for your answer. If possible, decide on a date to implement your goal.

Setting Legitimate Limits

A useful humanistic setting is not a chaotic one. Nurse educators convey respect for learner thoughts, feelings, and perceptions. It is important to convey that displaying humanism is not a one-way process but requires contributions from learners and educators alike.

In the humanistic classroom, learners are expected to demonstrate respect for the educators. Learners are provided with feedback about unrealistic demands or lack of respect for nurse educators. Some examples of humanistic statements that convey limits and the need for respecting others are:

"I hear you saying that you're angry, and I can accept that, but the agreed contract between us was . . ."

"I listened to you, and I expect you to listen to me."

"The syllabus, our contract, says the report was due yesterday. Yours is late and points will be subtracted as per the syllabus."

The humanistic classroom creates a positive learning environment by setting legitimate limits. Once limits are set, the nurse educator can focus on creating other aspects of a positive learning environment.

Creating an Environment for Learning

Nurse educators who create a humanizing classroom environment will probably evoke creative responses in nursing learners. Some conditions that are more likely to lead to creative learning (and that are similar to humanizing factors) are:

- The absence of serious threat to the self,
- The encouragement of appropriate risk-taking,
- The effort to put learners in touch with their feelings,
- The reward of diverse contributions,
- The reduction of isolation from peers,
- Practice in coping with anxiety, fear, frustration, and failure,
- The freeing of learners from their "blind spots" or inability to see alternatives,
- The development of values and purpose, and
- The identification of lack of minimal skill level. (Torrance, 1962)

Once creative learning is an aspect of the learning environment, the nurse educator focuses on other elements of the helping relationship. Chief among these is empathy.

Empathy

A crucial helping skill for both the nurse educator and nursing learner is **empathy**. It is the basis of the helping relationship and an important part of the humanistic classroom. Carkhuff (1969) is the most well-known proponent of empathy. He developed scales for the assessment of empathic understanding that included five levels.

Empathy is the basis of a helping relationship and includes communicating the feeling and meaning of the other person.

Level one empathy implies a total lack of listening skills. The verbal and nonverbal behavior of the educator or learner does not attend to or actually detracts significantly from the other's message. Level one behavior might be exemplified by the nurse educator who avoids or fails to notice learner anxiety, joy, fear, or other strong feeling, or the nursing learner who changes the subject when the client talks about dying.

At **level two** empathy, the feeling aspect of a response is diminished. For example, the educator or learner subtracts noticeable affect (feeling) from the communications of the other. Level two behavior may be demonstrated by the nursing

learner who tells an angry client, "You're a little upset, but you'll soon feel better," and the educator who smiles and downplays the angry expressions of a learner.

At **levels three through five**, the educator or learner respond in such a way as to communicate the feeling and meaning of the other person. Only at level three and above is communication facilitated and empathy demonstrated. An example of level three empathy is:

> Learner: "I disagree with that and I think . . ."
>
> Nurse educator: "I see that you feel very strongly about that, and if I understand you, your point was . . ."

Empathy is important in the humanizing classroom because the nurse educator role models listening skills and provides practice experiences in constructing empathic responses. The nurse educator also instructs learners about how to use empathic skills with clients. In addition to ensuring that empathy reigns in the classroom, there are other steps the nurse educator can take to humanize the setting.

Nurse Educator's Humanism

Before nurse educators can teach learners empathy skills, educators must ensure they have the needed skills. An early step in humanizing the classroom is an assessment of the educator's humanistic trends and empathic skill (see Box 1–5).

Box 1–5 Nurse Educator's Humanism

Rate yourself on the following questions. A "yes" answer to all 12 questions indicates a high level of humanism. It is probably advisable to ask students for feedback on questions 5, 7, 8, 9, 10, 11, and 12.

1. Do I trust learners to be self-directing?
2. Do I find rewards in facilitating the development of learners (as opposed to receiving approval from students or administrators)?
3. Am I able to move beyond believing that mine is the final and best way to educate or to solve problems?
4. Can I maintain my humanism despite any dehumanizing aspects of my school system?
5. Do I give I learners access to me as a person?

(continues)

Box 1–5 Nurse Educator's Humanism (continued)

6. Do I suggest alternative learning experiences?
7. Do I respect learner autonomy and freedom?
8. Do I give honest feedback to learners?
9. Do I share responsibility for learning with learners?
10. Do I foster the process of learning?
11. Do I respond to students so as to reflect accurately their thoughts and feelings?
12. Do I act consistently with the idea that people are the best authority on how they feel and experience situations?

Knowledge of learner learning styles and preferences can help nurse educators respond appropriately to a diverse class, facilitate dialogue between educators and learners, and help educators communicate in the most efficient and effective way.

Learning Preferences, Cognitive Complexity, and Moral Development

There are three other important concepts for nurse educators to evaluate and take action when appropriate are: learner styles and preferences, cognitive complexity, and moral development.

Learning Styles and Preferences

Nurse educators must understand learning styles and preferences because:

- Research on learning suggests dialogue and educator/learner interaction is more appropriate than lecture. To accomplish an effective dialogue, educators must get to know learners.
- Classrooms are increasingly diverse, not only in terms of ethnicity and gender, but also by age, nationality, cultural background, and more. This diversity can affect learning. For example, older learners can draw on a lifetime of experience and are more apt to be independent, while women, in general, approach learning in more connected, empathic, collaborative ways;

African-American and Mexican-American learners may prefer working with others to achieve common goals.
- By making an effort to consider learner preferences, educators may reinvigorate teaching practices (Montgomery & Groat, 1998).
- Individuals learn in different ways and at different rates. Nurse educators must be aware of variations in learner interests, needs, abilities, and previous learning in order to choose appropriate education strategies (Wetzig, 2004).

James and Gardner (1995) defined **learning styles** as the most effective manner learners perceive, process, store, and recall material they learn.

Amy, a learner in a RN-to-BSN program, learned best with flash cards and by reading articles. John, another learner in the class, learned best by watching videos and following an RN around as she worked with clients. Debby, another learner in the class, learned best by reading case studies and discussing them.

Learning style indicates the most effective way learners perceive, process, store, and recall information.

Learning Style Models

This book presents four learning style models: The Myers-Briggs Type Indicator, the Kolb/McCarthy Learning Circle, Felder-Silyerman Learning Styles Model, and Gasha-Reichmann Learning Styles. Each raises one or more important issues.

Myers-Briggs Type Indicator

The Myers-Briggs Type Indicator is based on Carl Jung's concept of archetypes and was developed by two women: Isabel Briggs Myers and Katherine Cooks Briggs. A profile is identified along four dimensions: orientation to life (extroverted/introverted), perception (sensing/intuitive), decision-making (thinking/feeling), and attitude toward the outer world (judgment/perception). A learner who is extroverted, prefers sensing, feeling and perception, is called an ESFP (the first letter of extroverted, sensing, feeling, and perception), while a learner who prefers to work alone, use facts and data, is logical and spontaneous, is called an ISTP (the first letter of introverted, sensing, thinking, perception). For an online test based on Jung-Myers-Briggs typology, go to the Website http://humanmetrics.com/cgi-win/JTypes2.asp.

Kolb/McCarthy Learning Cycle

An underlying assumption of the Kolb/McCarthy model is that all learning includes a cycle of four learning modes, but each individual is apt to feel most comfortable in

one mode along the dimensions of Perception and Processing. Kolb's four-stage theory is based on a model with two dimensions expressed in the form of a Learning Style Grid. The first dimension (s-axis) is based on the individual's preferred way of learning a task. The left end of this dimension identifies a preference for doing tasks, and the right end indicates a preference for observing a task. The second dimension (y-axis) is based on an individual's thought and emotional processes. The top end of the dimension indicates preference for learning through feelings, and the bottom indicates a preference for learning based on thinking (Montgomery & Groat, 1998; Kolb, 1984).

He placed educators in the Type 4 learning style, which he named Accomodators. He viewed faculty with this kind of learning style as evaluators/remediators. Sample activities for this learning style are using open ended problems, learner presentations, design projects, subjective exams, and simulations. Other learning styles included Divergers (Social Science and Humanities), Assimilators (Physical Science), and Convergers (e.g., Engineering).

Kolb suggests following a learning cycle that addresses each of the following questions in order (Kolb, 1984). By teaching through the cycle, all the various learning styles of nursing learners will be addressed. The questions include:

- "Why are we learning this?"
- "What are the key points of this issue?"
- "How do I use this knowledge?"
- "What are the implications of this information in other contexts?"

Kolb (1984) envisioned a four-stage learning process requiring the following abilities:

- Concrete experience,
- Reflective observation,
- Abstract conceptualization, and
- Active experimentation.

Felder-Silverman Learning Styles Model

The learning style model developed by Richard Felder and Linda Silverman (Felder, 1993; Felder and Silverman, 1988) incorporates two aspects of the Myers-Briggs and Kolb models. The Perception dimension (sensing/intuitive) is analogous to the Perception of both Myers-Briggs and Kolb. The Processing dimension (active/reflective) is also found in Kolb's model. Felder and Silverman also propose additional dimensions of input (visual/verbal), organization (inductive/deductive), and under-

standing (sequential/global). Felder (1993) advocated balancing the extremes of each learning dimension by:

- Providing a context for concepts by making connections to learners' everyday experiences (global),
- Balancing theory and models (intuitive),
- Using demonstrations and diagrams (visual),
- Using simulation (sensing, inductive) to illustrate abstract concepts (intuitive, deductive), and
- Providing time for learner reflection about information presented (reflective).

■ Nurse Educator Challenge

Which learning style model requires reflective observation?

Grasha-Reichmann Learning Styles

Anthony Grasha and Sheryl Hruska-Reichmann developed a learning styles model different from the other three models (Grasha, 1996). Their model was based on learner responses to classroom activities, not a general assessment of cognitive or personality traits, and included the following styles: competitive (prefers teacher-centered class activities), collaborative (prefers learner-led small groups), avoidant (prefers anonymous environment), participant (prefers lectures with discussion), dependent (prefers clear instructions and little ambiguity), and independent (prefers independent study and projects).

Grasha (1996) pointed out that matching teaching style to learning style is not a panacea that solves all classroom conflicts. He also underlined the importance of the following educator actions:

- Working out potential conflicts and misunderstandings with learners that can undermine learning
- Reflecting on pedagogical goals and strengths as an educator
- Gradually introducing class activities that expand learner style preferences

■ Nurse Educator Challenge

Which learning style model uses collaboration?

Learning Style Research

Several nursing researchers have examined learner preferences. Abu-Moghli, Khalaf, Halabi, and Wardam (2005) examined learning styles of Jordanian nursing learners. They found the majority of baccalaureate learners identified themselves as independent learners who were curious to learn and who could identify learner goals. A serendipitous finding of the study was that a low percentage of learners indicated having good study skills and ability to concentrate while studying, and they needed assistance using study time efficiently.

■ **Nurse Educator Challenge**

If you were the nurse educator in the class studied by Khalaf, Halabi, and Wardam, what action would you take? Base your answers on the research findings.

Wetzig (2004) focused on the differences in learning styles of a group of twenty RNs in Intensive Care. She used the Index of Learning Styles (ILS) devised by Soloman and Felder. Participants were asked to indicate their perceived accuracy of the assessment, and provide suggestions for improvement in educational support. Results showed the majority of learners identified a preference for visual learning while the learning program utilized mostly written learning strategies. Based on learner evaluation, educational support and teaching strategies changed.

■ **Nurse Educator Challenge**

If you were teaching the Intensive Care RNs, would you change your teaching strategies based on the findings of the study? Justify your answer.

Hauer (2005) assessed the learning style preferences of learners enrolled in various allied health programs, including nursing. He noted there have been many studies assessing the learning styles of learners in various health-related disciplines. These assessments include Three Representational Modes (Trim), VAK (Visual, Auditory, Kinesthetic), Kolb's Learning Style Inventory, and Howard Gardner's Multiple Intelligences (Clark, 2000).

Hauer used the Kolb Learning Style Inventory LSI-IIa, which is based on John Dewey's belief that learning must be grounded in experience, Kurt Lewin's belief in active learning, and Jean Piaget's theory of intelligence.

Eighty-nine learners from various allied health care programs enrolled at a small Midwestern university participated in the study. The nursing and speech-language pathology learners showed a slight preference for concrete experimentation, whereas the OT and physician assistant learners preferred abstract conceptualization.

Learning Style Implications for Teaching

The learning style implications for teaching include:

- Striving to provide a variety of learning experiences so all learning styles are addressed.
- Including some applications that will help the sensing learner understand the reason for learning abstract concepts.
- Grouping projects, case studies, and in-class presentations that engage sensing learners.
- Including both rote problems and open-ended questions to challenge both sensing and intuitive learners.
- Including both individual and group work to satisfy both introverts and extroverts.
- Making sure all of Kolb's four types are accommodated by using open-ended questions, learner presentations, projects, subjective exams, simulations to satisfy accommodators, homework, computer simulations, field trips, reports, demonstrations, motivational stories, group discussion, lectures, textbook reading, demonstrations by instructor, and independent research and objective (Montgomery & Groat, 1998).

■ Nurse Educator Challenge

Which of the suggested learning style implications for teaching have been introduced into your classroom? How could you help introduce at least one?

One assessment tool to use with learners is shown in Box 1–6. Environmental, emotional, social, and physical aspects of learning preferences are surveyed. Note that questions 39–49 begin to assess levels of cognitive complexity and moral development.

Box 1–6 Assessing Learner Preferences

Ask learners at the beginning of a semester to check whether they sometimes, always, or never need or like the following situations. Build your classroom accordingly.

	Always	Sometimes	Never
1. I need quiet in order to learn.	❑	❑	❑
2. I need to discuss things with others in order to learn effectively.	❑	❑	❑
3. I require bright light in order to learn.	❑	❑	❑
4. I require soft, low light in order to learn.	❑	❑	❑
5. I need a cool room to learn in.	❑	❑	❑
6. I need a warm environment to learn in.	❑	❑	❑
7. I like a table and chairs or a desk arrangement when learning.	❑	❑	❑
8. I like to sit on the floor and/or move my chair around when learning.	❑	❑	❑
9. I like to receive input from the educator about how I'm doing and what is important knowledge.	❑	❑	❑
10. I can learn as much, if not more, from fellow learners than I can from the educator.	❑	❑	❑
11. I have a short attention span.	❑	❑	❑
12. I can concentrate for long periods of time.	❑	❑	❑
13. I need positive comments from the instructor.	❑	❑	❑
14. I need support from fellow classmates.	❑	❑	❑
15. I like detailed instructions from the educator about how to proceed.	❑	❑	❑
16. I like to "take off" on an assignment and create my own learning experience.	❑	❑	❑
17. I like to pace my own learning.	❑	❑	❑
18. I like the educator to set deadlines for me.	❑	❑	❑
19. I give up easily on a learning task.	❑	❑	❑

Box 1–6 Assessing Learner Preferences (continued)

	Always	Sometimes	Never
20. I work harder when the task eludes me.	❑	❑	❑
21. I take responsibility for what I learn.	❑	❑	❑
22. I expect the educator to take responsibility for what I learn.	❑	❑	❑
23. I prefer to learn things on my own.	❑	❑	❑
24. I like to learn with one other classmate.	❑	❑	❑
25. I like to learn by working with a small group.	❑	❑	❑
26. I prefer to learn by working with the educator.	❑	❑	❑
27. I seem to learn best by listening to others speak.	❑	❑	❑
28. I seem to learn best when I can look at the material I'm supposed to learn.	❑	❑	❑
29. I seem to learn best when I can pick up and touch learning materials.	❑	❑	❑
30. I seem to learn best by acting, moving, or trying out a learning experience.	❑	❑	❑
31. I seem to learn best through a combination of seeing, hearing, touching, and/or acting (cross out those that don't apply).	❑	❑	❑
32. I like to take frequent breaks when learning.	❑	❑	❑
33. I like to finish a task or class and then take a break.	❑	❑	❑
34. I like to get up out of my chair occasionally and/or stretch and move around the room.	❑	❑	❑
35. I like to sit in my chair until I've finished the task.	❑	❑	❑
36. I learn best in the morning.	❑	❑	❑

(continues)

Box 1–6 Assessing Learner Preferences (continued)

	Always	Sometimes	Never
37. I learn best in the afternoon.	❑	❑	❑
38. I learn best in the evening.	❑	❑	❑
39. I like to learn things that are unambiguous and clear-cut where there is little conflict in the group.	❑	❑	❑
40. I like to weigh the effects of different ways of approaching a problem and to hear others' views even if they differ from mine.	❑	❑	❑
41. I like to learn about my classmates and clients more than about techniques or strategies.	❑	❑	❑
42. I like to negotiate rules and ways of proceeding and learning with my teacher and peers.	❑	❑	❑
43. I like to try to see how widely divergent theoretical frameworks might interrelate or be used at different times with different experiences.	❑	❑	❑
44. I believe that if the educator says something is right, it must be right.	❑	❑	❑
45. I'll give in to a fellow learner or educator only if they'll give in to me.	❑	❑	❑
46. I feel very loyal to the learner group.	❑	❑	❑
47. I tend to do things because they please others in the class or the educator.	❑	❑	❑
48. I tend to follow through on a contract or agreement once I've agreed to do so.	❑	❑	❑
49. I tend to agree on a contract or agreement only if it fits with my own internal set of ethical standards.	❑ ❑	❑ ❑	❑ ❑

Learner's name _____

Date _____

Cognitive Complexity

According to Joyce and Weil (1972), there are three or four levels of **cognitive complexity**.

Although the assessment tool in Box 1–6 taps only learner-reported levels of complexity, it is a beginning step toward individualizing cognitive learning needs.

Cognitive complexity begins at the lowest level with black/white categorical thinking, and moves through various levels until it is possible to relate and compare different systems of interacting variables.

The **lowest level of cognitive complexity** is one characterized by black/white categorical thinking, a minimal tolerance of conflict, and a preference for a quick closure of discussion. The **moderate level of cognitive complexity** is one where people have several alternative ways of structuring the world and can weigh the effects of their own behavior from several vantage points simultaneously. **High cognitive complexity** is indicated by an ability to relate and compare different systems of interacting variables. Thinking is highly abstract and learners can adapt to complex, changing systems.

Although nurse educators might wish that all learners were able to think on the high cognitive complex level, many are not. Once cognitive complexity can be assessed, the learner can be assisted to the next higher level by matching the individual to an appropriate learning environment (Box 1–6).

Learners at a low level of cognitive complexity become even more rigid in thought without some structuring of the environment. Instruction must be supportive, directions must be given clearly, and information must not be too far removed from present belief systems; if information is too different, learners will reject it. Stress should be placed on self-delineation and on negotiation within the environment.

Jessie, a beginning BSN learner, asked for many rules for behavior. When the nurse educator asked the class to play a simulation game. the longer the game went on, the more questions Jessie asked.

■ Nurse Educator Challenge

What level of cognitive complexity is Jessie demonstrating?

Learners in a moderate level of cognitive complexity rebel against authority and resist external control. Learning experiences should emphasize negotiation in interpersonal relationships and divergence in the development of rules and concepts.

David, a beginning master's level nursing education learner, questioned the instructor about the source of many of her comments, and refused to follow the class syllabus for assignments and their due dates.

Learners in a moderate-to-high level of cognitive complexity tend to overplay interpersonal relationships and neglect learning tasks. Learning experience should guide learners to keep working on the task. Overprotection will decrease conceptualization and ability to learn how to function in task-oriented situations.

■ **Nurse Educator Challenge**

What level of cognitive complexity is David demonstrating?

Learners at a high level of cognitive complexity can balance task functions with maintenance or interpersonal functions and can negotiate rules with others as well as ways of approaching abstract problems. Learners can operate at the highest level when placed in interdependent, information-oriented, complex environments, and take responsibility for his or her own learning and structure (Joyce and Weil, 2004). Another aspect of learning that is important to nurses is moral development.

Moral Development

Moral development is an important issue in nursing because nurses are increasingly being faced with ethical dilemmas. Nurses must be assisted to higher levels of moral development so they can deal effectively with ethical dilemmas.

Many developmental psychologists use stage theories to explain moral development. Kohlberg, probably the best known theorist, developed six stages of moral development (Barger 2000; Kohlberg, 1981).

Stage one and two of Kohlberg's moral development are preconventional stages. Stage one is characterized by avoidance of punishment and unquestioning deference to power; nurses who attain a moral level no higher than stage one are apt to do what-

ever anyone in power tells them to do, regardless of its effect on patient care. At stage two, right action consists of what is satisfying to self and (occasionally) to others.

Reciprocity in sharing is based on "you scratch my back and I'll scratch yours," not on loyalty, gratitude, or justice. Nurses at this development level may help clients or doctors only if they are helped in return.

The preconventional stage of moral development is exemplified by the nurse who does whatever anyone in power tells them to do (stage one), and by the nurse who does what is satisfying or what is based on reciprocal sharing (stage two).

The conventional level of moral reasoning includes stages three and four. At stage three, people choose to behave well so that others will approve of them; nurses at this level will be most likely to seek out approval and to try to be nice to others. At stage four, the keeping of rules, the completion of one's duty, and the maintenance of the status quo are important. Nurses at this stage are apt to give medications on the dot, not to question rules, and to live up to their job descriptions.

The conventional stage of moral reasoning is exemplified by the nurse who seeks out approval and tries to be nice to everyone (stage three) and the nurse who maintains the status quo (stage four).

Stages five and six are postconventional or autonomous levels of moral reasoning. Since nursing seems to be moving toward independent practice, it would seem reasonable to expect nurses to function at the postconventional level; yet many do not. At stage five, right action is defined after critical examination and joint agreement.

Contracts and free agreement bind obligation. Nurses at this developmental level tend to contract with clients about health care issues.

The postconventional or autonomous level of moral reasoning is exemplified by the nurse who contracts with clients about health care issues (stage five), and the nurse who acts based on logical, consistent, comprehensive, and universal ethical principles (stage six).

At stage six, right action is defined by individual conscience in accordance with self-chosen ethical principles based on logical comprehensiveness, universality, and consistency. Universal principles of justice, equal rights, and respect for the dignity of individuals are used as measures.

Edward, a master's degree learner, is always checking with the nurse educator to make sure he's doing all right and doing extra credit assignments, even though he's already assured an A.

■ **Nurse Educator Challenge**

What level of moral development does Edward exemplify?

Even though she was a learner of Kohlberg's, Gilligan disagreed with him and decided to develop her own moral development stages. She complained that Kohlberg's stages were male-centered, and indeed, Kohlberg did develop his theory based on a male population. Her complaint was that it is not good psychology to leave out half the human race.

Gilligan (1982) proposed a stage theory of moral development for women. She took umbrage at basing the theory on justice and guilt. From her careful interviews with women making momentous decisions in their lives, Gilligan concluded that these women were thinking more about the caring thing to do rather than the just thing to do.

Gilligan's five stages, which she called an "Ethic of Care," focused on connections among people and included:

1. The preconventional stage—the goal is survival.
2. The transitional stage—movement from selfishness to responsibility to others.
3. The conventional stage—self-sacrifices are good.
4. The transition stage—from goodness to truth that a woman is a person too.
5. The postconventional stage—may never be attained and includes the principle of nonviolence of not hurting others or self.

Nursing Research on Moral Development

Krawczyk (1997) conducted a study to determine the development of moral judgement in first-year and senior baccalaureate nursing learners. A sample of 180 learners enrolled in three separate nursing programs. The courses differed significantly in ethical content. Program A included an ethics course taught by a professor of ethics. Program B integrated ethical issues into all nursing theory courses. Program C included no ethical content in the theory courses. The independent variables were the amount of ethics taught in the nursing programs and the level of academic education. The dependent variable was the development of moral judgement as measured by Rest's Defining Issues Test. The senior nursing learners from Program A scored significantly higher than the other senior groups on the Defining Issues Test. Krawczyk

concluded that an ethics course with group participation and a decision-making element significantly facilitated nursing learner development of moral judgment.

Kim and colleagues (2003) used a longitudinal study to examine moral judgement level and related factors. Thirty-seven nursing learners and twenty medical learners comprised the sample. She collected data using the Korean version of the Defining Issues Test. She found no significant change in score at each academic year in either group. The researcher suggested that ethics education be developed and evaluated.

Using Research and Theory to Enhance Learner Moral Development

Moral reasoning can be influenced in the direction of higher levels by exposing people to them (Barger, 2000). It is important to structure learning experiences so that learners will be exposed to the next higher stage of reasoning. It is important for them to be exposed to situations that pose problems, to contradictions in the current level of reasoning, and to an atmosphere of interchange and dialogue where values can be identified. Value clarification (see Chapter 5) is a beginning step toward identifying values.

This chapter has explored challenges nurse educators face and suggested some ways of dealing with these challenges in a positive manner. Chapter 2 provides information for designing effective learning systems.

EXERCISES FOR NURSE EDUCATORS

Directions: It's always wise to try out exercises yourself to make sure they work and determine how they work. Feel free to adapt them for your use after trying out each one. When using any of these exercises with learners in the classroom, allow a 10-15 minute period for debriefing the learning. Some questions to ask learners include:

- What was the exercise like for you?
- What did you learn from doing this exercise?
- What changes would you suggest in the exercise?
- How could you use this exercise when teaching learners?
- What questions do you have about this exercise?

1. Philosophy of nursing education

Study Figure 1–1. How might it help you to develop your own personal philosophy of nursing education? What other materials or experiences do you think you need to develop such a philosophy? What steps do you plan to take to consolidate your philosophy? Develop a written plan with deadlines for achieving each step.

2. Ideal classroom/dreaded classroom
Imagine a pleasant scene, where you are relaxed and away from the dreaded classroom. You are composed and about to enter your ideal classroom. Picture your ideal classroom in your mind:

- What are learners doing that you consider ideal?
- How are you acting, feeling, and thinking in your ideal classroom?
- To whom are learners talking?
- What actions do you observe?
- Where are people located in the room?
- What does the room look like?
- What are you feeling?

Imagine that you are about to face a classroom full of learners. Pretend that some dreaded situation occurs as you step into the classroom. Picture this classroom in your mind.

- What are learners doing that you dread?
- What are you doing?
- Who is talking to whom?
- What are the physical characteristics of the room?
- Where are people sitting?
- Who is moving?
- What is the movement?
- What are you feeling?

Consider steps you can take to make your dreaded classroom more ideal. Share your results with your classmates.This exercise can be used to prepare learners for clinical experiences by changing the term "dreaded classroom" to "dreaded clinical experience."

3. Risking success
Choose a teaching/1earning situation where you would feel comfortable taking a risk by demonstrating your lack of competence as a strategy to enhance learning. Plan how you will implement the strategy. Try it out, and evaluate the results in part by asking for feedback from at least three learners.

4. Finding uniqueness
A large classroom of learners can lead to a blurring of individual learner differences and unique qualities. Devise a way of finding out at least one personal or unique quality about each learner. You might consider using one of the following strategies:

- Asking learners to write down a unique thing about themselves,
- Asking learners to go around the class and report one thing about themselves they consider unique, or
- Greeting one new learner at the beginning (or end) of each class and finding out one thing about their wishes, aspirations, or unique qualities.

Write down your results and share it with at least three other learners.

5. Teaching/learning challenges
Identify one teaching/learning challenge you have. Devise a strategy for correcting it. Ask three learners for input and/or assistance with the problem. Share your results with at least three learners.

6. Facing your fears
Most educators have fears of losing control or not taking a positive direction in a classroom. Think about your fear(s). Devise a strategy for facing your classroom fear(s). Try out your strategy and share your results with at least three learners.

7. Empathy
Conduct an experiment to identify the empathy level(s) you use in your classroom. You may wish to use audiotape, videotape, written self-report, or learner feedback as part of your experiment. If you find you are functioning lower than at level three, devise a strategy for improving your empathic skill. Share your results with at least three learners.

8. Ethics/moral development
Compose a list of possible ethical/moral dilemmas nursing learners or graduate nurses might face. Poll other nursing instructors, learners, and nurse practitioners. Do some reading about ethics and moral development. Devise learning experiences for learners that will help them to function at a higher ethical or moral development level. Test it out with three other learners or collaborate with another learner to try out your experiences. Share your findings with the class or at least three other learners.

9. Managing the classroom
Make a list of the pros and cons of being a manager of classroom experiences. Be sure to include feelings, attitudes, or biases that motivate you to accept or reject the concept. What skills do you need to develop to adopt the position of classroom manager? What skills do you already have that would assist you? Make a written plan for enhancing your classroom management skills.

10. Journaling
Read at least one article on journaling and start your own journal detailing your process of becoming a nurse educator. Resist the urge to rewrite anything. If you have additional ideas, just add them as they occur to you. Every week, reread your entries and summarize what you've learned, what questions you wish to bring to class, and what goals remain for you.

ADVANCED LEARNING EXPERIENCES

11. Learning Challenges
Complete a small research project by comparing one nurse educator's learning challenges with three learners'; or compare 3-10 learner self-assessed learning challenges at the beginning and end of the course

12. Problem Statement
Devise a problem statement for a study of learning challenges for nurse educators or nursing learners.

13. Mastery through overfamiliarity
Interview three nurse educators using the questions in Nurse Educator Tips in the "Mastery through Overfamiliarity" section of this chapter.

14. Transfer
Chose one of the research questions regarding transfer from Box 1–1. Develop a problem statement and research design in collaboration with an advanced doctoral learner in a related discipline.

15. Developmental Helping Model
Choose one of the nurse educator actions for learners at level one, two, or three of the developmental helping model and develop a research design. Test your chosen action with three to ten nursing learners.

16. Feedback
Study the Nurse Educator Tip on feedback (page 54) and choose one of the principles to follow up on by taking a leadership role, a legislative/policy role, or a research role. Take action and write up the results.

17. Environment
Work in conjunction with a nurse educator to help create an environment for creative learning.

18. Learning Styles
Choose one of the reasons why nurse educators must understand learning styles and pair off with a fellow learner. Flip a coin to decide who will take the rationale as stated, and who will take the other side of the argument. Debate the issue.

19. Moral Development
Decide on a plan for enhancing the moral development of a group of learners. Put your plan into action.

References

Abu-Moghli, F. A., Khalaf, I. A., Halabi, J. O., & Wardam, L. A. (2005). Jordanian baccalaureate nursing learners' perception of their learning styles. *International Nursing Review, 52, 39-45.*

Akinsanyz, C., & Williams, M. (2004). Concept mapping for meaningful elearning. *Nurse Education Today, 24*(1), 41-46.

Allen, G., Rubenfeld, M. & Scheffer, B. (2004). Reliability of assessment of critical thinking. *Journal of Professional Nursing, 20,* 15–22.

American Association of Colleges of Nursing. (1998). *The essentials of baccalaureate education for professional nursing practice.* Washington, DC: AACN.

Anderson, E. T., & Mercer, Z. B. (2004). Impact of community health content on nurse practitioner practice: A comparison of classroom and web-based teaching. *Nursing Education Perspectives, 25,* 171–176.

Anderson, L., & Krathwohl, D. (Eds.). (2001). *A taxonomy for learning, teaching and assessing.* New York: Addison Wesley Longman.

Attewell, A. (1998). Florence Nightengale. *Prospects, The Quarterly Review of Comparative Education, 28*(1), 153-166.

Baumberger-Henry, M. (2005). Cooperative learning and case study: Does the combination improve learners' perception of problem-solving and decision making skills? *Nurse Education Today, 25,* 238-246.

Beckie, T., Lowry, L., & Barnett, S. (2001). Assessing critical thinking in baccalaureate nursing learners: A longitudinal study. *Holistic Nursing Practice, 15*(3), 18–26.

Billings, D. M., Connors, H. R., & Skiba, D. J. (2001). Benchmarking best practices in web-based nursing courses. *Advances in Nursing Science, 23*(3), 41–52.

Bloom's Taxonomy. (2003). Retrieved December 2, 2003 from http://www.olemiss.edu/depts/educ_school2/docs/stai_manual/manual10.htm

Bransford, J. D., Brown, A. L., & Cocking, R. R. (1999). *The design of learning environment: How people learn: Brain, mind, experience and school.* Washington, DC: National Academy of Sciences.

Callaghan, G. M. (2006). Functional analytic psychotherapy and supervision. *International Journal of Behavioral and Consultant Therapy, 2*(3), 416-431.

Candela, L., Dalley, K., & Benzel-Lindley, J. (2006). A case for learning-centered curricula. *Journal of Nursing Education, 45*(2)59–66.

Carkhuff, R. (1969). *Helping and Human Relationships* (Vol. 1). New York: Holt, Rhinehart & Winston.

Cashwell, C. (1994). *Interpersonal process recall.* Retrieved September 23, 2006 from http://www.eric.ed.go ED372342 1994-04-00

Clark, D. (2000). *Learning styles or, how we go from the unknown to the known.* Retrieved September 23, 2006 from http://www.nwlink.com/~donclark/hrd/vak.html

Cote-Arsenault, D. (2004). Planning for a new baby: A creative approach to learning. *Nurse Educator, 29*(1), 6-9.

Cottrell, S. (2002). Suspicion, resistance, tokenism and mutiny: Problematic dynamics relevant to the implementation of clinical supervision in nursing. *Journal of Psychiatric and Mental Health Nursing, 9,* 667–671.

Davies, P. (2000). Approaches to evidence-based teaching. *Medical Teacher, 22*(1), 142–159.

Davis, D., Stullenbarger, E., Dearman, C., & Kelley, J. A. (2005). Proposed nurse educator competencies: Development and validation of a model. *Nursing Outlook, 53*(4), 206–211.

DeVito, J. A. (2005). *The Interpersonal Communication Book*. Old Tappan, NJ: Pearson, Allyn & Bacon.

Diekelmann, N. (2002). "Pitching a lecture" and "reading the faces of learners": Learning lecturing and the embodied practices of teaching. *Journal of Nursing Education, 41*, 97–100.

Ekstein, R., & Wallerstein, R. (1971). *The Teaching and Learning of Psychotherapy* (2nd ed.). New York: International Universities Press.

Ellerman, C. R., Kataoka-Yahiro, M. R., & Wong, L. C. (2006). Logic models used to enhance critical thinking. *Journal of Nursing Education, 45*(6), 220–227.

Facione, P. A. (1992). *Test Manual: The California Critical Thinking Dispositions Inventory* (2nd ed.). Millbrae, CA: California Academic Press.

Felder, R. M., & Silverman, L. K. (1988). Learning styles and teaching styles in engineering education. *Engineering Education, 78*(7), 674-681.

Felder, R. M. (1993). Reaching the second tier: Learning and teaching styles in college science education. *Journal of College Science Teaching, 23*(5), 286-290.

Foley, B. J., Redman, R. W., Horn, E. V., Davis, G. T., Neal, E. M., & Van Ripper, J. (2001). Determining nursing faculty development needs. *Nursing Outlook, 51*(5), 227–232.

Forehand, M. (2005). *Bloom's taxonomy: Original and revised.* Retrieved November 5, 2006 from http://www.coe.uga.edu/epltt/bloom.htm.

Gilligan, C. (1982). *In a different voice: Psychological theory and women's development.* Cambridge, MA: Harvard University Press.

Ginsburg, S. (2004). The professionalism movement. *The American Journal of Bioethics, 4*(2), 14-15.

Grasha, A. F. (1996). *Teaching with style: A practical guide to enhancing learning by understanding teaching and learning styles*. Pittsburgh, PA: Alliance Publishers.

Hesook, K., & Kollak, I. (2005). *Nursing Theories* (2nd ed.). New York: Springer.

Hauer, P. (2005). Learning styles of allied health learners using Kolb's LSI-IIa. *Journal of Allied Health, 34,* 177-182.

Ibarreta, G. I., & McLeod, L. (2004). Educational innovations. Thinking aloud on paper: An experience in journal writing. *Journal of Nursing Education, 43*, 134-137.

Ironside, P. (2004). "Covering content" and teaching thinking: Deconstructing the additive curriculum. *Journal of Nursing Education, 43,* 5–14.

James, W. B., & Gardner, D. L. (1995). *Learning styles: Implications for distance learning.* East Lansing, MI: National Center for Research on Teacher Learning. Eric Document Reproduction Service No. ED514356.

Jeffries, P. (2005). A framework for designing, implementing, and evaluating: Simulations used as teaching strategies in nursing. *Nursing Education Perspectives, 26,* 96-103.

Joyce, B. R., & Weil, M. (1972). *Models of Teaching.* Englewood Cliffs, NJ: Prentice-Hall.

Kagan, N. (1975). Influencing human interaction—eleven years with IPR. *Canadian Counsellor, 9*(2), 74–97.

Kautz, D. D., Kuiper, R. A., Pesut, P. K. B., & Daneker, D. (2005). Promoting clinical reasoning in undergraduate nursing learners: Application and evaluation of the Outcome Present State Test (OPT) Model of Clinical Reasoning. *International Journal of Nursing Education Scholarship, 2*(1), 1–15.

Kearns, L., Shoaf, J., & Summey, M. (2004). Performance and satisfaction of second-degree BSN learners in web-based and traditional course delivery environments. *Journal of Nursing Education, 43,* 280–285.

Kim, Y. S., Park, J. W., & Son, Y. J. (2003). A longitudinal study on moral judgment development in nursing and medical learners. *Tachan Kanho Hakkoe Chi, 33*(6), 820-828.

Knowles, M. (1990). *The adult learner: A neglected species.* Houston, TX: Gulf Publishing.

Knowles, M. S., Holton, E. F., & Swanson, R. A. (1998). *The adult learner: The definitive classic in adult education and human resource development* (5th ed.). Houston, TX: Gulf Publishing.

Kohlberg, L. (1975). The cognitive-developmental approach to moral education. *Phi Delta Kappan, 56*(10), 670–677.

Kohlberg, L. (1981). *Essays on moral development, volume 1: The philogosophy of moral development.* New York: Harper & Row.

Kolb, D. A. (1984). *Experiential learning: Experience as the source of learning and development.* Englewood Cliffs, NJ: Prentice-Hall.

Krawczyk, R. M. (1997). Teaching ethics: Effect on moral development. *Nursing Ethics, 4*(1), 56-65.

Leasure, A. R., Davis, L., & Thievon, S. (2000). Evaluating reflective writing for appropriateness, fairness, and consistency. *Journal of Nursing Education, 39,* 149–155.

Leenerts, M. H. (2003). Teaching personal knowledge as a way of knowing self in therapeutic relationship. *Nursing Outlook, 51,* 158-164.

Luckowski, A. (2003). Concept mapping as a critical thinking tool for nurse educators. *Journal for Nurses in Staff Development, 19,* 225-230.

Marino, T. (2000). *Using technology to create a safe, humantistic classroom.* Retrieved January 26, 2007 from http://www.Tltgroup.org/resources/rmarinosafe2.html

McCarthy, P., Schuster, P., Zehr, P., & McDougal, D. (1999). Evaluation of critical thinking in a baccalaureate nursing program. *Journal of Nursing Education, 38,* 142–144.

Mester, J. (2003). *Transfer of learning: Issues and research agenda.* Report of a workshop on transfer of knowledge held at the National Science Foundation in Arlington, VA, March 21–22, 2002. Retrieved January 28, 2007 from http://www.nsf.gov/pubs/2003/nsf/03212/nsf03212_.pdf

Montgomery, S., & Groat, L. (1998). *Learner learning styles and their implications for teaching.* Center for Research on Learning and Teaching. Retrieved April 14, 2002 from http://www.crit.umich.edu/occ10.html

National Council of State Boards of Nursing. (2006). *Fast facts about alternate item formats and the NCLEX examination.* Retrieved September 14, 2006 from http://www.ncsbn.org/pdfs/01_08_04altitm.pdf

National League for Nursing Accrediting Commission. (1997). *Interpreting Guidelines for Standards and Criteria* (Rev ed.). (Publication No. 15-7681). New York: NLN Accrediting Commission.

Papes, K. A. (1998). *The relationships among nursing program attributes, nurse faculties' personal attributes and preferences for learn-centered instruction.* Unpublished doctoral dissertation, Florida Atlantic University. Retrieved January 25, 2007 from http://digitalcommons.fau.edu/dissertations/AA19913292

Phillips, J. M. (2005). Syllabus selections: Innovative learning activities. Chat role play as an online learning strategy. *Journal of Nursing Education, 9,* 43-44.

Profetto-McGrath, J. (2003). The relationship of critical thinking skills and critical thinking dispositions of baccalaureate nursing learners. *Journal of Advanced Nursing, 43,* 569–577.

Reising, D. L. (2004). Syllabus selections. The outcome-present state-testing model applied to classroom settings. *Journal of Nursing Education, 43,* 431-432.

Rosignol, M. (1997). Relationship between selected discourse strategies and learner critical thinking. *Journal of Nursing Education, 36,* 467–475.

Scriven, M., & Paul, R. (2004). *Defining critical thinking.* Retrieved September 14, 2006 from http://www.criticalthinking.org/aboutCT/definingCR.shtml

Sellappah, S., Hussey, T., Blackmore, A. M., & McMurray, A. (1998). The use of questioning strategies by clinical teachers. *Journal of Advanced Nursing, 28,* 142–144.

Sharif, F., & Masoumi, S. (2005). *A qualitative study of nursing learner experiences of clinical practice.* Retrieved September 7, 2006 from http://www.biomedcentral.com/1472-6955/4/6/

Shell, R. (2001). Perceived barriers to teaching critical thinking by BSN nursing faculty. *Nursing and Health Care Perspectives, 22,* 286-291.

Shin, K., Jung, D. Y., Shin, S., & Kim, M. S. (2006). Critical thinking dispositions and skills of senior nursing learners in associate, baccalaureate, and RN-to-BSN programs. *Journal of Nursing Education, 45*(6), 233–237.

Southern Regional Education Board Council on Collegiate Education in Nursing. (2002, February). *SREB study indicates serious shortage of nursing faculty. Faculty Shortage Committee 2001 Survey Report.* (Report 02N3). Atlanta, GA: Author.

Spelic, S., Parsons, M., Hercinger, M., Andrews, A., Parks, J., & Norris, J. (2001). Evaluation of critical thinking outcomes of a BSN program. *Holistic Nursing Practice, 15*(3), 27–34.

Staib, S. (2003). Teaching and measuring critical thinking. *Journal of Nursing Education, 42,* 498-508.

Stock-Ward, S. R., & Javorek, M. E. (2003). Applying theory to practice: Supervision in learner affairs. *NASPA Journal, 40*(3), 77-92.

Stone, C., Davidson, L., Evans, J., & Hansen, M. (2001). Validity evidence for using a general critical thinking test to measure nursing learners' critical thinking. *Holistic Nursing Process, 15*(3), 27–34.

Stuart, G. W., Hoge, M. A., & Tondora, J. (2004). *Theory and evidence-based teaching strategies: Implications for behavioral health.* Retrieved September 7, 2006 from http://www.annapolis-coalition.org/pdfs/Teaching_Strategies+2-02-04.pdf

Su, W., Osisec, P., & Starnes, B. (2004). Applying the revised Bloom's taxonomy to a medical-surgical nursing lesson. *Nurse Educator, 29,* 116-120.

Su, W., Osisec, P., & Starnes, B. (2005). Using the revised Bloom's taxonomy in the clinical laboratory: Thinking skills involved in diagnostic reasoning. *Nurse Educator, 30,*117-122.

Tomey, A. M. (2003). Learning with cases. *Journal of Continuing Education in Nursing, 34*(1), 34-38.

Torrance, E. P. (1962). *Guiding Creative Talent.* Englewood Cliffs, NJ: Prentice-Hall.

Valiathan, P. (2002). *Blended learning modes.* Retrieved April 6, 2007 from http://www.learning circuit.org/2002/aug2002/valiathan.html

Valiga, T. (2003). Teaching thinking: Is it worth the effort? *Journal of Nursing Education, 42,* 479-480.

Wagner, P. S., & Ash, K. L. (1998). Educational innovations. Creating the teachable moment. *Journal of Nursing Education, 27*, 278-280.

Walker, J. T., Martin, T., White, J., Elliot, R., Norwood, A., Mangum, C., & Haynie, L. (2004). Generation (Age) differences in nursing learners' preferences for teaching methodology. *Journal of Nursing Education, 45*(9), 371-374.

Walsh, C. M., & Seldomridge, L. A. (2006). Critical thinking: Back to square two. *Journal of Nursing Education, 45*(6), 212–218.

Watson, G. B., & Glaser, E. M. (1994). *Watson-Glaser Critical Thinking Appraisal Form S Manual.* San Antonio, TX: Harcourt Brace.

Wetzig, S. M. (2004). *Learning style preferences and learning strategies in intensive care nurse education.* Retrieved January 25, 2007 from http://eprint.uq.edu.au/archive/00001272

Yancey, N. R. (2004). Witnessing change with aspiring nurses: A human becoming teaching-learning process in nursing education. *Nursing Science Quarterly, 17*(1), 36-41.