

PRINCIPLES OF EDUCATION

BACKGROUND

- ▶ *Teaching* is an art and science in which structured, sequenced information and experiences are transmitted to produce learning.
- ▶ *Learning* occurs when a person changes behavior, mental processing, or emotional functioning as a result of exposure to new knowledge or experience (Braungart & Braungart, 2008).
- ▶ *Andragogy* is the art and science of teaching adults.
- ▶ Fundamental principles that guide the planning, implementation, and evaluation of adult education:
 - ▶ Lifelong learning is the learner's responsibility.
 - ▶ Lifelong learning is essential to maintain competence.
 - ▶ Competence is critical to the delivery of quality, appropriate patient care.
 - ▶ The nursing professional development specialist acts as a facilitator who actively partners with the learner during educational activities.
 - ▶ The nursing professional development specialist is responsible for considering adult learning principles in planning and implementing educational activities that meet the needs of the organization and its employees.
 - ▶ Various formats are used to deliver educational activities to accommodate the diverse learning styles, learning needs, and characteristics of nurse populations.
 - ▶ The nursing professional development specialist is responsible for evaluating progress toward the attainment of outcomes (American Nurses Association, 2010).

PRINCIPLES OF ADULT EDUCATION

- ▶ Adults need a reason for learning.
 - ▶ Adults want to know from a personal perspective why it is important to attend an educational activity.
 - ▶ Communicating evidence that supports the need for an educational program is essential. Adults have the right and responsibility to know the rationale for attending educational activities.
- ▶ Adults are self-directed learners responsible for their own learning.
 - ▶ Self-direction in adults stems from a desire to have control over what they learn and how they learn it.
 - ▶ Adults participate in the planning, implementation, and evaluation of educational activities.
 - ▶ Adults participate in assessing educational needs.
- ▶ Adults bring varied life experiences to learning situations.
 - ▶ Life experiences may enhance learning even if they do not directly relate to the program topic.
 - ▶ Adult learners should be encouraged to share their life experiences if they are willing to do so.
 - ▶ The nursing professional development educator facilitates learning by helping learners apply their personal experiences to enhance the learning process.
- ▶ Adults are life-oriented learners. They focus on obtaining knowledge and skills that will help them in their daily lives.
 - ▶ Adults need to understand how specific knowledge, skills, and behaviors will benefit them in job performance, interpersonal interactions, and professional development.
 - ▶ Adults become impatient if they are forced to participate in educational activities that they believe are not purposeful or beneficial to work or their personal lives.
 - ▶ Adults approach education from a task-, problem-, or life-oriented perspective.
- ▶ Adults respond to both intrinsic and extrinsic motivators.
 - ▶ Motivators are factors perceived to be of benefit to the learner.
 - ▶ Examples of extrinsic motivators include salary increases, promotions, improved working conditions, and public recognition.

- ▶ Examples of intrinsic motivators include increased self-esteem, ability to enhance interpersonal relationships, and enhanced job satisfaction.
- ▶ Adults are more responsive to intrinsic motivators. Connecting educational program purpose to the adult learner's intrinsic motivators increases learning.
- ▶ Nursing professional development educators must consider internal and external motivators when planning learning activities (Avillion, 2008).

LEARNING THEORIES

Behaviorism

- ▶ "Learning is viewed as a change in behavior or a change in response primarily due to environmental factors" (Schunk, 2012, as cited in Ellis, 2013, p. 50).
- ▶ Behavioral theory focuses on overt, measurable, observable behavior.
- ▶ Also called the S-R mode of learning, behavioral theory suggests that learning occurs in response to altered stimulus conditions in the environment or reinforcement after a response.
- ▶ Behavioral theory applies the principles of respondent conditioning (responses are conditioned or unconditioned reflexes) and operant conditioning (desired behavior is reinforced to encourage the frequency of a desired response) to the learning situation.
- ▶ Transfer of learning occurs through repeated practice and consistent, immediate reinforcement.
- ▶ The educator's role is to arrange the environment, including the reinforcement, to produce desired behavior change and eliminate undesirable behavior (Vandaveer, 2009).

Cognitive Learning Theory

- ▶ Cognitive learning theory states that learning is a highly active process directed by the learner, who uses cognitive skills to acquire and apply new information.
- ▶ Cognitive learning theory focuses on reorganizing information into new insights or understanding.
- ▶ Goals and expectations within the individual create disequilibrium, which produces the motivation for learning.
- ▶ The learner controls transfer of learning through information processing and application.

- ▶ Recognizing the learners' past experiences, perceptions, ways of processing information, and social influences that affect any learning situation is the focus of the educator.
- ▶ The educator's role is to consider available information about the learners when organizing and presenting the educational content (Braungart & Braungart, 2008; Vandever, 2009).

Humanism

- ▶ Humanistic learning theory is based on the belief that each person is unique, autonomous, and wants to grow in a positive way.
- ▶ According to this theory, self-direction and individual life experiences are essential to the process of learning.
- ▶ Self-evaluation, internal motivation, self-concept, and self-discovery are all important to the humanistic learning process.
- ▶ "Learning has an impact on behavior, attitudes and personality of the learner" (Ellis, 2013, p. 51).
- ▶ The educator's role is to facilitate learning, not to serve as the source of all information (Braungart & Braungart, 2008; Vandever, 2009).

Multiple Intelligences Theory

- ▶ Multiple intelligences theory, based on the work of Howard Gardner, proposes that each individual possesses a unique profile of eight intelligences that forms the basis for learning throughout life.
- ▶ This theory focuses on biopsychosocial potentials that work together to promote individual learning and development, problem-solving, and interaction with the environment.
- ▶ The intelligences that work together to produce learning are bodily-kinesthetic, spatial, linguistic, logical-mathematical, musical, interpersonal, intrapersonal, and naturalist. Existential intelligence, moral intelligence, and spiritual intelligence are three other areas that Gardner suggested be studied further before adding them to the list of intelligences.
- ▶ Different people have different strengths and learn in different ways.
- ▶ The educator's role is to use knowledge of learners' profiles or the intelligences themselves to design meaningful learning experiences (Lowenstein & Bradshaw, 2001; Vandever, 2009).

CHARACTERISTICS OF ADULT LEARNERS

- ▶ Educators of adults have a responsibility to consider the characteristics of adult learners in planning, implementing, and evaluating learning experiences (Alspach, 1995; Bastable, 2008; Ellis, 2013; Kelly-Thomas, 1998).
- ▶ Because adults are heterogeneous learners, educators will
 - ▶ Involve learners in determining their own learning needs and how to meet them.
 - ▶ Expect and encourage differences of opinion and meaning.
 - ▶ Respect the unique perspective and background of each learner.
- ▶ Because adults have multiple responsibilities, educators will
 - ▶ Recognize that other responsibilities may interfere with readiness, participation, or learning achievement.
 - ▶ Provide flexibility in scheduling, teaching strategies, and options for learning to make education convenient for adults.
 - ▶ Provide opportunities for adults to participate actively in all phases of the educational experience.
- ▶ Because adults bring various life and work backgrounds to the current educational experience, educators will
 - ▶ Assess past experiences and incorporate them into the educational activity.
 - ▶ Value the knowledge and skills that learners bring from their backgrounds to an educational environment.
 - ▶ Use teaching strategies that build on past experiences.
 - ▶ Emphasize the relationship between past experiences and present content to encourage transfer of learning.
- ▶ Because adults may be less flexible than children as learners, educators will
 - ▶ Be open-minded and adaptable in designing educational activities.
 - ▶ Help learners integrate new concepts with previous beliefs and perspectives.
 - ▶ Give learners time to work through new information, consider how new concepts fit, and reach their own conclusions.

- ▶ Because adults may have negative past learning experiences, educators will
 - ▶ Provide frequent positive reinforcement.
 - ▶ Create a learning climate that is conducive to a positive educational experience.
 - ▶ Show confidence in the learner's abilities to acquire the necessary knowledge and skills to change behavior.
 - ▶ Give learners positive or constructive feedback about performance.
- ▶ Because adults are voluntary learners, educators will:
 - ▶ Assess the motivational factors that influence learner participation in the educational activity.
 - ▶ Maintain realistic expectations of learners based on their motivation for attending the educational activity.
 - ▶ Identify and respond to behavioral cues that suggest that the learner's needs are not being met.
- ▶ Adults are problem-centered learners who respond to educators who
 - ▶ Identify and meet the learner's priority needs.
 - ▶ Focus the educational content on concrete essentials that learners can apply to their own situations.
 - ▶ Use a problem-centered approach that relates educational content to real-life situations.
- ▶ Educators who recognize that adults are knowledgeable learners will
 - ▶ Approach learners as peers who are knowledgeable colleagues.
 - ▶ Display mutual respect and a sense of collegiality in interactions with learners.
 - ▶ Encourage learners to experiment and learn from their mistakes when possible, but be available to support learners when needed.
 - ▶ Provide helpful, useful, clear information using realistic scenarios to illustrate content.
- ▶ Because most adults are self-directed in their learning, educators will
 - ▶ Provide opportunities for learners to use their own goals and expectations to evaluate the effectiveness of the educational activity.
 - ▶ Respond to evaluation feedback to provide additional educational support or make changes in future educational activities.

- ▶ Because adults of different ages need varying degrees of support in learning, educators will
 - ▶ Create a learning environment (e.g., seating, ventilation, lighting, acoustics) that is comfortable and conducive to learning for people with varied physical, mental, emotional, and social capabilities.
 - ▶ Check in with learners often to adjust the pace of learning activities or provide support as needed.
 - ▶ Arrange coverage of content so that the most complex or challenging material is addressed when learners are at peak performance (Alspach, 1995; Fischer, 2009).

LEARNING STYLES

- ▶ Learning style preferences refer to the ways in which learners prefer to approach learning as well as the conditions under which they learn most effectively and efficiently (Alspach, 1995; Kitchie, 2008).
- ▶ Learning style may be influenced over time by factors such as the environment, life experiences, job changes and demands, and personality traits.
- ▶ Learning is more likely to occur at educational activities that are designed to correspond with the learning styles of the audience (Kitchie, 2008).

Six Learning Style Principles

1. Both the educator's teaching style and the learner's learning style can be identified.
2. Educators must avoid relying on teaching methods and tools that fit their own preferred styles.
3. Educators are most helpful when they assist learners to identify their own learning style preferences and pursue educational activities that match those preferences.
4. Learners should have the chance to learn using their preferred learning style.
5. Learners should be encouraged to take advantage of opportunities to expand their learning style preferences.
6. Educators can develop educational activities that support each learning style (Kitchie, 2008).

Learning Style Inventories

- ▶ A number of instruments can be used to measure learning styles and preferences.
- ▶ “Knowing and understanding their learning style or preference may help the learner learn and study more effectively” (Smith, 2013, p. 238).

Kolb’s Experiential Learning Model

- ▶ Kolb’s Experiential Learning Model is based on the premise that adults refine their approaches to learning over time as they perceive and process information. Influencing factors include past experiences, current environmental demands, and heredity. This model emphasizes the way meaning is attached to experience, not just the collection of experiences.
- ▶ Kolb’s model describes four styles of learning that are reflective of two dimensions: perception and processing.
- ▶ Four modes of learning are identified as steps in the learning cycle: concrete experience (feeling), reflective observation (watching), abstract conceptualization (thinking), and active experimentation (doing).
- ▶ Based on the learner’s strengths in perception and processing through the four modes of learning, Kolb described these four learning styles:
 1. *Diverger*: The learner emphasizes concrete experience and reflective observation (feeling and watching). These learners are sensitive and interested in people.
 2. *Assimilator*: The learner combines reflective observation and abstract conceptualization (watching and thinking). These learners focus on ideas and concepts.
 3. *Converger*: The learner integrates abstract conceptualization and active experimentation (thinking and doing). These learners excel at deductive reasoning to address specific problems or find the best solutions.
 4. *Accommodator*: The learner uses active experimentation and concrete experience (doing and feeling). These learners are oriented to facts and use intuitive, trial-and-error methods (Kolb, 1984).

Sensory Learning

- ▶ Sensory learning style theories reflect the belief that learners have preferences for the senses that they find most effective in processing information.
- ▶ *Visual learners* learn best through visual stimuli in an otherwise passive environment. These learners are attracted to images, handouts, colorful presentations, and dialogue with imagery.
- ▶ *Auditory learners* prefer to learn through the spoken word. These learners prefer audiotapes, lectures, or interactive dialogue and respond well to verbal directions.

- ▶ *Aural learners* like to learn through sound and music. These learners prefer information within a musical context or background.
- ▶ *Verbal learners* use a combination of the written and spoken word to learn most effectively. These learners like to learn through debates, concept papers, and simulation.
- ▶ *Kinesthetic learners* learn through hands-on involvement and physical activities. These learners learn most effectively through skill demonstrations, simulation, and experiential activities.
- ▶ The VARK (Visual-Auditory-Read/Write-Kinesthetic) is one tool that measures sensory learning styles (Avillion, 2008; Fischer, 2009; Kitchie, 2008).

Benner's Novice to Expert Model

- ▶ Benner's Novice to Expert Model of Skill Acquisition describes how nurses acquire practice skills and knowledge.
- ▶ According to this model, skill acquisition is dependent on the learner's knowledge and experience over time.
- ▶ The five levels of nursing practice are:
 1. *Novice* (new student nurse): The learner has no background or experience.
 2. *Advanced beginner* (graduate nurse): The learner has some experience and needs extensive experiences.
 3. *Competent* (2 to 3 years): The learner has a sense of mastery and is able to perform adequately on a day-to-day basis unless major variations occur.
 4. *Proficient*: The learner perceives global aspects of situations, recognizes variations, and knows how to modify plans appropriately.
 5. *Expert*: The learner intuitively grasps each situation and problem-solves creatively and effectively (Benner, Tanner, & Chesla, 1996, as cited in Ellis, 2013).

VARIATIONS IN LEARNER CHARACTERISTICS

Generational Differences

- ▶ Currently, the workforce is composed of four generations, each with its own set of characteristics, values, and preferences.
- ▶ Since educators often deal with audiences that include people from all four generations, a variety of activities can be used to address some of the needs and preferences of each generation.

- ▶ *Veterans* (born between 1925 and 1945) are products of the Great Depression and World War II. Veterans want recognition for their extensive knowledge and experience. They value tradition, hard work, and adherence to rules. As learners, veterans respect educators as authority figures and prefer formal learning environments and experiences (Avillion, 2008; Gallo, 2011, as cited in Engvall, 2013).
- ▶ *Baby Boomers* (born between 1946 and 1964) are the result of the healthy postwar economy, civil rights movement, and Vietnam War. They enjoy learning, have a passion to achieve success, and want to make a difference in the world. Baby boomers value teamwork and personal gratification in the workplace. As learners, baby boomers respond best when treated as equals, life experiences are incorporated in learning, and team activities are used (Avillion, 2011, as cited in Engvall, 2013).
- ▶ *Generation Xers* (born between 1965 and 1980) are often referred to as the “latch-key generation.” Their values were shaped by “massive corporate layoffs, technological advances, and increased divorce rates” (Gallo, 2010, as cited in Engvall, 2013, p. 93). They value work–life balance, flexibility, and loyalty to self. As learners, Gen Xers prefer self-directed learning on their terms and stimulating visual or live activities that are fun (Avillion, 2011, as cited in Engvall, 2013).
- ▶ *Generation Yers* (born between 1981 and 2001) have grown up in a technological era, are globally oriented, and are comfortable with diversity. They are highly motivated and recognize that knowledge and skills increase their job marketability. This is important because they have little company loyalty. As learners, Gen Yers enjoy varied educational strategies and opportunities for creative, interactive exercises (Avillion, 2011; Gallo, 2011 as cited in Engvall, 2013).

Cultural Diversity

- ▶ Because cultural diversity is a valued social and demographic part of society, nursing professional development educators work with learners from a variety of cultures.
- ▶ *Culture* is defined as the socially transmitted behavioral patterns, arts, beliefs, values, customs, and other characteristics of a group that guide their worldview and actions.
- ▶ “Cultural and linguistic competence is a set of congruent behaviors, attitudes, and policies that come together in a system, agency, or among professionals that enables effective work in cross-cultural situations.” (Office of Minority Health, 2007, as cited in Engvall, 2013, p. 14.)
- ▶ *Acculturation* refers to the process of learning another culture and modifying one’s own behavior following exposure to that culture.
- ▶ *Assimilation* is the process in which people from a nondominant culture adopt the behaviors and attitudes of the dominant culture (Husting, 2009).

- ▶ The cultural values and beliefs of learners influence the educational process and learning outcomes because they affect the learner's thinking, decisions, and actions (Husting, 2009).
- ▶ Cultural factors to consider in planning, implementing, and evaluating educational activities include verbal and nonverbal communication patterns and barriers; learning style preferences; beliefs and values; gender, interpersonal, and social roles; and time orientation (Andrews, 2008).

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