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Question 1

Who or what is the adult learner? What characteristics or attributes of the adult are important to consider in the process of helping adults learn?

In order to best understand our adult learners, we should assess them demographically, by individual differences and through their developmental make-up.

Demographically, according to Johnstone and Rivera's (cited in Merriam, Caffarella & Baumgartner, 2007, p 54 - 56) national study of adult formal participation, learners are on average, white, middle-class male or females employed and better educated than nonparticipants. Although this study was completed in the 1960s, the demographic characteristic of adult learners hasn't changed much. Educators need to be aware of the cultural and social environment students come from so that they may better relate the learning material to their experience.

Ideally, in order to understand your student's individual differences, it would be helpful to administer the Individual Learning Styles Questionnaire developed by Felder & Solomon (n.d.). and/or a psychometric IQ test such as the Kaufman Adolescent and Adult Intelligence Test (KAIT). This would assist educators in developing varied instructional methods to enhance student understanding of the material to be learned.

Developmental influences such as a person's psychological profile or socio-cultural experiences are important to consider as well. However, it would be best to consider a more integrated perspective on adult development to have a more thorough understanding of your learners. Baltz (cited in Merriam, Caffarella & Baumgartner, 2007, p. 320) theorized in his model of development that "individuals do not develop in terms of single variables, but as total integrated systems." Vella (2002) also believes that

educators need to be aware of student's ideas (cognitive), feelings (affective) and actions (psychomotor) if we want to help people learn.

In other words, the whole person should be considered as much as possible when designing new programs, lessons, or workshops.

To what extent is the adult as a learner qualitatively different than learners who are children or youth?

The differences between adult and children learners is best described by Knowles (cited in Merriam, Caffarella & Baumgartner, 2007, p. 84) whose assumptions on andragogy include the idea that adults need their learning to be quite different from that of children. He posits adult learning should be self-directed and internally motivated. Also, that adults need to know *why* they are learning and generally the reason is problem centered, not subject centered as in primary or secondary school.

Further differences to consider are that children absorb information and store it for use later whereas adults apply the information immediately. Adult learning is voluntary and children are required to attend school. Adult learners are able to relate past experience to new information and are able to predict how it will affect something in the future whereas children have very little, if any frame of reference. Lastly, the relationship between student and teacher is qualitatively different. Teachers are far more consultative than directional with adults than with children.

In recruiting or motivating adults to participate in educational or training programs in your area, what are the key issues or factors you need to address? What are some of the factors that might influence your learners to decide not to participate or to complete their programs?

In the context of recruiting learners to continuing education programs at our community college, we must consider what motivates learners to enroll. Aslanian (cited

in Merriam, Caffarella, & Baumgartner, 2007, p. 63) “found that participation in higher and continuing education is largely due to a life transition.” The life transition adults return to learn for most often is job-related. Johnson and Rivera’s (cited in Merriam, Caffarella, & Baumgartner, 2007, 64) research survey concluded that “36% of respondents indicated that they were ‘preparing for a new job or occupation.’”

A thorough needs assessment is critical to counseling students towards the learning that will be most successful for them. Hutchinson (cited in Vella 2002, p. 57) suggests educators consider “*who* needs *what* as defined by *whom*.” In workforce development at our community college we bring together employers (whom) and student employees (who) to meet with faculty to determine the best methods for delivering educational programs (what) to the company.

Immediacy is also key to motivating adults to participate. “A large percentage of adult learners start a course and then decide to give it up because they cannot see the immediate usefulness of what they are learning” (Vella, 2002, p. 19). Due to our current economic climate, students are returning to community colleges in droves to re-skill for a new career. One benefit to working in continuing education is that we can bring to market “just-in-time” training for students who want only the essential knowledge and skills necessary to regain employment quickly.

Another example of the importance of considering the value of immediacy in a learning situation is the story Vella (2002) tells of her Ethiopian students who participated in an educational relief program because they were desperate for jobs. They needed the learning in order to survive and to learn to help build a system that would make them self-sufficient and able to withstand future draughts.

Safety is an important factor to consider. Vella (2002) describes safety in relation to trust, such as trust in the design and relevance of the objectives, and in the competence or skill of the teacher. She was able to build trust with her Ethiopian students by grouping them into teams to have them identify their learning needs and then formulating the learning lessons based on those needs.

Hamann (cited in Kerka, 1995, ¶4) suggests that one cause of attrition may be that there is a difference between learner expectations and reality. "Adult learners may get frustrated early by lack of progress, or they are not given enough information before enrollment to know when to expect change and what they must do to achieve it."

Situational or dispositional barriers may also be reasons why adults don't participate in learning. Valentine and Darkenwald (cited in Merriam, Caffarella, & Baumgartner, 2007, p. 66 – 67) identified five reasons why adults don't participate: "personal problems, lack of confidence, educational costs, lack of interest in organized education generally, or lack of interest in available courses."

Tinto (2006) also stresses the importance of integration into learning environments as being important to retention (at least in four-year universities). Students who don't feel connected to the system may leave the institution for a more comfortable fit (culturally, socially or whatever) elsewhere.

Community colleges work hard to address recruitment and retention of adult students. We must consider the multiple factors of participation or nonparticipation not only for our academic programs success, but also to insure the quality of our institutional student support structures such as counseling and student activities.

What does it mean to “learn?” What theories of adult learning inform your understanding of how adults learn? What do these theories say about the process by which adults learn? What factors significantly influence or shape the nature of this learning process?

Once succinct definition of learning crafted by Merriam, Caffarella, and Baumgartner (2007) is “learning is a process that brings together cognitive, emotional, and environmental influences and experiences for acquiring, enhancing, or making changes in one’s knowledge, skills, values, and worldviews” (p. 277).

I find credibility in many learning theories, but the theory that makes the most sense to me is the constructivist orientation. How people make sense or meaning out of their experiences is the general idea and there are differing opinions as to whether we make this meaning individually or in combination with our environment. Those who believe that meaning making is an individual endeavor believe that meaning is an internal cognitive activity dependent on a person’s previous knowledge which is built upon. The social constructivist’s posit that we make meaning through our social interactions in dialog with others and that this also is how we assimilate into our culture.

All constructivists view the process of learning to be active rather than passive. So, instead of sitting quietly in a classroom listening to lectures, students are learning “through dialogue, collaborative learning, and cooperative learning” (Merriam, Caffarella, & Baumgartner, 2007, p. 292). I think a combination of the personal and social perspective is more relevant to adult learning because we must be able to access and analyze our individual knowledge and experiences before we can adapt it to our social interactions and environment.

The most important factors which shape the nature of this type of learning are the processes of reflection and the role of personal experience. Educators can facilitate this

process through creating learning activities which include dialog not only between teacher and student, but also between learners.

Candy (cited in Merriam, Caffarella, & Baumgartner, 2007, p. 293) demonstrates how this explains adult learning:

Becoming knowledgeable involves acquiring the symbolic meaning structures appropriate to one's society, and, since knowledge is socially constructed, individual members of society may be able add to or change the general pool of knowledge. Teaching and learning, *especially for adults*, is a process of negotiation, involving the construction and exchange of personally relevant and viable meanings (italics in original).

Philosophically, I think we use problem-based learning in EAD 861 in order to make sense of our studies, which is a constructivist theory. In our teams, we each brought to the problem our own set of experiences and prior knowledge. We learned new information (adult learning theories) and applied it, through dialog and negotiation, to solve a case scenario. The scenario of the attrition problem in the community college's adult basic education classes in lesson three is a good example of how our team used constructivist learning methods to solve the problem.

Each of our team members shared their current knowledge and experiences of the problems we understood about attrition and about adult basic education students in general before we began the readings on motivation, participation and retention. After reading the relevant theories, we negotiated which areas of the problem each of us would address and tackled the writing individually. We came back together periodically to reflect on the process of the product (the PowerPoint presentation) and mutually agreed on a finished paper. Based on our grade, and the debriefing session after the lesson, I believe our learning of the new material for the lesson was successful.

Question 3

Identify a form of difference for each of these categories (biological, intellectual, psychological and cognitive) that is important to consider in adult learning; briefly describe the overarching theorists; identify defining attributes; and describe why it is significant in why adults learn and how.

Biological Differences

A greater understanding of how to care for our bodies has resulted in increased longevity. According to Guyer, Freedman, Strobino, & Sondik, (cited in Merriam, Caffarella & Baumgartner, 2007, p. 300) “life expectancy has increased from 49.2 years in 1900 to 76.5 years in the United States in 2000.” However, decline in everyone’s overall health or biological functioning begins to show decline usually in the fourth or fifth decade of life with significant decline occurring in the sixth and seventh decade.

There are several theories as to why our biological systems decline with age. Bee & Bjorklund (cited in Merriam, Caffarella & Baumgartner, 2007, p. 300) describe three theories, though they suggest they are all in need of further exploration. One theory suggests “cellular damage occurs during the normal metabolism of oxygen.” A second “blames physical aging on the cell’s lessening ability to repair daily breaks in DNA strands.” A third “asserts that primary aging is related to ‘how many calories we metabolize per day.’”

The deterioration of our senses, our central nervous system and to some degree, our memory are the main biological attributes worth noting as it relates to learning. Changes in vision and hearing are usually progressive as we age. The central nervous system, which consists of the brain and spinal cord, “forms the primary biological basis for learning” (Merriam, Caffarella & Baumgartner, 2007, p. 304). The most identifiable change in the nervous system is the slowing down of our reaction time. Memory is often

associated with learning and a decline in the memory function jeopardizes learning.

The biological changes in aging can have a great impact on learners. Given that the Baby Boomer generation (persons born between 1946 and 1964) are already entering their senior years, educators and administrators can, as an example given by Merriam, Caffarella, and Baumgartner (2007), use “advances in technology such as closed captioning of lectures and discussions and computer programs that assist low-vision individuals to read texts, and to help older adults navigate new learning in both formal and informal settings” (p. 304).

Intellectual Differences

The individual differences approach views intelligence as something that can be measured. There are two approaches to measuring intelligence this way: the general intelligence or “g” factor and multiple factors. The most widespread use of IQ testing uses multiple factors to measure intelligence “such as spatial ability, perceptual speed, numerical ability, verbal relations, word, memory and induction” (Merriam, Caffarella & Baumgartner, 2007, p.363).

Regarding age and intellectual abilities, researchers are very interested in the idea of whether or not our intelligence declines with age. Opinions vary and “range from the contention that intelligence definitely enters a process of irreversible decline as we age (though that age does differ from scholar to scholar) to those who argue that intelligence is relatively stable through the adult years, with substantial changes occurring very late in life” (Merriam, Caffarella & Baumgartner, 2007, p. 366).

Horn and Cattell’s (cited in Merriam, Caffarella & Baumgartner, 2007, p. 363) theory on multiple intelligence factors viewed intelligence as “consisting of two broad areas:

fluid intelligence (Gf) and *crystallized intelligence (Gc)*. The main difference, according to Dirx (2009), is that “fluid intelligence describes the mechanics of intelligence and crystal describes the ability to apply intelligence to the context of life.”

There are a couple important attributes of intelligence to consider as we age. Dirx (2009) explains changes in our fluid intelligence “usually declines starting around midlife,” and changes in our crystal intelligence gradually increase, level off, then gradually decline very late in life.”

Merriam, Caffarella and Baumgartner (2007) identify plasticity, “the ability for people to change and also maintain durability as they age,” and compensation, “adapting to losses in cognitive processes that may affect intelligence as we age” as important attributes as to whether or not adults can “in some way change the course of their intellectual development” (p.367 - 368).

Educators would also be wise to understand individual differences in intelligence in their adult students. While we may have only minimal potential for improvement of the plasticity of our intellect, we wield far more control over our potential to compensate for our losses. Merriam, Caffarella and Baumgartner (2007) suggest “adults can invest more time and effort in a task, learn new ways to perform the same task, and adjust their goals and criteria for success to accommodate any losses or deficits” (p. 368).

As a student who has been away from the classroom for a couple of decades, my experience in EAD 861 has forced me to develop my own strategies to compensate for my loss in concentration, such as prioritizing quiet time away from the hustle and bustle of my home and going to the library to study.

Psychological Differences

According to Clark & Caffarella (cited in Merriam, Caffarella & Baumgartner, 2007, p. 299) “the psychological perspective of learning ‘focuses on how we develop as individuals and examines primarily internal development processes.’ Psychological models of development have been used to explore faith development, moral development, identity development and intellectual development.”

Sequential models of development represent “common themes of adult life according to what phase or stage of life one is in” (Merriam, Caffarella & Baumgartner, 2007, p. 323). Erikson’s eight-stage model of development is probably the most studied and well known of the sequential models.

In Erikson’s model, each of the stages is “representing a series of crises or issues to be dealt with over the lifespan” (Merriam, Caffarella & Baumgartner, 2007, p. 306). Also, he believes “it is imperative that persons achieve a favorable ratio of positive over negative prior to moving to the next stage” (Merriam, Caffarella & Baumgartner, 2007, p. 306).

According to Merriam, Caffarella, and Baumgartner (2007), in staged theories of psychological development “there is a stepwise upward movement” and posit that these stages “are hierarchical in nature and therefore build on one another” (p. 306). In Erikson’s model of human development, the fifth stage, identity versus identity confusion, is one that although is described as an adolescent stage, Erikson also believes adults return to this stage when they need to redefine themselves. For instance, adults who have been laid off from a job may need to redefine their identity of their work self and decide to return to school to explore that new identity.

On the issue of identity, “if the dominant culture does not validate individual’s identities, they face additional identity development challenges” (Baumgartner and Merriam, 2000, p. 3). Shamara Shantu Riley experienced this dilemma in *A Sistah Outsider* when she felt, due to family and cultural pressure, unable to come out of the closet as a lesbian. Riley exhibited other identity issues as well such as that of a feminist and activist. Only gradually was she able to overcome the challenges she faced though her college years.

Cognitive Differences

From the cognitive viewpoint, memory and aging are a fascinating study. Hoyer & Roodin (cited in Merriam, Caffarella, & Baumgartner, 2007, p. 392) state that “memory functions are equated with learning or are seen as one of the primary mental processes associated with learning.” Therefore, “if adults do suffer major changes, especially decline, in their memory functions, it follows that the learning process may also be impaired” (Merriam, Caffarella, & Baumgartner, 2007, p. 392 – 393).

Working from the idea that memory is an information processing function, there are three forms of memory to consider: sensory memory, meaning our capacity to recall sensory information; working memory, meaning our ability to process information and use it for short-term uses; and long term memory, meaning retrieving information stored from past experience to be used again.

Do we lose our capacity for memory as we age? Most research points to the affirmative at least in the areas of both working and long-term memory. Dirx (2009) summarized memory loss and its effect on learning and concluded that there is minimal effect on sensory memory; that older learners need increased time to process

information; and that we become less efficient at organizing new material.

The Angel learning system and the way lessons are structured on it for EAD 861 has been an area of concern in our class discussion board. Primarily, the organization of materials seems to be confusing. It would be helpful for educators to consider that the majority of the class seems to be attended by many middle-aged adults who may be beginning to feel the effects of memory loss.

Other ways educators can assist older learners in formal education, according to Merriam, Caffarella, and Baumgartner (2007), is to integrate training in memory skills such as: “providing both verbal and written cues, such as advance organizers and overheads, when introducing new material to learners; using mnemonics and rehearsal strategies; and giving opportunities to apply the new material as soon after the presentation as possible” (p. 400). The presentation of course EAD 861 did indeed use some of these strategies to assist students, namely, using introductory audio presentations and using problem-based learning to apply learning concepts.

Question 4

Define what is meant by each of these terms or concepts (self-directed learning, learning from experience and reflection) and identify a theory for each in your definitions that best describes the process in adult learning;

In self-directed learning individuals deliberately plan a path of learning that suits their needs. Knowles (cited in Merriam, Caffarella & Baumgartner, 2007, p.106) posits that “learners become increasingly self-directed as they mature.” I would have to agree that as we mature, we are more capable of autonomous self-directed learning. However, I believe children are also by nature, self-directed learners in order to understand and survive in their environment, their culture and other social contexts. They just don’t typically have a deliberate plan or methods to act on them. Or as Jarvis

(cited in Merriam, Caffarella & Baumgartner, 2007, p.103) states in regards to children, they “do not have the cognitive skills, emotional range, or action alternatives available to adults.”

The idea that learners are autonomous in self-directedness has been questioned. According to Poulton, Derrick & Carr (cited in Merriam, Caffarella & Baumgartner, 2007, p. 123), the authors found that “although adults might intend to persist in valued learning activities, they often do not choose to engage in such activities.” They also “identified four variables that have the most influence on whether individual adult learners exhibit autonomous behavior in learning situations: their technical skills related to the learning process, their familiarity with the subject matter, their sense of personal competence as learners, and their commitment to learning at this point in time” (Merriam, Caffarella & Baumgartner, 2007, p.123).

The self-directed learning model I find most appropriate is the interactive model which suggests self-directed learning does not have a beginning and end, but instead relies on “opportunities in the learner’s environment, the personality characteristics of learners, cognitive processes and the context of learning, which collectively interact to form episodes of self-directed learning” (Merriam, Caffarella & Baumgartner, 2007, p. 111). In particular, Spears’ (cited in Merriam, Caffarella & Baumgartner, 2007, p. 112) model suggests there are three elements crucial to self-directed learning: “the opportunity people find in their own environments, past or new knowledge and chance occurrences”... and that “each self-directed learning project is composed of a set of clusters of those elements.” The clusters of learning activities would then be gathered together when the learner needed them, typically after a catalyst opportunity occurs to

pull them all together.

When learners are engaged in self-directed learning they reflect upon and draw on their experiences to make decisions about their learning path. The clearest description of learning from experience is that people have experiences; they reflect on them and construct new knowledge as a result of these reflections. This is the constructivist approach as described by Fenwick (cited in Merriam, Caffarella & Baumgartner, 2007). However, I believe the best model of experiential learning is described by Jarvis (cited in Merriam, Caffarella & Baumgartner, 2007, p. 100) who believes “all learning begins with experience.”

Jarvis' holistic model starts with the understanding that the learner is not only a cognitive being, but also one who brings his/her psychological, biological and, spiritual self to a learning situation. The learner brings that history and uses their five human senses to interact with a new situation that doesn't fit into their current understanding, or, doesn't assimilate into their current knowledge. The person experiences emotion relating to this new information, reflects on it, and decides whether or not to take action to generate a new learning experience. If the person dismisses the emotion or thoughts, no learning will occur.

The model Jarvis (cited in Merriam, Caffarella & Baumgartner, 2007, p.164) uses “includes both experimental learning (the result of a person experimenting on the environment) and reflective practice (thinking about and monitoring one's practice as it is happening).” The result of this learning is the learner is changed in some way and there are three possible ways a person is changed: their self-identity may shift, they may view their world differently, and they may be able to apply the new learning to

other, similar experiences. This changed person will then incorporate this learning experience into the next new situation encountered.

Once the person has reflected on and accepted this new learning, this experiential model also becomes an example of *Reflection-on-Action* which is a reflective learning theory. According to Merriam, Caffarella and Baumgartner (2007) “reflection-on-action involves thinking through a situation after it has happened” ... and “results in new perspectives on experiences, changes in behavior, and commitments to action” (p. 175).

Using transformative learning theory, suggest the ways in which these ideas (SDL, reflection, and learning from experience) are theoretically manifest in our understanding of learning as transformative;

The ideas of self-directed learning, reflection and learning from experience are all intertwined in the theory of transformative learning. Merriam, Caffarella and Baumgartner (2007) acknowledge that in transformative learning there are “three key components: the centrality of experience, the process of critical reflection and transformative learning’s link to adult development” (p. 158).

The goals of self-directed learning as stated by Merriam, Caffarella and Baumgartner (2007) are to “enhance the ability of adult learners to be self-directed in their learning, to foster transformational learning as central to self-directed learning and to promote emancipatory learning and social action” (p. 107). Thus, there can be no transformational learning without self-directed learning.

Merriam, Caffarella and Baumgartner (2007) also describe Jarvis’ model of the learning process as one that “links the whole person (body, mind, self, life history) with an experience encountered in the person’s social context. The disjuncture between the

person's biography and the experience leads to learning that involves emotion, thought, and action. The result is some change in the person" (p. 104). Thus, this is also a transformational perspective.

Reflection is a method of experiential learning and if the result of reflection results in self-directed behavioral changes, then reflection can also lead to transformation of the individual.

Identify and briefly describe incident from your experiences in EAD 861 this past semester, as well as examples from the B&M text that you feel illustrates these terms and their inter-relationship with transformative learning.

Baumgartner and Merriam (2000) include in their text the story *Flip-Flops* by Perri Klass. Our heroine is a medical doctor who gradually believes she has transformed into a confident physician who is comfortable in her authority in giving medical orders. In her path to becoming self-directed learner, if we follow Spears' (cited in Merriam, Caffarella & Baumgartner, 2007, p.112) model of self-directed learning, Klass begins as a novice medical student, progresses to an intern and then a resident (building on her knowledge). She gradually is given more complex cases (opportunities in her environment) and during an emergency she attends on the street (chance occurrence) she experiences an opportunity to reflect on her self-concept as an authority figure as a doctor.

The transformation concept relevant to Klass' story is the one on adult development. According to Mezirow (cited in Merriam, Caffarella & Baumgartner, 2007, p. 147) the process of perspective transformation is the "central process of adult development." Klass goes through a period of transformation in her psychological development as evidenced by her change in her perception of herself as a competent doctor.

Through my study of this subject in EAD 861, I've come to believe my self-directed learning experience is not quite autonomous, or at least my need for outside direction is becoming more apparent. The context of the online learning environment is affecting my autonomy and I'm questioning my motivation to persist in this environment. Using the Poulton, Derrick & Carr (cited in Merriam, Caffarella & Baumgartner, 2007, p. 123) variables on whether individual learners are exhibiting autonomous behaviors in learning situations, what follows is my assessment of my reflections on my thoughts and behaviors relating to my current experience in EAD 861.

My technical skills related to the learning process are fairly competent in the online environment as are my overall computer skills. However, I am not at all comfortable with my referencing and citation skills. As a new graduate student, I would have appreciated some sort of formal orientation to APA style and online research techniques prior to starting my first class. Instead, I am deciphering the style and submitting work in the hope that I am correctly understanding the rules. This has caused me some anxiety which I believe could have been remedied by a short orientation with feedback from an instructor, prior to enrolling in my first course.

My familiarity with the subject matter is sketchy. One would think that someone who works in higher education would have a greater understanding of the subject of adult learning than I do. I was familiar with some of the theories in adult development and intelligence from my undergraduate studies in psychology, but the majority of the subject matter in EAD 861 is new to me. I don't find this a barrier to my autonomous self-directed learning, though I believe a fuller understanding of the concepts would be learned best (for me) in a classroom setting as there are many times I wished I could

have just raised my hand to get more illustrations of the concepts.

My sense of personal competence as a learner has changed over the years.

Though I bring more experience and knowledge to the classroom as an older student than when I was an undergrad, there are age-related issues (such as diminished concentration abilities) and situational issues (such as work and family commitments) which make it harder for me to get through complex theories and assignments in the time allotted. I find I need more frequent feedback from both classmates and instructors so that I may better assess my competence as a learner.

My commitment to learning at this point in time has not been an autonomous decision. While I enjoy learning at a leisurely pace, my decision to attend graduate school was a decision made with input and direction from my employer and my family. I will likely struggle with this throughout my future as a graduate student, but at this point will not let it deter me from continuing my studies.

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