

Emotions and Their Effect on Adult Learning: A Constructivist Perspective

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Abstract: Adult educators are only beginning to understand the interaction between learning and emotion (Dirkx, 2006; O'Regan, 2003). Understanding these concepts and their interaction through the constructivist perspective presents a unique opportunity to appreciate the learner's perspective and the construction of knowledge through experience.

Learning is primal. As one of the most basic human behaviors, learning occurs instinctively at all times. Our minds actively engage new ideas, new facts, and new behaviors, allowing new truths and principles to be applied in our lives. Humans continuously seek information about circumstances they encounter to help make meaning of what they have experienced. Learning is not only primal; it is constant and significant; survival is at the primal core of learning.

Adults look for ways of understanding experiences as they are occurring, hoping to learn something applicable to interactions and challenges in life (Goffman, 1959). Experience is not isolated, but connected to previous opportunities for learning often associated with emotions. Emotions, the cognitive manifestations of behavioral acts, are at our deepest core. Emotion serves as a cognitive guide and helps adults make decisions every day (Goleman, 1997). A frown, a smile, or tears give different cognitive cues regarding what is affecting the behavior of people surrounding us. Humans react and learn through the lens of emotionally laden experiences. Emotions guide humans on how to console a sad friend, show happiness at a party, or ask a question in a classroom. Emotions are extraordinarily powerful, permeating perspective and helping to make meaning of physical and social surroundings (Callahan, 2004; Dirkx, 2006; Goleman, 1997; Lutz, 1988). Shaping our experience, emotions bias learning. By shaping experience, emotion angles the learning perspective and consequently the recollection of actual events later in life.

"Emotions are important in adult learning because they can either impede or motivate learning" (Dirkx, 2001, p. 63). Serving as motivation to pursue desires, emotion creates purpose and shapes the context of learning experiences (Merriam & Caffarella, 1999; Reeve, 2001). Emotion plays a critical role in the construction of meaning and knowledge of the self in the adult learning process (Dirkx, 2001). Entering the cognitive system, emotions are recognized and as a result alter thought patterns, affecting the experience of how adults learn (Opengart, 2005).

Poor engagement with the topic of emotions and learning has resulted in little literature on the topic (Dirkx, 2006). "Relatively few scholars and practitioners in adult and higher education regard emotion as integral to the meaning-making process" (Dirkx, 2006, p. 16). The importance of emotion in cognitive processes is only now being recognized (O'Regan, 2003). Information available on how emotion affects learning suggests a linkage between the two, but the scholarly scope in adult education literature is narrow (Dirkx, 2006). The purpose of this paper is to explore how emotions affect learning in adults. First, we explore how learning is defined using the constructivist perspective. Second, we look at how emotions are constructed both biologically and cognitively. Lastly, implications for teaching and learning as well as suggestions for further research are explored.

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Constructivist Learning Perspective

Promoting change in cognition parallels that of change in evolution. Constant adjustments occur until an individual reaches congruency with the environment. Without adjustment and congruency, the individual dies. Individuals change ideas and learn to preserve their life. The mechanism promoting change in cognition is the same as in evolution, namely equilibration. Dynamic processes of self-regulated behavior balance two intrinsic polarities: assimilation and accommodation (Piaget, 1970). Assimilation is the organization of experience, understanding how to and act to preserve autonomy as a part of a whole system. Accommodation is comprised of reflective, integrative behavior serving to change the self and explicate the object to function with cognitive equilibrium (Twomey, 2005). Learning from the constructivist perspective involves both the perception of experiences through constructed reality and the encouragement to develop new knowledge schemas through adapted experience. Stimuli are interpreted and received, constructing the very ideas of reality. Ideas are created internally and are assembled through mental structures that represent some aspect of the world. People use these mental structures to organize current knowledge and provide a framework for future understanding. For constructivists, human beings have no access to an objective reality (von Glaserfeld, 2005); we have access only to our mental structures.

Social, physical, and emotional conditions are always changing. Therefore, developing strategies for learning and adaptation are essential to survival. Permanent reflection on learned mental structures and behaviors must be completed to respond to environmental challenges. Learning occurs through this adaptive function. Understanding how organisms adapt and evolve is central to understanding the psychological basis of learning (Twomey & Randall, 2005).

Transferring the constructivist principles to the educational setting, it is possible to say that a student will learn only what he or she perceives as necessary to survive. Learning becomes of value in relation to a student's experiences and construction of reality, underscoring the adaptive behaviors of learning. If learning is not seen as survival, nothing objective specifies how or what a student takes away. Learning must be constructed through interpreting, organizing, and transforming deeply personal perspectives of experience. Students' beliefs, based on formative experiences, are always acting as a filter for understanding what is presented in an educational setting (Cranton, 2005).

Students are, under this perspective, active constructors of the self according to the specific needs that they have. Deep understanding of students' internal worlds through experience is needed to achieve effective learning and engagement. People have a natural tendency to develop cognitive structures that allow for physical and emotional survival. Learning through constructivism can be understood as a tool providing adaptive behaviors through learning.

Development of Emotion

Biological Construction of Emotion

Our bodies are designed to take in sensory information from all around us. Our brains are designed to process, store, and act on information received from both external and internal stimuli (Perry, 2006). Biological emotional response is guided by a structure in the brain called the amygdala (Wolfe, 2006). Preparing our bodies to react to potential challenges, the amygdala releases chemicals in the blood stream resulting in sweaty palms, tense muscles, an occasional spike in blood pressure, and mobilized movement to the fight or flight response (Wolfe, 2006).

Emotions occur very rapidly, lasting only a short time (Reeve, 2001). Humans act emotionally before the conscious awareness of emotion can occur; we react before we know we

are reacting. Our minds respond cognitively as the biological response for emotions reacts to the physical environment. Biologically, emotion affects the mind. “A traumatized person in a state of alarm is less capable of concentrating, more anxious, and more attentive to nonverbal cues such as tone of voice, body posture, and facial expressions” (Perry, 2006, p. 24).

Cognitive Construction of Emotion

Researchers who study emotion from a socio-cultural, behavioral, or constructivist’s point of view do not believe biological processes are important in understanding emotion (Reeve, 2001). “Emotions do emerge from biological processes, but emotions also emerge from information processing, social interaction, and cultural contexts” (Reeve, 2001, p. 452). The creation of experience is formed through the cognitive construction of emotions. “Through the experience of emotions, [we] come to recognize what is cognitively and affectively of value,” helping determine how and why we respond to the world around us (Dirkx, 2006, p. 31). Cognitive construction of emotions allows for the creation and understanding of our world. Cognitively we assign values, make judgments, and work in the context of cultural norms to take action.

Emotional cognitive development plays a large role in learner development. “If people are anxious, uncomfortable, or fearful, they do not learn” (Perry, 2006, p. 26). Encountering negative emotions impacts a learner’s future. Students who have experienced negative cognitive emotional moments avoid certain behaviors when faced with new challenges in the classroom, responding to problems with peers or assignments, and seeing another’s viewpoint. Behavioral manifestations of avoidance can be witnessed in high absenteeism, little or no engagement with classroom discussion, or an abundance of missing assignments. Emotions influence self-esteem, affecting the development of avoidance behaviors. The recollection of negative emotions and the emergence of fear can be too much for some students to risk emotionally. Experiencing strong negative feelings can influence students to avoid situations that previously resulted in negative emotions (Perry, 2006).

The Creation of Feeling

Emotions are a part of the learning process and part of our everyday experiences (Callahan, 2002; Dirkx, 2006; Kasl & Yorks, 2002; Perry, 2006; Reeve, 2001; Wolfe, 2006). Although the concepts are explained separately, biological and cognitive processes work together to create our experience and meaning. As our bodies respond biologically, our minds respond cognitively to create the affective component of feeling. The experience of emotion revolves around the creation of feeling and is operationally defined as the participatory effect of the biological and cognitive response (Heron, 1992).

Expression of emotion within the learning experience suggests deep involvement of the learner's psyche (Dirkx, 2006). Holistic by definition, feelings are the manifestations of both biological and cognitive processes working in tandem. Feelings determine why we cry and why we laugh, successfully creating opportunities for creating meaning in context of the learner’s experience.

Implications for Teaching and Learning

Teaching

Educators can use the power of emotion to affect learning (Wolfe, 2006). Emotions serve as filters anticipating threats to the self-image protecting self-esteem. Emotionally, the freedom to learn is heavily dependent on emotions experienced while learning, a framework that educators have some control over. Trust toward the person offering new knowledge or the belief that current experiences will not be harmful is central to learners’ availability to transform.

Learning, as an adaptive filter, is powerful and sensitive. Meaningful learning occurs after emotional factors facilitate personal transformation. Some emotions have a positive effect on learning, and others block the learning process. No list of these emotions and their effects exists due to the individual construction of emotion and feeling, but we can speculate. Emotions like anxiety or fear could have positive effects, while other emotions, like anger or arrogance, could have negative effects. Some emotions blind us to evident deficiencies, allowing others to take advantage of our kindness. Identifying, analyzing, and managing emotion takes more than emotional intelligence. Emotional awareness requires a deeper understanding of the subconscious dimensions of emotional organization and the flow that keeps emotions dynamic in our life (Gabriel & Griffiths, 2002).

Today's knowledge is tomorrow's unawareness (Drucker, 1998). As new challenges occur, an adult learner is forced to sharpen and renew their skills. Admitting something might be wrong with how one sees the world can be challenging and feel personally vulnerable (Cranton, 2006). Leaving old knowledge behind implies not only cognitive transformation, but also an emotional transformation to accept changes, differences, and most fearful, uncertainty. Understanding of the constructivist emotional learning perspective would open new transformative teaching possibilities.

Educators should give thought to current paradigms when teaching. The right answers in class are often praised, but what about the courageous answer or genuinely personal response? A deeper reflection on how to create the adequate emotional tone to facilitate learning is necessary to overcome the challenges of apathy, passiveness, or stress commanding attention in classroom settings today. The blending of emotions and learning in the classroom promotes secure, emotionally engaging environments that challenge and test as well as encourage knowledge acquisition.

Learning

Emotion is the framework adults use to make meaning, allowing for the expression of personal values as well as an understanding of surrounding cultural meaning systems (Lutz, 1998). The meanings we associate with experience inform us about the self and broader social world; how we feel about an experience is reflective of value systems and personal perspectives of society (Denzin, 1984). Emotion refers to the self, and understanding its dynamics allows for the development of self-knowledge. Understanding the emotional effect of learning allows us to more holistically reveal our inner beings to the outside world.

Although emotion and learning are symbiotic in the cognitive experience, the two constructs are just as vital in creating the settings in which learning will take place. Anecdotal experiences show that adult students can feel uniquely threatened within the walls of a classroom. A sense of vulnerability and fear can permeate the learning lens, blocking or delaying significant pieces of the learning experience.

Educators should give thought to the types of environment they create and to the emotionality of the classroom. Settings low in emotional awareness that fail to produce a sense of engagement do not fully develop the student's potential. From the constructivist perspective, classroom settings allow ideas to interact in the mind and with the environment, creating value and meaning. Students must feel safe to interact, experiment, and explore new topics and constructs. In dichotomist fashion, they must feel safe to succeed as well as to fail.

Further Research

Research on the effects of emotions and learning, concentrated on the creation of positive learning environments and emotional teaching strategies, would benefit the field. A closer look

at the construction of emotions in learner centered arenas, both qualitatively and quantitatively, would greatly enhance how adult educators understand emotion and learning, as well as their effects.

Additionally, adult educators should focus on the practice of creating emotionally safe environments where learners are free to construct their realities; however, research must indicate how this can and should occur (Callahan, 2004; Dirkx, 2001, 2006). Currently, there are limited resources available in this area and most are commentary in nature. The field would benefit from research on teaching strategies that lead to the creation of emotionally aware environments and that give pragmatic techniques to adult educators in the field.

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