

## **Two Channels of Learning: Transformative Learning and Creative Learning**

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### **Abstract**

*For adult learners, it is important to make meaning of their lives through a critical worldview to better construe the world around them. Therefore, transformative learning posits a better position to explain adult learning processes where adults construct and interpret their experiences in order to validate their fidelity and to make appropriate decisions. Another aspect of the practice of meaningful and useful learning in the adult classroom is creative learning. Its main objective is to help adults open themselves to new possibilities, to play with ideas, to experiment, and to modulate their reactions to fast-changing environments. The purpose of this article is to portray that the implementation of transformative and creative learning is an admirable approach to offer potential personal growth among adult learners. First, the nature of transformative and creative learning is discussed. Then the barriers and practice of two learning strategies in classrooms are explored. Finally, implications and suggestions are provided.*

**Keywords:** Transformative learning, creative learning, adult learning

### **Introduction**

For adult learners, it is important to make meaning of their lives through a critical worldview to better construe the world around them (Taylor, 2008). “Meaning is making sense of or giving coherence to our experiences. Meaning is an interpretation” (Mezirow, 1991, p. 11). The nature of transformative learning is about “change-dramatic, fundamental change in the way we see ourselves and the world in which we live” (Merriam, Caffarella, & Baumgartner, 2007, p. 130). Specifically, “when people critically examine their habitual expectations, revise them, and act on the revised point of view, transformative learning occurs” (Cranton, 2006b, p. 19). Therefore, transformative learning posits a better position to explain adult learning processes where adults construct and interpret their experiences in order to validate their fidelity and to make appropriate decisions. Moreover, this proposition is grounded in the constructivist assumption, where we build our world through our own perceptions of our experiences (Cranton, 2006b). Taylor (2008) notices that transformative learning “seems to have replaced andragogy as the dominant educational philosophy of adult education” (p. 12).

Another aspect of the practice of meaningful and useful learning in the adult classroom is creative learning. Its main objective is to help adults open themselves to new possibilities, to play with ideas, to experiment, and to modulate their reactions to fast-changing environments (Craft, 2001; Sierpina & Cole, 2004; Torrance, 1977). It should be recognized that not all adult education involves creative learning; however, fostering creative learning should be the fundamental goal of adult education. Jones (2011) underlines the potential creative capital in education and suggests that “creativity in education is seen as one instance of human capacity for social semiotics, a capacity spurned by rules but vital as a resource for change” (p. 188). With the examination of critical and creative thinking in higher education, Halpern (2010) suggests more empirical research should focus on “what practices produce better thinkers” (p. 381). He indicates the imperative role of teachers to foster creativity is because “students need permission to be creative and, in some cases, direction as well, so that they understand the bounds of being novel and appropriate” (p. 391).

The purpose of this article is to portray that the implementation of transformative and creative learning is an admirable approach to offer potential personal growth among adult learners. First, the nature of transformative and creative learning is discussed. Then the barriers and practice of two learning strategies in classrooms are explored. Finally, implications and suggestions are provided.

### **Transformative Learning for Meaning Making**

The most influential thoughts on transformative learning are from Mezirow's (1991) psychocritical view, which overshadow other alternative concepts (Taylor, 2008). Apart from this ubiquitous recognition of Mezirow's position, Taylor (2008) has identified several conceptions of transformative learning: psychocritical, psychoanalytical, psychodevelopmental, social emancipatory, neurobiological, cultural-spiritual, race-centric, and planetary perspectives of transformative learning (pp. 7-9). The critical differences among the various views are rooted in the goal of transformation and the emphasis on either individual or social change.

According to Mezirow (1991), transformative learning "pertains to both the transformation of meaning schemes through content and process reflection and the transformation of meaning perspectives through premise reflection" (p. 117). More specifically, "what needs to be learned for transformative learning is critical reflection on assimilated epistemic assumptions and critical dialectical judgment to validate new assumptions" (Mezirow, 2004, pp. 69-70). Cranton (2006b) follows the notion of Mezirow's perspective and defines transformative learning as the "process by which people examine problematic frames of reference to make them more inclusive, discriminating, open, reflective, and emotionally able to change" (p. 36). Merriam et al. (2007) have identified three key concepts in transformative learning: individual experience, critical reflection, and development. For adults, experience is the bedrock for their learning; however, not all experiences lead to learning.

It is possible that different people have different reflections can the transformative learning process begin. Critical reflection, especially under the category of critical thinking, has generated a plethora of articles in the literature. As Mezirow (1991) states, "reflection on content or process may result in the elaboration, creation, or transformation of meaning schemes. Reflection on assumptions involves a critique of these premises that may result in the transformation of both meaning perspective and the experience being interpreted" (p. 6). Finally individual development is also central to transformative learning. Self-development is the fruit of transformative learning, which is congruent with adult learning literature (pp. 144-148). Taken as a whole, experience serves as the starting point. Critical reflection is the process of transforming the experience towards meaningful learning. Finally, this inner change is the outcome of transformative learning that contributes to personal growth and development.

Cranton (2006) points out, "although transformative learning is stimulated by any event or experience that calls into question our habitual expectations about ourselves and the world around us... it likely depends on the nature of dialogue and relationships between teacher and student and among students" (p. 12). Merriam et al. (2007) identify some issues of transformative learning, specifically, "the overreliance on rational forms of knowing at the expense of honoring feelings and other ways of knowing" (p. 158). As a result, Cranton (2006a) expands the initial perspective of transformative learning for responding to this concern and states that "the central process of transformative learning may be rational, affective, extrarational, or experiential depending on the person engaged in the learning and the context in which it takes place" (p. 6).

### **Creative Learning for Optimizing Learning**

Rational critical reflection is a central process of transformative learning. However, in order to attain a complete learning process, it should go beyond critical reflection. It is believed that creative learning could fill this gap. Most significantly, some scholars have argued the importance of alternative knowing and learning through other channels (NACCCE, 1999). As Cranton (2006b) notes, "if a person responds to an alternative habit of mind by reconsidering and revising prior belief systems, the learning becomes transformative" (p. 24). The problem is how can we challenge our assumptions. Mezirow (1991) believes that critical reflection is the key. However, in order to arrive at alternatives, it is believed that creative thinking and learning could play an important role in exploring different possibilities (Jeffrey & Craft, 2004; Lin, 2011). As Mezirow (1991) notices, "habits of mind" is sometimes used as a roadblock and prevents us from transforming our thoughts. Cranton (2006b) also writes, "habits of mind are unexamined. They create limitations and form boxes of which we are unconscious and cannot, therefore, get beyond" (p. 28). As a consequence, creative learning could function as a useful vehicle and force us to think outside the box through consciously considering different ideas and executing some tactics, such as imagination, play, and brainstorming.

Sefton-Green, Thomson, Jones, and Bresler(2011) attempt to capture the essence of creative learning and observe in the literature two elements (teaching for creativity and creative teaching) are involved in the term “creative learning” in England. They suggest that “the idea of creative learning stands in opposition to a steady diet of teacher-directed” and define creative learning as “an experimental, destabilizing force; it questions the startingpoints and opens up the outcome of curriculum” (p. 2). At the heart of creative learning is “a ‘more than’ or ‘different than’ kind of approach [toward learning]” (p. 2) and to encourage the attitude of playfulness. The ultimate goal of creative learning is to promote personal growth and to unleash the individual’s potential (Sefton-Green et al., 2011).Banaji (2011) reminds us to include context in the concept of creative learning. He states that “creative learning is interactive, incorporating discussion, social context, sensitivity to others, and the acquisition and improvement of literacy skills; it is contextual, and has a sense of purpose and thus cannot be based around small units of testable knowledge”(p. 41).

Davis-Manigaulte, Yorks, and Kasl (2006) believe that “expressive ways of knowing” (p.27) could bridge the gap between affect and rationality in transformative learning. The idea of expressive ways of knowing is grounded in the belief that imagination and intuition are important elements of holistic learning that complete the model of transformative learning. They argued that “imaginal and intuitive knowing manifested in expressive forms is an important bridge between precognitive, prelinguistic experimental knowing and conceptual knowing, which is often referred to as rational or analytical knowing” (p. 30). This proposition signifies the importance of developing whole-person learners.

Young (2009) points out the fact that “imagination and creativity are integral parts of our classrooms and their inclusion is as natural to most of us as breathing” (p. 74). As a result, she supports the idea that “classroom learning should always include time for students to brainstorm, envision, dream, and think impossible thoughts . . . . [Most important], imagination and creativity can be unproductive daydreams unless students are taught how to use their creative abilities” (p. 75).

Michalko (2006) in his book *Thinkertoys* provides thirty-nine creative-thinking strategies from linear to intuitive techniques because he believes that “linear and intuitive thinking... are necessary for optimum creativity” (p. 36). He held the belief that people can increase their creativity through appropriate training. Specifically, he wrote:

Creativity is not an accident, nor something that is genetically determined. It is not a result of some easily learned magic trick or secret, but a consequence of your intention to be creative and your determination to learn and use creative-thinking strategies. (p. XVII)

The Center for Creative Learning (CCL) in its web site ([www.creativelearning.com](http://www.creativelearning.com)) promotes the model of Creative Problem Solving (CPS) as a powerful and useful tool for creative learning. CCL (2012) uses productive thinking to include the idea of creative thinking, problem solving, and decision-making. It develops several activities and tools to facilitate productive thinking, which is grounded in two fundamental beliefs: creative thinking (generating tools) and critical thinking (focusing tools). For the generating tools, brainstorming, force-fitting, SCAMPER, attribute listing, and morphological matrix are included. With regard to focusing tools, Advantages, Limitations (overcome), Uniqueness (ALoU), hits and hot spots, sequencing (S-M-L), evaluation matrix, and paired comparison analysis (PCA) are involved. Additionally,CCL believe these thinking tools could have a positive effect on students’ academic performance to meet content and curriculum standards in the school.

### **Fueling Adult Learning for Changes through Transformative and Creative Learning**

Some barriers that inhibit both transformative and creative learning,which in turn limit the real effects of transformation of adult learners, should be recognized. For transformative learning, the biggest issue is the lack of critical reflection and critique among learners (Taylor, 2008), whereas the main problem for the practice of creative learning is the environment (Amabile, 1998; Sternberg, 2003). As Taylor (2006) notes, “the choice of being transformed may not always reside with the educator” (p. 92); however, the main role of the educator is to cultivate an appropriate and healthy environment that prepares an appropriate setting for learners.

With regard to fostering transformative learning, Cranton (2006a) provides thoughtful strategies to help educators through developing: (a) a greater self-awareness of being educators, (b) awareness of other students, (c) specifying students as unique individuals, (d) an appreciation of how context impacts that process, and (e)critical reflection (pp. 8-12).

More specifically, Cranton (2006b) believes that being supportive of transformative learning is based on the following principles: (a) becoming an authentic teacher is an important developmental and transformative process for the educator, and making that explicit helps establish trust and support (p. 178); (b) helping people act on their revised habits of mind (p. 179); (c) educators need to be conscious of potential conflicts and the related ethical issues (p. 180); and (d) being aware of and sensitive to the individual and the context that has shaped that person is essential in that process (p. 180).

Additionally, Taylor (2006) reflects on the literature and suggests four streams of thoughts should be considered while practicing transformative learning: (a) the transformative educator as developing an authentic teaching practice, (b) the transformative classroom environment that provides a safe, inclusive, and open learning environment, (c) the transformative text for group dialogue and discussion, and (d) the roles and responsibilities of transformative students in this process (pp. 91-95).

In order to practice imaginal and intuitive knowing in transformative learning, Davis-Manigaulte et al. (2006) provide several suggestions for educators, including: (a) help learners be attentive to learning; (b) create an empathic field; (c) create a pathway to felt experience and unconscious knowing; (d) codify new insights for more accessible to further meaning making; and (e) create a lived experience of what the learners seek to understand (pp. 31-32). With regard to creative learning, Wiggins (2011) reminds us “we mustn’t conflate ‘creative learning’ with mere ‘creativity’ or creative potential” (p. 321). The focus of creative learning is still “learning” that requires “students to learn to use content creatively” (p. 322). He believes “creative learning is only elicited and developed when the learner is confronted with one novel challenge after another, interspersed with feedback and focused direct instruction” (p. 322).

Mezirow (1991, pp. 168-169) proposes a model of transformation and describes 10 phases of this transformation, from facing a dilemma, to exploring alternatives and planning a course of action, and to integrating a new perspective into life. The relationship between reflection and problem solving in Mezirow’s view is tight. As Mezirow (1991, pp. 116) wrote, “Reflection is the central dynamic involved in problem solving, problem posing, and transformation of meaning schemes and meaning perspectives.”

To date, the most frequently used and most successful model that facilitates creative learning in the classroom is the Creative Problem Solving (CPS) model. The focus of this program is to train students to solve problems in a more systematic and effective way (Meadow & Parnes, 1959; Schack, 2004). The CPS process is composed of three stages: understanding the problem, generating ideas, and implementing them. Six steps guide this process: mess finding, fact finding, and problem finding comprise the first stage; idea finding is the second phase; and solution finding and accepting finding form the last step. Each of the stages involves two cycles: brainstorming to generate ideas for consideration and an evaluative phase to filter those possibilities (Davis, 2006). Treffinger (1995) refines the steps further and clustered them into three components: understanding the problem, generating ideas, and planning for action. More importantly, he identifies the CPS framework not as a linear model but rather a flexible process that fits an individual’s learning style and personality.

It is reasonable to expect that the combination of two models (Mezirow’s model and CPS) could maximize the learning experience. The proposed model is elaborated as follows: First, encountering dilemmas and pitfalls. At the first stage, adults experience some unlikely episodes and problems and need to identify what the issues are. The second stage is to use their creativity to generate different possible ideas to solve the problems. Brainstorming might be a good strategy. When solutions are saturated, they can move to the last stage, evaluation and reflection. This last phase is specifically for learning. When adults evaluate different solutions, they need to consider the cause and effect, context, and possible benefits and drawbacks. Most important, they should reflect on how they can learn from this experience. The lessons learned could serve as a useful reference for the future when experiencing similar situations.

With regard to implementing these learning strategies in the classroom, two possible issues need to be considered. Taylor (2008) states that “a response to learner resistance and barriers to transformative learning are for educators to develop awareness of learner readiness for change” (p. 12). On the other hand, when creativity is placed into the classroom context, it is important to consider, as Sefton-Green and Bresler (2011) ask, “what does creativity add to our understanding of learning, its organization and its process? And how does our understanding of learning determine our understanding of creativity?” (p. 13).

Taken together, it suggests the important role of the educator is not only to encourage learners to embrace different learning modes but also to facilitate the learning experience.

### Final Remarks

Hill (2008) might provide a fair statement related to the issue of adult learning when he states, "Learning is the process of making sense of experiences. It is a lifelong adventure. . . . Adult learning is often considered as a quest for truth, authenticity, and what is right" (p. 89). Davis-Manigaulte et al. (2006) note that "fostering transformative learning requires taking learners out of their comfort zone, both cognitively and affectively, while providing sufficient support" (p. 34). Taylor (2008) acknowledges that practicing transformative learning is not an easy task. He reminded adult educators that it is "much more than implementing a series of instructional strategies with adult learners" (p. 13) and most important if adult educators take "the position that without developing a deeper awareness of our own frames of reference and how they shape practice, there is little likelihood that we can foster change in others" (p. 13).

In short, Cranton (2006b) maintains that "in adult education generally, reflective thinking is a goal of learning" (p. 33); nevertheless, creative thinking should also be included in the adult education curriculum for developing adult learning capacities. It is believed that the power of bringing transformative and creative learning into classroom could foster change for both learners and educators. Both conceptualizations pertain to maximizing adult learning. Cranton (2006b) claims that "transformative learning is a process of examining, questioning, validating, and revising our perspectives" (p. 23). At the same time, through creative learning, we could also re-examine our worldview by thinking outside the box and revisiting our assumptions. It is important to elaborate on the important roles of cognitive, critical, convergent, affective, intuitive, creative, and imaginative facets of the learning process. After all, "we are all collaborating to build a theory in the process of development" (Mezirow, 2004, p. 70).

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