The Necessity of Creativity Development in Adult Learners for Lifelong Learning

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Abstract

Attaining a creative achievement is not a one-shot affair; it is instead a life span trajectory. This necessity implies that creative action is a lifelong learning. The concept of creativity has been well documented in the literature. Research illustrated that creativity activities could enrich psychological states of adults, which in turn improves quality of life and well-being. Therefore, it is hypothesized that, especially for adult educators, the conceptualization of creativity could serve as a useful adult pedagogy to promote lifelong learning in adults. Being equipped with creative thinking, adults could compensate for or accommodate the unavoidable age-related losses, which in turn explore their unfinished journeys with satisfaction.

Keywords: Creativity, Lifelong Learning, Adult Education, Adult Learning

Introduction

Attaining a creative achievement is not a one-shot affair; instead it needs passion, the labor of love, and the commitment of a lifetime (Amabile, 1996; Simonton, 1998; Weisberg, 1988). Indeed, a life span trajectory of creativity development varies from adult to adult (Simonton, 2006), and this necessity implies that creative action is learning (Guilford, 1950). For instance, with more experience, the quality of creation will show more mature and refined ideas (Sinnott, 1998). Accordingly, developing creative capacity is a lifelong learning.

Researchers have justified that creativity can be learned and taught through proper training programs with educators' conscious efforts and providing a creativity friendly environment (Davis, 2006; Reese & Parnes, 1970; Runco, 2003). The assumption behind creative training is not to warrant creative breakthroughs but to employ useful strategies in meaningful ways and achieve greater satisfaction through creative efforts (Treffinger, 1995; Treffinger & Isaksen, 2005). In line with this notion, some supporters suggest that creative

thinking and training pedagogy should blend into curricula, and with a more pluralistic approach will facilitate students to produce an increment of quantity and quality of ideas (Hsen-Hsing, 2006; Lau, Ng, & Lee, 2009; Parnes & Meadow, 1959; Puccio & Keller-Mathers, 2007).

The main attempt of this study is to review related literature and to begin, the definition of creativity is provided. Then, creativity development of adults is reviewed. Third, the importance of creativity in adults for lifelong learning is discussed. Finally, some suggestions for adult educators are disclosed.

Kaleidoscope Facets of Creativity

In early times, creativity was viewed as mystery. Creativity was credited to the visitation of the Muse or the divine force, creative geniuses were serendipitously inspired by divine intervention (Haring-Smith, 2006; Niu & Sternberg, 2006). In this light, human beings cannot create and only mimic the glory of God as inspired by the Muses (Ludwig, 1992; Niu & Sternberg, 2003; Simonton, 2000). Thus, Plato argued this inspiration is the gift of Gods (Plato: The Laws). The notion of creativity under the umbrella of the divine entity was dominant in the history of Western mindset for centuries. In the Age of Enlightenment, the concept of creativity shifted from divine to individual, as emphasis shifted to the achievement of science and technology (Craft, Gardner, & Claxton, 2008; Niu & Sternberg, 2006).

Creativity is hard to define and there is no single theory that dominates the academia (Kleiman, 2008; Niu & Sternberg, 2001). For example, Ribot (1900) taped creativity into imagination. He identified that "creative imagination demands something new: this is peculiar and essential sign" (p. 650). Following this line, Vygotsky (1930/2004) was inspired by Ribot and theorized the creative imagination. He viewed creativity as the ability to combine existing elements and to present in a new way. According to Dewey (1934), the participation of creative expression is for self-expression. In the similar thread, Maslow (1968) viewed creativity is self-actualizing. He stressed the importance of personality traits instead of achievements with regard to this kind of creativeness. In Piaget's (1962) view, the creative process stems from play. The creative thinking is assimilation, which is the interaction between imagination and environment. During the process of accommodation, the creative product is manifested by this mental experimentation.

Rather focusing on creative process, several scholars underline the fruit of the creativity. This intention has received increasingly support over the years (Baldwin, 2010; Runco, 2010). MacKinnon's (1962) provided a well-known product-orientated definition of creativity:

It involves a response or an idea that is novel or at the very least statistically infrequent. But novelty or originality of thought or action, while a necessary aspect of creativity, is not sufficient. If a response is to lay claim to being part of the creative process, it must

to some extent be adaptive to, or of reality. It must serve to solve a problem, fit a situation, or accomplish some recognizable goal. And thirdly, true creativeness involves sustaining of the original insight, an evaluation and elaboration of it, a developing of it to the full. Creativity, from this point of view, is a process extended in time and characterized by originality, adaptiveness, and realization. (p. 485)

In a drastic recognition of creativity, Csikszentmihalyi (1988) underscored the impact of social and milieu on creativity. He theorized that the creativity is the consequence of three shaping forces: domain, a set of opportunities or constraints that preserve and transmit the norms and ideas to the individual; the filed, the set of gatekeepers or professionals who judge the creative production meets the criteria of the domain; and the person, the creative individual persuades the filed to accept the creative idea or product that changes the domain to some extent.

In order to address the diverse definitional issues, Mumford and Gustafson (1988) observed that a homogeneous psychological attribute of creativity is impractical. Rather, creative behavior should be described in a complex interaction framework between the attributes of the individual and the attributes of the environment. Thus, they conceptualized creativity as a syndrome, including

(a) The process underlying the individual's capacity to generate new ideas or understandings, (b) the characteristics of the individual facilitating process operation, (c) the characteristics of the individual facilitating the translation of these ideas into action, (d) the attributes of the situation conditioning the individual's willingness to engage in creative behavior, and (e) the attributes of the situation influencing evaluation of the individual's productive efforts. (p. 28)

To sum up, at this juncture, in contemporary western view, the general consensus of creativity is defined as the individuals (creators), processes (creating), and products (creations) with the features of usefulness, appropriateness, and novelty (Amabile, 1996; Csikszentmihalyi, 1996; Taylor, 1988).

Creativity Development in Adults

The majority of creativity literature centers on children or young adults with less research on the elderly (Goff, 1993; Taylor, 1974). Studies demonstrated that creativity is not a negative association with aging (Golf, 1992). In fact, creativity capacity is not "a timebound act nor a function of chronological age" (Hickson & Housley, 1997, p. 540). It is believed that the peak of creativity in most people is around 30s and 40s, with productivity declining after 50s (Lindauer, 1998a; Marsiske & Willis, 1998). Lehman (1954, 1958, 1960) found the production

of first-rate work in science and mathematics fields was decrease markedly. Especially, the outstanding works were found between age 30 and 39. Simonton (2006) also observed the outputs from creative geniuses show an inverted-backwards J curve.

On the other hand, western renowned artists normally produced their masterpieces in their 40s and their highly creative achievements were still sustained through 60s (Lindauer, Orwoll, & Kelley, 1997). Based on self-reports of aging contemporary artists, Lindauer et al (1997) found creativity was the manifestation of continual learning and lifelong activity. The research results of Golf (1992, 1993) also supported the notion of lifelong creativity. With regard to artistic expression, the impact of aging was illustrated as a positive term, due to maturity of craft and knowledge, high motivation and priority, and positive inter- and intra-relationships (Lindauer et al., 1997).

According to Simonton (1998), "creativity of the highest caliber can continue until a person's final days" (pp. 14-15). Further, imaginative and other cognitive abilities do not necessarily decline with increasing age (Lindauer, 1998a, 1998b). For instance, Lixia, Krampe, and Baltes (2006) found through deliberate training the basic forms of plasticity could be extended to an age of 80 and above. The aging related losses could be compensated or adjusted through interventions (Lindauer et al., 1997). Finally, Golf (1992) concluded "creativity is a lifelong process which can be stimulated and enhanced at any age" (p. 84).

Promote Creativity for Lifelong Learning Practices

The insight of a learning society is grounded in the belief that learning takes place not only in the schools but is an everyday phenomenon (van der Veen, 2006). The peculiarity of creativity in lifelong learning practices is manifested in two tenets: problem solving strategies (external development) and self-realization in the learner (internal development) (Goff, 1992; Maslow, 1968; Marsiske & Willis, 1998). Through this lens, creativity is viewed as a process that is beneficial for generating ideas as well as the transformation of personal life (Su, 2009). In light of lifespan development, Baltes, Staudinger, and Lindenberger (1999) proposed a system theory of lifespan trajectories including three components: selection, optimization, and compensation. The shifts among those phases are constituted by gains and losses to some extent. The cultivation of creativity could function as optimization, thereby achieving personal adjustment and adaptability (Torrance & Mason, 1957). Specifically, modern challenges necessitate the adoption of a new way of thinking, where creative problem finding and solving plays a key role (Fontenot, 1993). As a result, creative thinking abilities could guarantee that the elderly adapt to the ever-changing world around them (Hickson & Housley, 1997; Sinnott, 1998).

Lones (2000) asserted "learning is a creative act" (p. 10). The best condition for adult learning is to focus on problem-solving and relevant scenarios (Nemec & Sullivan-Soydan, 2009). Marsiske and Willis (1998) underlined the importance of practical creativity for

adulthood success, which includes the implementation of creative problem solving to ill-defined and unfamiliar challenging situations every day. Additionally, the exercise of creativity is in line with the process of holistic learning, which is the focus of lifelong learning theory (Su, 2009).

Creativity *per se* is propulsion (Sternberg, 2006). Maslow (1968) declared "to the extent that creativeness is constructive, synthesizing, unifying, and integrative, to that extent does it depend in part on the inner integration of the person" (p. 140). Research has shown that creativity activities could enrich psychological states of adults, which in turn improves quality of life and well being (Hickson & Housley, 1997; Simonton, 2000). It is likely that creative outputs from older adults represent active involvement in life (Hickson & Housley, 1997). Moreover, in studies of paid jobs, Mirowsky and Ross (2007) found that creativity was highly associated with health. They concluded it is likelihood that creativity could increase the sense of control and decrease depression, which in turn improving health status. Another study verified the relationship between creativity and life satisfaction of older adults and suggested the need for proper programs for these rapidly growing segments of the population (Goff, 1993). Following this line, in adult and continuing education, the attempt to bridge creativity and curriculum is a clearly imperative issue (Edelson, 1999; Simmons & Thompson, 2008). The main reason is that creativity development of adults is attractive to social and economic well being as a whole (Taylor & Sacks, 2004). Above all, the desire to create and the following creative actions could be an effective impetus for social evolution (Edelson, 1999; Urban, 2007).

Actualization of Creativity in Adult Classrooms

Teachers stand a unique position in fostering creativity in the classroom. Teachers' beliefs about classroom practice appear to shape their goals for creativity. Research shows a person's motivation on pursuing creativity is moderated by relevant expectations, emotions, and goals. In fact, behavior episodes related to creativity are elicited from intentional or attentional goals (Ford, 1996). Drawing form this implication, teachers should set an appropriate leaning goal to encourage and inspire for students to pursue creative achievements.

Teaching styles, which are conducive to satisfaction of developing creative capacity, are those that focus on autonomy, trust, independent learning, and individual considerations (Dineen & Collins, 2005). Student-centered learning experience should also be grounded in the classroom, thereby promoting creative thinking. Most important, teachers as facilitators should provide ample opportunities for learners to actively engage in learning. Creative learning involves the abilities of evaluation, divergent production, and redefinition (Torrance, 1977). Dineen, Samuel, and Livesey (2005) suggested that creativity in learners is encouraged by (a) supportive, student-centered environments, (b) non-hierarchical teaching styles, (c) teaching methods and tasks, and (d) assessment systems (p. 159).

The advantages of adult learners are highly motivated and self-directed when comparing to other learner groups. However, some adults are problematic experiences with learning because they lack confidence of their academic performance. Adult educators should adequately encourage them and provide a supportive learning environment that buttresses their positive learning experiences (Taylor, Marienau, & Fiddler, 2000). Some strategies might be favorable to creative actions in adult classrooms: groups learning, free writing, one-minute paper, role-playing, and problem-based leaning (Nilson, 2010). The key is, as Dineen and Collins (2005) pointed out, "creative learning relies on experiential, often intuitive" (p. 48). Further, Dineen et al. (2005) found that students viewed teaching style and methods as an important factor for their creative success. More specifically, three favorable traits of teaching styles are friendly, encouraging, and enthusiastic. Finally, Torrance (1977) and Hennessey and Amabile (1987) provided some beneficial suggestions for educators who attempt to nourish creativity in their classrooms: (1) give purpose to creative activities; (2) provide adequate warm-up for creative attitudes; (3) downplay comments during activities; (4) make intrinsic motivation a conscious factor of your discussion; (5) help students build their self-esteem and appreciate their own strengths; (6) show students that you value creativity.

Lin (2011) suggested three possible pathways for developing creativity throguh education, including teaching, creativity-friendly environment, and teacher ethos. Centrally, the main effects of promoting creativity through education is to "support the individual's development in creative qualities to face everyday problem, to support their needs for self-actualization, as well as enhance their capacities for future success" (Lin, 2001, p. 151). When examining those propositions, they result in three general conclusions. First, some traditional teaching approaches should be adjusted or fundamentally changed. For example, is an analytical skill suitable for every class scenario? Second, the education system should provide the kind of training that promotes creativity development on both teachers and students side. Finally, teachers should encourage diversity in the classroom allowing creative individual to express their potential. In fact, as Niu and Sterberg (2003) recommended, teachers should take the lead to promptly encourage students to challenge the norms, be critical reflection and be imaginative thinking, and involve more in creative self-exploratory activities.

Conclusions

Given the literature available at this juncture, it is hypothesized that the conceptualization of creativity, especially for adult educators, could serve as a useful pedagogy to promote lifelong learning in adults. By doing so, the imperative is that creativity should be waved into classrooms. Most important, Weisberg (1988) maintained "creative thinking must be omnipresent in all of us" (p. 172). Through progressive learning from meaningful education, it is possible for creative potential to materialize (Beghetto, 2007; Mueller, 1978).

The National Advisory Committee on Creative and Cultural Education (1999) identified some important features shared between lifelong learning and creativity: intrinsic motivation, enterprise, persistence and resilience, curiosity, questioning and reflecting, assessing and testing, moving from problems to solutions and back to new problems (p. 108). The creative achievements in fact are contingent on consistent efforts of involvement (Amabile, 2001; Gardner, 1993; Torrance, 1995). As a result, Walberg (1988) suggested viewing creativity as "being on one end of a continuum of performance or learning that is attainable by nearly anyone with sufficient instruction and perseverance" (p. 345). In other words, developing creativity is a necessary lifelong learning process.

With increased longevity, creativity development could serve as a means for older adults to orientate themselves to the modern world (Torrance, 2003). Research shows, in terms of creativity, later life could be an episode of gains (Lindauer, 1998b). In closing, creativity capacity is a sine qua non, particularly for adults. Regarding lifelong learning, creativity could unleash imagination and problem solving that facilitates the process of overcoming challenges and pitfalls around adults. Consequently, it is beneficial to include the ingredient of creativity into adult pedagogy, thereby fostering lifelong learning. Being equipped with creativity capacity, adults could compensate for or accommodate unavoidable age-related losses, which in turn explore their unfinished journeys with satisfaction.

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