

Fostering Creativity through Education—A Conceptual Framework of Creative Pedagogy

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Capacities and qualities of creativity have been identified by researchers and strategies in fostering children's creative thinking skills were proposed to create supportive environments in an educational setting. There is little consistent rhetoric, however, among these insights and strategies concerning different aspects of fostering creativity. In light of this, a three-element framework of creative pedagogy is proposed to offer a more holistic view of enhancing creativity through teaching, to cover the aspect of creative learning which was overlooked in the past, and to provide a different explanation to some arguments about teaching creativity. This framework is also a starting point for studies which intend to understand the teachers and pupils' responses to creative pedagogy, and to provide implications for applying creative pedagogy in a classroom and in Asian context as well. In the end, several possible routes are suggested for future research in creative pedagogy.

Keywords: Creative Pedagogy, Creative Teaching, Teaching for Creativity, Creative Learning

Rationale

Different Rhetoric of Fostering Creativity

Although the argument exists for long that whether creativity can be increased, there seems to be a consensus view within the realm of education that creativity is amenable to teaching (Amabile, 1996; Baer & Kaufman, 2006; Craft, 2000; Cropley, 1992; Esquivel, 1995; Fryer, 1996; James, Lederman, & Vagt-Traore, 2004; Kaufman & Beghetto, 2009; Parnes, 1963; Puccio & Gonzalez, 2004; Runco & Chand, 1995; Torrance, 1963; Wilson, 2005). The attempt of fostering creativity through training was given more attention in the mid twentieth century, when psychometric researchers, such as Guilford, Torrance, put efforts in extending and measuring individual's creativity. Guilford claimed that (1952; Parnes, 1963: pp. 342-343):

"Like most behaviour, creative activity probably represents to some extent many learned skills. There may be limitations set on these skills by heredity; but I am convinced that through learning one can extend the skills within those limitations".

Certain training programmes designed to help stimulate individual's creativity were then proposed, for instance, thinking tools (e.g. six thinking hats, developed by Edward De Bono (1987)) and brainstorming technique (developed by Osborn (Fryer, 1996)) were suggested to help people generate diverse thoughts and solutions (Sternberg, 2003). CPS (the Osborn Parnes Creative Problem Solving process) is another model that has been widely applied and researched (Fryer, 1996). In addition to pragmatic techniques of creativity training programmes, cognitive, social psychologists, and educational researchers have also generated implications for fostering creativity in school teaching (Amabile, 1996; Esquivel, 1995; Feldman & Benjamin, 2006).

The insights and implications in developing creativity through

education can be scrutinized into three aspects. First aspect is concerning about *teaching*, including how to provide creative and innovative practices which stimulates the development of multiple intelligence (Armstrong, 2000; Chen, 1997; Torrance, 1963; Torrance & Myers, 1970; Woods, 1995), possibility thinking (Craft, 2000, 2005), and higher-level thinking (Cropley, 1992; Fryer, 1996; Yeh, 2006), or how to involve the opportunity of exploring and solving problem (Cropley, 1992; Fryer, 1996, 2003; Torrance, 1963). The second aspect of the implications suggests creating an *environment*¹, both external and social, that is stimulating and supportive to learners' motivation/enthusiasm (Collins & Amabile, 1999; Hennessey, 1995, 2007; Woods & Jeffrey, 1996) and creative behaviour (Craft, 2001a; Esquivel, 1995; Lucas, 2001; Torrance, 1995). The third concern of nurturing creativity is about *teacher ethos*, which includes maintaining an open attitude towards creative ideas or behaviours, showing a humanistic pupil control ideology (as opposed to being authoritarian), being flexible, and valuing independence thinking (Chen, 2008; Craft, 2001a, 2005, 2007; Cremin, Barnes, & Scoffham, 2009; Esquivel, 1995; Hennessey, 1995; NACCCE, 1999).

Albeit these insights focus on different dimensions of developing creativity and the assumptions behind each view are not opposing and are even consistent, distinctions between pedagogical views were formed and varied terms used referring to a similar conception, due to different research approach. In light of this situation, a framework of creative pedagogy consisting of three interrelated elements is theorized with a confluence approach, in attempt to offer a more holistic view of fostering

¹The term for "environment" varies in the literature; other terms include *climate* (Craft, 2001a; Rowe & Humphries, 2001; Torrance, 1995), *atmosphere* (Esquivel, 1995; Joubert, 2001; Woods & Jeffrey, 1996), *conditions* (Rogers, 1954), *classroom/school environment* (Lucas, 2001), and *school culture* (Fryer, 1996; Joubert, 2001).

creativity in education.

A Confluence Approach

Wehner, Csikszentmihalyi, and Magyari-Berck (1991; Sternberg & Lubart, 1999) described the situation within creativity research with the fable of the blind men and the elephant, that people touch different parts of the huge animal but claim what they touch and know is the whole picture. As a result of the fractional findings of different approaches of creativity research, a confluence approach which integrated multiple dimensions and factors of creativity, has been developed since the last two decades of 20th century (Sternberg & Lubart, 1999). Complex models, for instance, Amabile's (1996; Collins & Amabile, 1999) three-factor componential model, Gruber and his colleagues' (Gruber & Wallace, 1999) developmental evolving-systems model, and Csikszentmihalyi's (1996, 1999) systems model, were proposed to illustrate the multilevel interactions of different factors for creativity (Baer & Kaufman, 2006; Lin, 2009).

Likewise, confluence approach and complex model can also be found in researching pedagogical practices. In a review of modern conceptions of pedagogy since the 1930s, Watkins & Mortimore (1999: pp. 3-8) suggested four phases of pedagogy research, including:

- a focus on different types of teachers
- a focus on the contexts of teaching
- a focus on teaching and learner
- complex models that offer an integrated conceptualization of pedagogy

Watkins & Mortimore explained that the last phase represents a more current view of pedagogy, and complex models are employed to describe relations between the teacher, classroom context/content, and the view of learning. The model differentiates itself from the previous phase of pedagogy research which focused on linear cause-effect chains and simplified prescriptions for action.

Given the background conception and implications of confluence approach in creativity research as well as in pedagogy research, it is argued in this paper that the framework of creative pedagogy, a model consisting of three interrelated elements in nurturing creativity, is able to offer a more holistic view of fostering creativity through education.

Keen Efforts without Clear Guideline

Since the late 90's enhancing creativity has become a global-wide interest reflecting social and economic changes and the need to raise competitiveness in globalization activities (Choe, 2006; Craft, 2005; Shaheen, 2010). The function of education is re-conceptualized as building human capital by equipping youngsters with innovation and creative capacities in addition to knowledge delivering (Craft, 2005; NACCCE, 1999; Sawyer, 2004; Wilson, 2005). Curriculum reform has been carried out and creativity has been included in education policy in western countries such as the US, UK, France, Germany, Sweden and Australia (Feldman & Benjamin, 2006; Craft, 2005; Shaheen, 2010). Many Asian countries have also responded to this trend. For instance, educational reform is urged to release children's creative potential in China, since the phenomenon of students' high achievement in math in international tests yet low ranking

in imagination and creativity was noticed (Jun, Wu, & Albanese, 2010). In Hong Kong, creativity is recognized as one of the three generic skills to be developed in education, and several general principles for developing creativity are suggested in curriculum documents (Cheng, 2010). Other places like Japan, South Korea, Taiwan, and Singapore have also implemented curriculum reforms with an emphasis on creativity development (Choe, 2006; Shaheen, 2010) in a top-down mode (Cheng, 2010; Lin, 2009).

With governmental support, keen efforts were put in these Asian regions in promoting creativity education. However, in addition to point out teachers and traditional practice as impediments to enhancing creativity in the classroom (Cheng, 2004; Lee, 2008; Leung, Au, & Leung, 2004; Ng & Smith, 2004; Wu, 2004), there is little discussion in the initiatives on guidelines of pedagogical strategies to adopt for fostering creativity (Lin, 2009). On the other hand, there is little response from school teachers to the urge of enhancing creativity through education (Cheng, 2004; Wu, 2004). As mentioned earlier, varied terms and disparities were created due to different approaches and foci of creativity research. Therefore a comprehensive framework is proposed to offer a more consistent rhetoric. While in the East, a framework is suggested to render a clearer guideline of pedagogy in facilitating learner creativity, as well as to challenge the perceptions and ways of teaching/learning taken for granted in many Asian regions where creativity is often discouraged (Cheng, 2004; Craft, 2005; Lin, 2009; Ng & Smith, 2004; Rudowicz, 2004; Wu, 2004).

Theoretical Assumptions of the Framework

There are varied explanations and theories of creativity; for instance, some psychologists believe creativity to arise from unconscious drives, while some psychological researchers defined creativity as a syndrome or a complex (Runco & Sakamoto, 1999). Some other researchers deem creativity as thinking skills, a product of creative thinking, or personal qualities (Sternberg, 1999). The varied views and definitions of creativity imply different research approach to creativity. Then what is the view of creativity within education? Although mainly drawing from theories of scholarly field of creativity studies, such as behaviourist, cognitive, social-psychological, or humanistic approach, the approach to creativity in education, as Craft (2005) suggests, has its unique concerns, including the relationship between creativity and knowledge, curriculum, and appropriate pedagogical strategies to foster creativity in the classroom. The perceptions of creativity this approach adopts are hence more relevant to educational values and settings. Generally there are two premises underpinning the approach of creativity in education: first is the view that creativity can be developed (Fryer, 1996; Parnes, 1963; Torrance, 1963; Torrance & Myers, 1970), and second is that all individuals have the potential to be creative (Craft, 2001a; Esquivel, 1995; Feldman & Benjamin, 2006; NACCCE, 1999).

Creativity Can Be Developed

The argument over whether creativity is amenable to education can be dated back to the nineteenth century (Baer & Kaufman, 2006) when the studies of human genius and creative achievement were the main concern. In the early twentieth

century, the perception of the source for creativity has gradually shifted from inherited genius possessed by the highly talented individuals, to diverse human abilities. Owing to the attempt of psychometric researchers in measuring and fostering individuals' thinking abilities since the 50's, and to the later multidimensional theories of intelligence, more interest was given to developing creativity in education (Esquivel, 1995). Educational researchers, for instance, Fryer (1996: p. 5) maintains that creative skills could be taught through certain strategies: "Training in creative problem solving can enable people to be skilled in finding the best solution quickly...". Esquivel (1995) also emphasizes the role of educators in enhancing the creative potential of every student. In contemporary research, creativity is embraced as a multi-dimensional and developmental construct; it is believed that creativity is a developmental shift and a life long process (Craft, 2001a; Esquivel, 1995; Feldman, 1999).

Everyone Has the Potential to Be Creative

As mentioned, more attention was given after the 50's to enhancing creative development, and since then several waves of creativity in education occurred (Craft, 2001b; Shaheen, 2010). In the earlier wave of promoting creativity, child-centred and innovative pedagogy were called for in the attempt to reform traditional school practice (Esquivel, 1995). Educators hold the view that children are naturally creative, open to experience, and tend to be attracted by novel things, and this natural quality will diminish unless it is nurtured by favorable environments created by adults (Esquivel, 1995; Feldman & Benjamin, 2006; Torrance & Myers, 1970). Humanistic scholars also see creativity as the natural urge of individuals to develop, extend, express and activate their capacities (Maslow, 1996; Rogers, 1954).

The latest wave in enhancing creativity began in the 90's due to the intense social, economic, and technological changes nowadays (Craft, 2001b; Shaheen, 2010); creativity is reckoned as a basic capacity for survival as well as for future success (NACCCE, 1999). Csikszentmihalyi (Jackson et al., 2006) put it this way to show the altered status of creativity: "In the Renaissance creativity might have been a luxury for the few, but by now it is a necessity for all". At this point, the relationship between creativity and education is more than the previous goal, to encourage personal development and self-actualization, but to equip youngsters with the basic capacity for future life. Yet regardless in the earlier or recent urge for fostering creativity, the belief behind the efforts that every individual has the potential to be creative is unchanged.

The Promoted Aspects of Creativity within Education

Psychologists have made a significant distinction between product-oriented and process-oriented creativity, focusing on different facets and values of novel invention (James, Lederman, & Vagt-Traore, 2004; Smith, 2005). Product creativity makes the assumption that creativity should be defined as the production of both novel and appropriate work (Sternberg & Lubart, 1999). "Novel refers to original work; ... appropriate simply concerns the usefulness of the product towards a certain need" (James, Lederman, & Vagt-Traore, 2004: p. 2). In contrast to the utility and productivity, process-oriented creativity

focuses on the "mental process" involving creative potential to generate new ideas, solution of problems, and the self-actualization of individuals (Esquivel, 1995; Fryer, 1996; James, Lederman, & Vagt-Traore, 2004).

Other researchers draw a distinction between "big C" and "little c" creativity (Craft, 2001a; Gardner, 2004) with the former having wider influence in society and the latter being relevant to everyday creativity (Lin, 2009). Instead of highlighting remarkable achievements, little c creativity (LCC) focuses on the agency of ordinary people and recognizes everyone's potential to be creative in terms of everyday problem-solving. To illustrate its features, Craft (2000, 2001a) proposed the notion of "possibility thinking" as the core of LCC, involving nine qualities² that manifest the aspiration of asking the question "what if" when facing blockage. Whether creativity is domain-specific or transferrable is another debatable issue (Craft, 2001a). Although creativity is often related to arts or poetry for instance (Robinson, 2001), and some researchers believe creative expression and outcome requires specific knowledge and skills (Csikszentmihalyi, 1996; Feldman & Benjamin, 2006; Kaufman & Beghetto, 2009), the qualities and capacities of everyday creativity, as Lucas (2001: p. 38) maintains, "can be demonstrated in any subject at school or in any aspect of life".

In a recent study, a four c model of creativity (Kaufman & Beghetto, 2009) is proposed based on the original distinction, for the reason of more precise judgment and measurement of creativity. Two other constructs are introduced: *professional* and *mini-c* creativity. Similar to the educational concern of LCC, mini-c intends to describe the creative insights experienced by the students and to "encompass the creativity inherent in the learning process" (Kaufman & Beghetto, 2009: p. 3). Because of its premise and concern, the concept of process creativity, LCC, and mini-c creativity are found useful in advocating educational efforts in creativity. It is the developmental process that is underlined, and therefore what really matters is the intention and evaluation of the agent, and as a result, the self-actualization. In recent years, LCC is also regarded as a life capacity for future success (Craft, 2005). Thus nurturing creativity through education is to support the individual's development in creative qualities to face everyday problem, to support their need for self-actualization, as well as enhance their capacities for future success.

The Framework of Creative Pedagogy

Informed by the assumptions and the aspects of creativity nurtured within education, a framework of creative pedagogy is proposed to illustrate the relationship between creativity and pedagogical practices. *Creative pedagogy* is put forward to describe practice that enhances creative development through three interrelated elements—*creative teaching*, *teaching for creativity*, and *creative learning*. Rather than a situation in which teaching and learning are two parallel processes that rarely meet (see Figure 1), the three interconnected elements complement and result in each other, rendering it a resonant process (see Figure 2). A supportive climate for developing creative abilities and qualities is created through the interaction

²The nine qualities of possibility thinking include self-determination and direction, innovation, action, development, depth, risk, being imaginative, posing questions, and play (Craft, 2001a, 2001b).

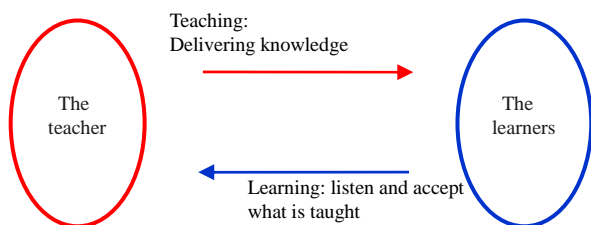


Figure 1.
Conventional teaching and learning process (Lin, 2009).

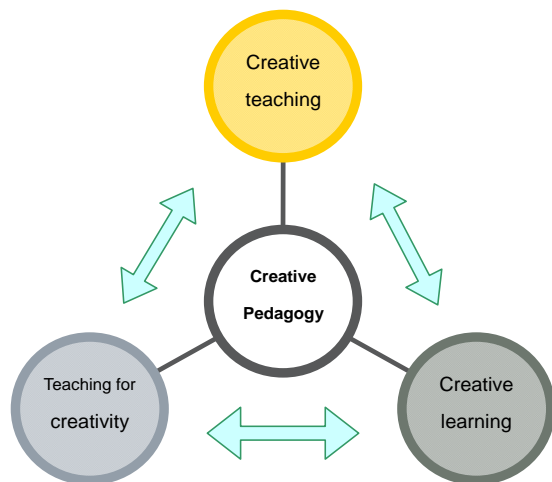


Figure 2.
The three elements of creative pedagogy (Lin, 2009).

between inventive and effective teaching (by the creative facilitator), and creative learning (by the active learner).

Creative Teaching and Teaching for Creativity

A distinction is made in the NACCCE report (1999) between *teaching creatively* and *teaching for creativity*, defining the former as “using imaginative approaches to make learning more interesting and effective” (NACCCE, 1999: p. 89), while relating the latter to the objective of identifying young people’s creative abilities, as well as encouraging and providing opportunities for the development of those capacities (Jeffrey & Craft, 2004: p. 81). Albeit having different foci—creative teaching focuses on teacher practice, whereas teaching for creativity highlights learner agency (Craft, 2005)—the two practices are seen interconnected and indispensable in this framework. For the features of *creative teaching*, such as imaginative, dynamic, and innovative approaches (Jeffrey & Craft, 2004), often inspire children’s imagination and new ideas and lead directly to teaching for creativity. On the other hand, the pedagogical strategies of *teaching for creativity* that facilitate children’s agency and engagement, such as strategies of learning to learn, or to exploring more new possibilities, often seek to be inventive in order to arouse curiosity and learning motivation (Cropley, 1992; Torrance, 1963).

In addition, a supportive ethos for nurturing creativity can be found in both practices. Through teaching creatively, teachers encourage learners’ creativity by passing on their enthusiasm, imagination, and other talents (Lucas, 2001); whilst creating a

learning context for problem solving and appreciating learners’ creative contributions are essential principles of teaching for creativity (Fryer, 1996). The pedagogical principles of foster children’s possibility thinking identified by Cremin, Burnard, and Craft (2006), are useful to describe how teachers create a supportive environment through effective strategies that prioritize children’s autonomy. They maintain that the three principles, involving *standing back*, *profiling learner agency*, and *creating time and space*, help to encourage the children’s questioning and active engagement in learning by passing the decision making and the responsibility for learning back to the child. In short, the two practices are interrelated and are salient elements of building a context for children’s creative development and engagement.

Creative Learning

When considering pedagogy, most research and implications seem to focus on the teacher, classroom context, or teaching content, and few include the importance of learning until the complex model of pedagogy proposed in recent years (Watkins & Mortimore, 1999). It is suggested in this paper that the neglect of a spontaneous and creative learning and its characteristics, such as autonomy, could result in difficulties in fostering children’s creativity. Therefore *creative learning* is considered a salient feature in the framework of creative pedagogy.

Torrance (1963) contrasted *learning creatively* with *learning by authority* when arguing about giving children a chance to learn and think creatively. Children learn by authority when they are told what they should learn and accept the ideas from the authority (e.g. teachers, books); whereas in the other process, children learn by means such as questioning, inquiring, searching, manipulating, experimenting, and even aimless play. Children explore out of their curiosity, which is natural to human beings. Torrance also connected learning and teaching by suggesting that during the learning process, children’s creative skills and methods are required; while at the same time the learning context, which is filled with curious problems to explore, stimulates spontaneous learning and flexes the capacities for learning and thinking creatively.

In more recent studies, several features of creative learning are revealed including playfulness (Kangas, 2010), collaboration (Mardell, Otami, & Turner, 2008), development for imagination and possibility thinking (Craft, Cremin, Burnard, & Chappell, 2008; Spendlove & Wyse, 2008), and supportive/resourceful context (Oral, 2008). These features of creative learning not only echo the previous argument, but imply the interplay between creative endeavours of teachers and learners (Lin, 2009).

The Interplay between the Framework Elements

In an article of stressing creative and improvisational teaching, Sawyer (2004) criticizes that contemporary reform efforts has associated creative teaching with “scripted instruction”, which emphasizes important skills for teachers yet often denies teacher creativity. This scripted approach is considered problematic for it suggests teachers as “solo performers reading from a script, with the students as the passive, observing audience” (Sawyer, 2004: p. 13). Thus Sawyer conceives of creative teaching as improvisational performance, highlighting the in-

teractional, collaborative and emergent nature of classroom practice.

Adding to the view of seeing creative teaching as improvisational process that allows “collaborative emergence”, it is argued that the creative endeavors of both teachers and learners in an effective teaching/learning process are indispensable. In other words, the three elements of creative pedagogy interplay and contribute to each other, forming a dialogic and improvisational process with creative inspiration, supportive teacher ethos, effective inquiry-based strategies, and learners’ creative and autonomous engagement.

In short, instead of merely addressing one of the aspects of teaching practice that fosters creativity, the proposed framework of creative pedagogy embraces three features—creative teaching, teaching for creativity, and creative learning. It intends to describe the interplay between innovative teaching and effective strategies which facilitate and are responded by children’s creative and active engagement, as well as to encourage a more comprehensive practice in developing learners’ creativity.

Prospective Research in Creative Pedagogy

As argued, a framework of creative pedagogy is proposed to connect different foci of the implications for fostering creativity, and to promote the overlooked learning aspect as well. In addition, it is introduced to offer a clearer pedagogical guideline to encourage the educators/practitioners to re-examine educational views and methods of fostering creativity, especially in an Asian context. In fact, a study was conducted and in which a series of drama lessons based on the framework of creative pedagogy was designed and taught to understand the Taiwanese teachers and pupils’ responses to a creative pedagogy in drama (Lin, 2010). The finding shows that the pupils considered the lessons useful in developing certain creative qualities, such as imagination, independent thinking, and risk-taking. The participants also identified characteristics and strategies used in the lessons that made the development possible, such as innovation, playfulness, task-oriented, collaborative learning, and the teacher’s guidance. Although most of the pupils conveyed their enjoyment of the lessons, tensions arose during the teaching/learning process, for instance, there were different views of the space and freedom offered, of the playfulness of the learning, and the strategies and ethos which may result in the teacher losing authority, to name a few. Based on these findings, more specific issues in fostering creativity through creative pedagogy are raised; concerns of re-evaluation of teacher’s role, ways of learning, and contextualization of creative pedagogy are therefore urged.

There are other concerns over creative pedagogy that could be addressed further in addition to the above study. The sustainability of the impact of a creative pedagogy used, for instance, could be investigated, especially when the pedagogy is adopted in a context that is less supportive to creative development. The perceptions of applying creative pedagogy are worthwhile to learn from participants with different positions in the educational system, such as academic researchers, policy makers, school principals, or parents, in addition to the pupils and their classroom teachers. It would also be useful to focus on studying teachers’ responses through using creative pedagogy in teacher education to nurture their own creativity. In terms of

cultural issue, it would be interesting to learn and compare the indigenous perceptions and practices of creative teaching in Asian countries with the *creative pedagogy theorized and applied in Western classrooms*, and the possible benefit and means of balancing between the two sets of values and practices.

Conclusion

This paper starts with expounding the rationale for a conceptual framework of creative pedagogy, and examining relevant theoretical assumptions and promoted aspects of creativity in education: process and little c creativity (including possibility thinking and mini-c), which inform the proposed framework. Three interrelated features of creative pedagogy in terms of creative teaching, teaching for creativity, and creative learning are then introduced. The characteristics and principles of, and close relations between each element are discussed as well. Finally, several possible directions are suggested for researching further on the conceptual framework of creative pedagogy. Through the discussions in this paper, it is intended to clarify the creative abilities and qualities encouraged within educational field, and to offer a more comprehensive view of the research implications in fostering creativity, to urge both the educators and learners to re-examine the educational values and practices in the schools, and re-positioning the efforts of promoting creative education in the global trend as well as in a local context.

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