

# "Creative Education: Educating gifted learners about their creative attributes"

Dr. Chua-Tee Teo  
Gifted Education  
ECSE, National Institute of Education  
Nanyang Technological University  
Singapore

As humanity embarks on its learning journey in the 21st century, education needs to take on new dimensions. This discourse focuses on the essentials of what educators could do to promote creative development in young gifted and talented students. Current practices in Singapore's Gifted Education Programme are shared. Future possibilities of educating the young gifted students on their creative attributes like Piirto's 7 Is, brain functions, energy levels or intensities, volition, virtues and other personal and interpersonal skills will be explained. Gifted students are the captains of their own ships, the pilot of their own planes. Teaching them about their creative potential is the first step in awakening their consciousness from within. It is up to them to decide to become more creative with support from parents and teachers thereafter.

## Introduction

The development of creative potential in gifted and talented children has always been a topic of interest to parents, teachers and educators alike. However, educational programs and interventions cannot be devised until the concept of creativity has been understood. The reality of the interconnectedness of the world today informs us that creativity needs to be examined and understood in its relation to various fields of study such as psychology, psychoanalysis, psychiatry, philosophy, spirituality, business and technology. Jane Piirto in her recent book, *Understanding Creativity* (2004), has made such links and explained the creativity found in artists, architects, writers, scientists, mathematicians, inventors, entrepreneurs, musicians, conductors, composers, actors, dancers and athletes.

Creativity is often taken to be synonymous with giftedness and/or genius. Piirto

(2004) views creativity as "an aspect of all giftedness," and not merely "a form of giftedness." South Korea, like Singapore and many other countries, in an effort to nurture a pool of creative talents with superior ability in the sciences and the arts, embarks on more rigorous gifted and talented programs for its best and brightest students to help the country stay competitive in the global economy (Joo, 2005). Gifted and talented students are usually highly intelligent. Should they be nurtured to become increasingly more creative, they will certainly contribute more towards the advancement of the society as they grow into adulthood. Highly creative and eminent adults who have contributed to the advancement of the world are many. Albert Einstein, Leonardo da Vinci, Picasso, William Shakespeare, Mozart and John Nash are but a few examples.

#### Creativity and the Creative Personality

Creativity may be simply defined as a basic human ability applied in either (i) solving old or existing problems, or (ii) inventing new theories, gadgets, music, art, technology, etc. It is associated with cognitive characteristics of ideational fluency, flexibility, originality and elaborative thinking (Williams, 1972 cited in Selby, Shaw & Houtz, 2005). Creative people are also divergent in thinking. Affective traits associated with the creative person are curiosity, courage, complexity and imagination (Williams, 1972 cited in Selby, Shaw & Houtz, 2005). Piirto (2004) in her study of creative personalities, has found the highly creative personality to be more prone to experiences of natural mood swings, depression and could have appeared to be a little crazy or mad as their ideas, and consequently their behaviours, are usually "odd/outstanding/funny/abnormal".

Feldman and Goldsmith (1986, cited in Piirto, 2004, p. 14) regard creativity as "a special form of development that yields a product that is new and valuable" in a field, and that "*truly* creative contribution" is made only when the field is transformed. Such a concept is termed the developmental theory of creativity. In this case, the creative person is noted to be characterized by a "transformational imperative". That is, the person has an innate urge or tendency "to change reality outside the bounds of stable, ordered experience." This intrinsic motivation and excitement to create new, fresh and useful ideas and objects drives the creative person to attain works of great achievement. The creative personality thus has an internal locus of control, a willingness to grow, risk-taking and tenacity.

## Creative Performance and Teaching

Selby, Shaw and Houtz (2005), when explaining the conditions under which the creative personality works, states:

"Logic, as well as neuroscience and brain research, offers strong evidence that emotional processes and cognition must interact if creativity is to occur (p. 301)."

Hennessey (2004) suggests that special attention needs be given to promote and maintain intrinsic motivation in the classroom if gifted students are to become really creative. Any element which may stifle the development of creative thinking is to be discouraged. In Singapore's Gifted Education Programme (GEP) for instance, teachers do not use drills or didactic teaching. Instead, highly interactive methods, including computer assimilated lessons, games, puzzles, poetry, inquiry and discovery learning are used to create a lively and fun environment so that the highly intelligent students will not be bored (Ong, 2005). In fact, the teachers in the GEP constantly engage the gifted students using creative teaching modes. Socratic questioning is foundational in all GEP classrooms. Other efforts to enhance creative productivity in gifted and talented students include out-of-school enrichment special programs like the Science Research Programme, the Creative Arts Programme, Humanities and Social Sciences Research Programmes, Innovation Programme, the Science Mentorship Programme, Leadership Development Programme, ExLab, Kool Kids Programme and the Creative and Heuristic Applications of Science Programme (Ministry of Education, 2004).

It was reported in a Singapore study of creative thinking and academic achievement that a small but positive relationship does exist between creativity and academic achievement (Lourdusamy, Koh & Koh, 2002). The creative personality seems to have more influence on achievement in arts subjects than on school subjects with a clearly defined syllabus like Mathematics and Science. The researchers explained that it was probably the manner of assessment in these subjects which does not allow the students to exhibit creativity. It needs to be noted that this study was not conducted with the gifted students but with the mainstream secondary students.

Another study on creativity conducted by Ng (2003), also not conducted with gifted students but with undergraduates at two local universities, showed that creativity is positively associated with task orientation and openness to

experience, and negatively associated with ego involvement. Ng (2003) recommended that if schools would like to nurture creative, compassionate and vivacious students who enjoyed learning, then they would have to cultivate an environment that promotes task-involved or process-centred learning rather than performance-oriented or achievement-directed, or ego-involved, learning. In addition, the learning atmosphere needs to be less conforming, less competitive and more agreeable while it encourages the development of intrinsic goals and self-determination at the same time.

#### For Parents and Teachers: Advocating Development of Self-Knowledge on Creative Potential

Gifted and talented students are the captains of their own ships, the pilots of their own planes. Teaching them about their creative potential is the first step in awakening their consciousness from within. It is up to them to decide to become more creative with support from parents and teachers thereafter.

For instance, gifted and talented youths can be taught about their creative attributes, that is, whether they have the seven "I"s (Piiro, 2004) of inspiration, imagery, imagination, intuition, insight, incubation and improvisation and how to use them; whether they are more right-brained, left-brained or whole-brained. Knowledge of their energy levels or "overexcitabilities" or intensities in psychomotor, sensual, intellectual, imaginal and emotional areas (Falk, Piechowski & Lind, 1994, cited in Piechowski, 1997) would help those with high levels of creativity to become more conscious of their personal needs for expression. As energy cannot be destroyed and can only be transferred from one form to another, parents and teachers will have to devise means of helping the highly energetic gifted youths manage their "surplus energy" in particular areas, hopefully channeling them into creative and useful endeavours, and not destructive or depressive modalities.

Human beings are organic beings and each is endowed with volition, choice or decision-making ability. The adults can help educate the gifted and creative youth but eventually, it is the youth who needs to decide what to do with his or her talents, energy and time. It is a reality that growth and development needs to be holistic and balanced. A focus on just the development of the creative capacity alone may result in stress for the gifted child in the long run. Mature adults would recommend that the gifted youth also develops virtues and other personal and

interpersonal skills. Otherwise, the gifted youth may become exceptionally accomplished in a certain field at the expense of having no friends and no leisurely time to recuperate.

#### Conclusion

This paper advocates the development of creative potential in gifted and talented youths, dormant in its initial stages, through conscious education of the youths and their parents and teachers about creativity, its attributes, the creative process, the creative personality and then allows the gifted youth to choose to do what to do thereafter. After all, is it not real that:

"True loss is for him whose days have been spent in utter ignorance of his self.

Baha'u'llah, 1817-1892"

#### End Note

#### *Inspiration*

A post-graduate secondary teacher Mr. A, attending the "Understanding and teaching creative and critical thinking class wrote in his essay,

"Yes, while we may have creative means and well structured scaffolds and theories such as those proposed by Sternberg and Marzano to teach, what is the point if our teachings do not speak to the heart of the young. It will certainly erode within a short span and what more in a fickle teenage mind that rather place his thoughts on other important things like clothes, relationships, and the latest pop idol. No, we must inspire students. I myself only remember teachers who have believed in me or have rebuked me when needed. Time and again they spoke to my heart. And even though I can't remember most lessons, I remember that they spoke to my heart, the language used was one of great care and inspiration. (Teachers are privileged to that language because of the gift bestowed to us in society.) We must learn to master that language of inspiration so that our students can etch such teachings deeply and carry it through life's often tumultuous seas."

- Hennessey, B. A. (2004). *Developing creativity in gifted children: The central importance of motivation and classroom climate*(RM04202). Storrs, CT: The National Research Center on the Gifted and Talented, University of Connecticut. (<http://www.gifted.uconn.edu/nrcgt/hennesse.html>)
- Joo, S. M. (2005, January 3). Seoul starts gifted scheme for students. *The Straits Times*.
- Lourdusamy, A., Koh, B. L., & Koh, M. (2002). School Thinking Programme and its impact on student creative thinking and academic achievement: A perspective. *Teaching and Learning, 23*(2), 119-130.
- Ministry of Education. (2004). *20 Years of Gifted Education: From promise to flow*. Singapore: Author.
- Ng, A. K. (2003). Learning goals, creativity and personality. *Asia Pacific Journal of Education, 23*(2), 183-200.
- Ong, X. (2005, November 24). Gifted course a joyride of discovery: Students able to cope as extra work doesn't feel like 'work'. *Today*, p. 32.
- Piechowski, M. M. (1997). Emotional giftedness: The measure of intrapersonal intelligence. In N. Colangelo & G. A. Davis (Eds.), *Handbook of Gifted Education* (2nd ed.) (pp. 366-381). Boston: Allyn and Bacon.
- Piirto, J. (2004). *Understanding creativity*. Scottsdale, Arizona: Great Potential Press, Inc.
- Selby, E. C., Shaw, E. J., & Houtz, J. C. (2005). The creative personality. *Gifted Child Quarterly, 49*(4), 300-314.