

CREATIVITY: AN ASSET IN EDUCATION

Nitinkumar Dhadhodara

Gujarat Vidyapith, Ahmedabad

E-mail: nitinkumardhadhodara@gmail.com

ABSTRACT

The purpose of education is not just making a student literate but also to add rationale thinking, knowledge and self sufficiency. Creativity has been identified both as a key factor for adequately addressing the challenges caused by these changes as well as a major driving force towards knowledge creation and social and economic advancement through the development of a knowledge society. Creativity has received a high degree of attention from scholars, professionals and policy makers alike in recent years. Characteristics of creativity are originality, appropriateness, future orientation and Problem-solving ability. Teaching for creativity might best be described as using forms of teaching that are intended to develop students own creative thinking and behavior. However it would be fair to say that teaching for creativity must involve creative teaching. Guilford (1967) and Torrance (1963) observed that creative thinking abilities could be developed through direct instruction. It is important to reduce or eliminate the factors which inhibit the creative activity of teachers and learners and give priority to those that encourage it. Guilford's (1967) statement that "creativity is the key to education in its fullest sense and to the solution of mankind's most serious problems "is still relevant today.

Key Words : Creativity, Creative Leap, Teaching for Creativity

INTRODUCTION

Contemporary society is characterized by rapid and complex change processes encompassing all spheres of life. Education is a light that shows the mankind the right direction to surge. The purpose of education is not just making a student literate but also to add rationale thinking, knowledge and self sufficiency. Education is an engine for the growth and progress of any society. It not only imparts knowledge, skills and inculcates values, but is also responsible for building human capital which breeds, drives and sets technological innovation and economic growth. Creativity has been identified both as a key factor for adequately addressing the challenges caused by these changes as well as a major driving force towards knowledge creation and social and economic advancement through the development of a knowledge society.

Creativity has received a high degree of attention from scholars, professionals and policy makers alike in recent years. Creativity is frequently associated with notions such as talent, spontaneity and coincidence, i.e. factors that cannot be influenced or determined but ultimately are left to chance. We find this expressed, for instance, in the popular idea of a "creative leap" or "flash of genius" as the origin for major scientific, artistic or social breakthroughs (e.g. Newton observing a falling apple). Robert Fritz (1984) comments that the most important developments in civilization have come through the creative process, but ironically, most people have not

been taught to be creative. J.P. Guilford (1950) asked in his Inaugural address to the American Psychological Association why schools were not producing more creative persons. He also asked why there is so little apparent correlation between education and creative productiveness”

“The roots of a creative society are in basic education. The sheer volume of facts to be digested by the students of today leaves little time for a deeper interrogation of their moral worth. The result has been a generation of technicians rather than visionaries, each one taking a career rather than an idea seriously. The answer must be reform in our educational methods so that students are encouraged to ask about “know-why” as well as “know-how”. Our educational thinking is concerned with; ‘what is’. It is not good at designing ‘what can be’. Creative students lead richer lives and, in the longer term, make a valuable contribution to society. Richard Florida says human creativity is the ultimate economic resource.

DEFINING CREATIVITY

Although most people might look for signs of creativity in the appearance of the bulletin boards, student made projects, centers and displays in the classroom, I feel the truly creative classroom goes way beyond what can be seen with the eyes. It is a place where bodies and minds actively pursue new knowledge. Having a creative classroom means that the teacher takes risks on a daily basis and encourages his/her students to do the same.

UK National Advisory Committees report (1999) defines creativity as: “First, they [the characteristics of creativity] always involve thinking or behaving imaginatively. Second, overall this imaginative activity is purposeful: that is, it is directed to achieving an objective. Third, these processes must generate

something original. Fourth, the outcome must be of value in relation to the objective.”

Guilford (1950) stated that “a creative act is an in-stance of learning...[and that]a comprehensive learning the or must take into account both insight and creative activity”

Following are the characteristics of creativity:

- ❑ Originality: creativity is not about reproduction, but entails new developments (which albeit may build on established knowledge) and requires a certain disrespect for established ideas and concepts as well as personal courage.
- ❑ Appropriateness: not every novelty is creative, but creativity manifests itself in new approaches that are appropriate to the problem at hand.
- ❑ Future orientation: that is, not looking backwards, but being concerned with what may happen in the future and dealing with the resulting insecurity and uncertainty.
- ❑ Problem-solving ability: the capability to identify new solutions to problems; this requires “thinking outside the box”, looking at things from a new angle, venturing off the beaten path and risking failure.

CREATIVE PROCESS

Runco and Chand (1995) presented a model of creative thinking to explain the components and interactions of processes. The model depicts the complex structure of creativity and creative thinking. Other cognitive theories of learning, which began in the early 1960s (Neisser, 1967), have influenced our understanding of creativity. These theories generally view thinking as a “constructive process” (Houtz & Krug, 1995). Hennessey and Amabile (1987) proposed an “intrinsic motivation principle of creativity”, which states that intrinsic motivation is conducive to creativity and that extrinsic motivation undermines creativity.

CREATIVE TEACHING OR TEACHING CREATIVELY?

Creative teaching may be defined in two ways: firstly, teaching creatively and secondly, teaching for creativity. Teaching creatively might be described as teachers using imaginative approaches to make learning more interesting, engaging, exciting and effective. Teaching for creativity might best be described as using forms of teaching that are intended to develop students own creative thinking and behavior. However it would be fair to say that teaching for creativity must involve creative teaching. Teachers cannot develop the creative abilities of their students if their own creative abilities are undiscovered or suppressed. Teaching with creativity and teaching for creativity include all the characteristics of good teaching – including high motivation, high expectations, the ability to communicate and listen and the ability to interest, engage and inspire. Creative teachers need expertise in their particular fields but they need more than this. They need techniques that stimulate curiosity and raise self esteem and confidence. They must recognize when encouragement is needed and confidence threatened. They must balance structured learning with opportunities for self-direction; and the management of groups while giving attention to individuals. Teaching for creativity is not an easy option, but it can be enjoyable and deeply fulfilling. It can involve more time and planning to generate and develop ideas and to evaluate whether they have worked. It involves confidence to improvise and take detours, to pick up unexpected opportunities for learning; to live with uncertainty and to risk admitting that an idea led nowhere. Creative teachers are always willing to experiment but they recognize the need to learn from experience. All of this requires more, not less, expertise

of teachers. Creative teachers need confidence in their disciplines and in themselves. There are many highly creative teachers in our schools and many schools where creative approaches to teaching and learning are encouraged. But many schools and teachers do not have access to the necessary practical support and guidance in developing these approaches.

IDENTIFYING CREATIVE STUDENTS

When students are being creative in the classroom they are likely to:

- ❑ Question and challenge. Creative pupils are curious, question and challenge, and don't necessarily follow the rules.
- ❑ make connections and see relationships. Creative pupils think laterally and make associations between things that are not usually connected.
- ❑ envision what might be. They imagine, see possibilities, ask 'what if?', picture alternatives, and look at things from different viewpoints.
- ❑ explore ideas and options. Creative pupils play with ideas, try alternatives and fresh approaches, keep open minds and modify their ideas to achieve creative results.
- ❑ reflect critically on ideas, actions and outcomes. They review progress, invite and use feedback, criticize constructively and make perceptive observations.

STRATEGIES TO FOSTER CREATIVITY IN HIGHER EDUCATION

- ❑ Discussion class, colloquium or theme seminar: the teacher provides input on content and facilitates the discussions in class; the students choose the actual topic from a list provided by the teacher.
- ❑ Study circle: students and teachers with a common interest in a certain issue jointly

establish a study circle for exploring the subject further. This arrangement may also be used for arranging seminars or inviting guest lecturers.

- ❑ Workshop: this setting is envisaged as “learning by doing”; it provides a forum for techniques such as role play, experimentation or improvisation. It requires a high level of active participation and sense of ownership from both students and teachers.
- ❑ Debate cafes: these are structured occasions to meet and socialize and discuss topical concerns.
- ❑ Quality processes: Quality mechanisms set boundaries and indicate what is appreciated and valued in higher education and what is not.

FOSTERING CREATIVITY IN CLASSROOMS

Guilford (1967) and Torrance (1963) observed that creative thinking abilities could be developed through direct instruction. It is important to reduce or eliminate the factors which inhibit the creative activity of teachers and learners and give priority to those that encourage it. There are, in education, extraordinarily high levels of prescription in relation to content and teaching methods. There are huge risks of de-skilling teachers and encouraging conformity and passivity in some. We have an interesting paradox. We have industry commentators saying that, for a successful future, we need people who think, are creative and innovative and yet our education systems seem to be working against this. Developing the appropriate infrastructure is essential to promoting creativity, but these efforts may be fruitless if the culture of the organization is not changed (Birley 2002). The culture of an organization affects the creativity of its members. Particularly, a culture that encourages risk taking and accepts failure will

encourage its members to be creative and innovative (e.g. Markoff 2005, Walcott 2002). One needs to take advantages of creativity as an asset in education. Teachers should keep following things in mind while teaching to foster creativity in their classrooms:

- ❑ Support and reinforce unusual ideas and responses of students.
- ❑ Use failure as a positive to help students realize errors and meet acceptable standards in as supportive atmosphere.
- ❑ Adapt to student interests and ideas in the classroom whenever possible.
- ❑ Allow time for students to think about and develop their creative ideas. Not all creativity occurs immediately and spontaneously.
- ❑ Create a climate of mutual respect and acceptance between students and between students and teachers, so that students can share, develop, and learn together and from one another as well as independently.
- ❑ Be aware of the many facets of creativity besides arts and crafts: verbal responses, written responses both in prose and poetic style, fiction and nonfiction form. Creativity enters all curricular areas and disciplines.
- ❑ Encourage divergent learning activities. Be a resource provider and director.
- ❑ Listen and laugh with students. A warm, supportive atmosphere provides freedom and security in exploratory thinking.
- ❑ Allow students to have choices and be a part of the decision-making process. Let them have a part in the control of their education and learning experiences.
- ❑ Let everyone get involved, and demonstrate the value of involvement by supporting student ideas and solutions to problems and projects.
- ❑ Six resources have been identified as facilitating creativity in children and adults (Sternberg & Lubart, 1991) : (a) intelligence, (b) knowledge, (c) intellectual style,

(d) personality, (e) motivation, and (f) environmental context.

- There are also several personality attribute that have been shown to be traits of persons considered to be creative: (a) tolerance for ambiguity, (b) willingness to surmount obstacles and persevere, (c) willingness to grow, (d) willingness to take risks and (e) courage of One's convictions and belief in oneself (Sternberg & Lubart, 1991).
- Chambers(1973) found that the following behaviors of teachers fostered creativity in students:(a) conducting classes in an informal manner, (b) being well prepared, (c) welcoming unorthodox views and rewarding originality and creativity; and (d) encouraging student participation.

CONCLUSION

When there is a willingness to change, there is hope for progress in any field. Teaching is a challenge. Learning is a challenge. Steve Jobs has done more Cool Stuff than anybody else in Silicon Valley. One of his success secrets is loading every development team with artist and historians and poets and musicians and dramatists. Thus this shows importance of creativity in the progress in any field. Now is the time for every teacher to become more creative! In conclusion, it may well be that Guilford's (1967) statement that "creativity is the key to education in its fullest sense and to the solution of mankind's most serious problems "is still relevant today.

REFERENCES

- [1] Birley, S., (2002). Universities, Academics, and Spinout Companies: Lessons learned

from Imperial, *International Journal of Entrepreneurship Education*, Vol. 1, No. 1, pp. 133-153.

- [2] Chambers, J.A.(1973).College teachers : Their effect on creativity of students. *Journal of Educational Psychology*, 65, 326–334.
- [3] Guilford, J.P. (1950). Creativity. *American Psychologist*,5, 444–454.
- [4] Guilford, J.P.(1967). Creativity : Yesterday, today, and tomorrow. *Journal of Creative Behavior*, 1, 3–1
- [5] Hennessey , B. A. ,& Amabile ,T.M.(1987). *Creativity and learning*. Washington, DC: NEA Professional Library.
- [6] Houtz, J. C. ,& Krug ,D.(1995). Assessment of creativity : Resolving a mid-life crisis. *Educational Psychology Review*, 7, 269–300.
- [7] Markoff, J.(2005). *What The Dormouse Said: How The 60s Counterculture Shaped The Personal Computer Industry*. Viking Penguin.
- [8] Neisser, U. (1967). *Cognitive psychology*. NewYork : Appleton-Century-Crofts.
- [9] Robert, F.(1984). *The Path of Least Resistance*. Salem, MA: DMA Inc.,
- [10] Runco, M.A., & Chand, I. (1995). Cognition and creativity. *Educational Psychology Review*, 7, 243–267.
- [11] Sternberg, R.J. ,& Lubart, T.I.(1991).Creating creative minds. *Phi Delta Kappan*, 72, 608–614.
- [12] Torrance, E.P.(1963). *Education and the creative potential*. Minneapolis: University of Minnesota Press.
- [13] Walcott, S. (2002). Analyzing an innovative environment: San Diego as a bioscience beachhead. *Economic Development Quarterly*, Vol. 16, No 2 , pp. 99-114.