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## Student Teachers' Perception of Creativity – why should this matter and what can be done about it?

### **Abstract**

This paper adopts Harris' (1998) definition of creativity as the ability to imagine or find something new, an attitude to accept changes, a will to play with ideas and possibilities, and also a process to develop ideas and solutions in solving a problem to get changes.

Jupp *et al* (2001) wrote “There are economic, social and cultural arguments as to why creativity should be a prized asset. Creativity is becoming a key resource for individuals and societies. It will enable us to make the most of new opportunities, and to find the most productive responses to challenges as well as threats” ( as cited by Smith-Bingham, 2006). Creativity is needed in almost all aspects of life (Davis, 2004). Furthermore, creativity is not an inherited talent but an ability that can be learned and taught (Esquivel, 1995; Millar, 2002; Colvin, 2008). Thus, it is argued that creativity is needed in the field of education to help draw out student teachers' creative potential in order for them to develop their future students' creativity.

How do these student teachers perceive their own creativity? What is the connection between this perception and the perceived role of creativity in a teacher's profession? Can creativity training have a positive influence on these perceptions? The purpose of this study is to examine student teachers' perception of creativity for themselves as individuals and as teachers. Surveys were used for data collection among several groups of student teachers. The results indicate that student teachers lack self-confidence in their own creativity but creative ability is perceived to be important for creative teaching. Results also show that creativity training can build

self-confidences and a positive attitude on problem solving that can influence the job of a teacher.

This paper argues that in order to develop the creative potential of students, help must first be given to teachers to realize their creative potential. Specifically, teachers must be confident of their own creativity and be taught strategies to increase their creative abilities, in order to be able to apply it in their profession as a teacher. The most appropriate time to help teachers take control of their individual creativity is in teacher training courses.

### **Introduction**

The need for critical thinking and creativity in higher education has been emphasized by UNESCO (1998). The Indonesian education has a purpose to establish an environment where students have opportunities to develop their potential optimally. It is stated that one of national education purpose is to produce creative students (Depdiknas, 2003). This mandate is written in the national education purposes in Republic of Indonesian Laws Number 20, 2003 regarding the National Education Systems Chapter II Point 3.

What is creativity? This paper adopts Harris' (1998) definition of creativity as the ability to imagine or find something new, an attitude to accept changes, a will to play with ideas and possibilities, and also a process to develop ideas and solutions in solving a problem to get changes.

The evolution of civilization depends on innovation, and innovation depends on creativity. Therefore, it is undoubtedly important to nurture and enhance creativity in students. Jupp *et al* (2001) wrote "There are economic, social and cultural arguments as to why creativity should be a prized asset. Creativity is becoming a key resource for individuals and societies. It will enable us to make the most of new opportunities, and to find the most productive responses to challenges as well as threats" (cited by Smith-Bingham, 2006). Creativity is needed in almost all aspects of life (Davis, 2004). Furthermore, creativity is not an inherited talent but an ability that can be learned and taught (Esquivel, 1995; Millar, 2002; Colvin, 2008).

Creativity is considered so important, there is undisputed belief that it should be fostered in children from early on, especially in an educational context (Williams, 2002 as cited by Freund & Holling, 2008). Educational institutions, in this case, schools, can contribute to the development of students' creativity. The paradox is, schools can become institutions where student creativity is killed. Teachers hold an important role in developing students' creativity. But, in this centralized and achievement-oriented systems, teachers' roles are often limited to the implementation of the ready-made curriculum without enthusiasm and creativity. Research demonstrates that although creative teachers do make a difference in society, teacher insensitivity to creativity and teachers' discouraging of creativity lead to isolation of creative students in the classroom and continues to be a universal problem in various cultures (Guncer & Oral, 1997; Stoycheva, 1996; Torrance, 1970 as cited by Oral, 2006). Westby and Dawson (1995) were able to show that while teachers at school generally value creativity in their students, they quite often do, in fact, devalue creative behaviours exhibited by the very same students in the classroom (as cited by Freund and Holling, 2008). Thus, this paper argues that it is pertinent that teachers must have meaningful knowledge and understanding about creativity – its nature and qualities, its development and its encouragers and inhibitors.

Selection and training of prospective teachers in creative thinking and teaching skills are necessary to develop creativity in future generations (Slabbert, 1994 as cited in Oral, 2006). In its World declaration on Higher Education for the twenty first century, UNESCO called specifically for "innovative educational approaches". Based on the research by Man, Susanti and Indrajaya (2007), creative thinking can be effectively taught and learned in the Indonesian context. Thus, one way of preparing and nurturing creative teachers is to provide creativity education programs at teacher preparation institutions. The aim is to develop creative personality characteristics, creative thinking and instructional skills as well as creativity knowledge. Creativity is needed in the field of education to help draw out student teachers' creative potential in order for them to develop their future students' creativity.

Given the importance of creativity and in the absence of creativity education in teachers preparation institutions, a study was undertaken with the aim to examine student teachers' readiness to be creative teachers and whether creativity training might have an influence on such readiness. Specifically, what are the student teachers' perception of creativity for themselves as individuals and as teachers? How do these student teachers perceive their own creativity? What is the connection between this perception and the perceived role of creativity in a teacher's profession? Can creativity training have a positive influence on these perceptions?

### **Method**

The study involved a group of 27 undergraduate students who had just completed the first year of their bachelors degree course from a teacher training college (the "student teachers") affiliated to a large national university in Bandung, Indonesia. The student teachers were led by two experienced instructor external to the university. The training session was 3 and half hour per meeting. There were 2 meetings per week with a total of 12 meetings. The training included pre-training survey, teaching of creative thinking and post-training survey. To investigate student teachers' perception of creativity for themselves as individuals and as teachers, pre and post-training surveys were administered to examine participants' (a) awareness, beliefs and perceptions about their own creativity, (b) definition about creativity, (c) their attitude towards it as teachers, intended teaching strategies to teach creativity (if any); and to assess whether creativity training can have a positive influence on these perceptions, post-training surveys also examined (d) the effects, influences and benefits of training for the participants.

### **Results and Discussion**

#### ***Awareness, Beliefs and Perceptions about Personal Creativity***

From the pre-training survey, 55% from 27 participants believed they were creative. They had different reasons for this perception of themselves. 60% believed they were creative because of the ability to think differently and to generate ideas that were different, 13% believed they could produce a creative product, 13% believed

that everyone had creativity to some extent and 7% believe they were creative because they can manage the time. 7% thought that they needed more development in their creativity.

45% of the participants thought they were uncreative. The reasons are also different, 42% attributed this to a lack of ability to produce something original, 33% felt this way because their thinking was general and standard, 8% attributed their lack of creativity to the dominance of the use of logic in solving problems, 8% mentioned making mistakes in decision making, and the remaining 8% felt they lacked knowledge.

All of the participants believed that they could be more creative. Strategies included: gaining and practicing knowledge on creativity (82%), always trying to create something new and different (4%), holding the principle that everything can be done according to logic (4%), networking with creative people (4%), and acknowledging humans have strengths and weaknesses (4%).

From the post-training survey, 89% of the participants believed they were creative. 22% believed they were creative for producing ideas or something original, unique and unusual that are different from others, 15% believed they were creative because they could think divergently and convergently. The following reasons each elicited 7% of the total response: being open-minded, having a lot of potential, having already joined a creativity training program; and the following reasons each elicited 4% of the total responses: believing that everyone has their own creativity no matter the what the context is, sharing their ideas, ability to solve problems, ability to overcome blocks to creativity. The 11% participant who still felt uncreative after training explained that they hadn't yet found new ideas and needed to improve their ability on producing ideas.

From the results, more than half of the student teachers lacked self-confidence in their own creativity to begin with. They perceived creativity as something exclusive, out of their competence. This led them to believe that they couldn't do something creatively and to judge everything that they had done to be something usual, general and standard. As an individual, this perception will inhibit them from trying something new. The obvious danger of such a perception about one's lack of

creativity is the self-fulfilling prophecy of always doing and producing something that is common and unsurprising. This attitude of “losing before the war has even begun” can lead to a sense of loss or defeat when these student teachers face challenges in their future jobs of teaching. This is not only detrimental to their professional development but also can be devastating to the effectiveness of their future students’ learning.

Self-confidence and an awareness of one’s creativity not only enhance individuals in their everyday life but is also a pre-requisite for teachers to develop their students’ creativity. Not only is this necessary for teachers to be creative role models in the classroom, but also this awareness can help teachers to think beyond existing boundaries in their teaching and their students’ learning. When such awareness is gained, creativity can become a habit or a way of life, in which individuals seek to challenge boundaries, seek new ideas and dare to take risks. An encouraging result is that all the participants believed they could be more creative. Hence, the task is to find ways to help participants feel and be more creative in order to tap into this latent motivation and potential.

### ***Definition about Creativity***

Participants defined and associated creativity with a range of responses, 44% of the responses related creativity as a thinking skill, 33% of the participants associated creativity as a product, 12% defined creativity as an attitude in the willingness to share ideas and seeing things from others’ perspectives. The remaining 11% defined creativity as a process.

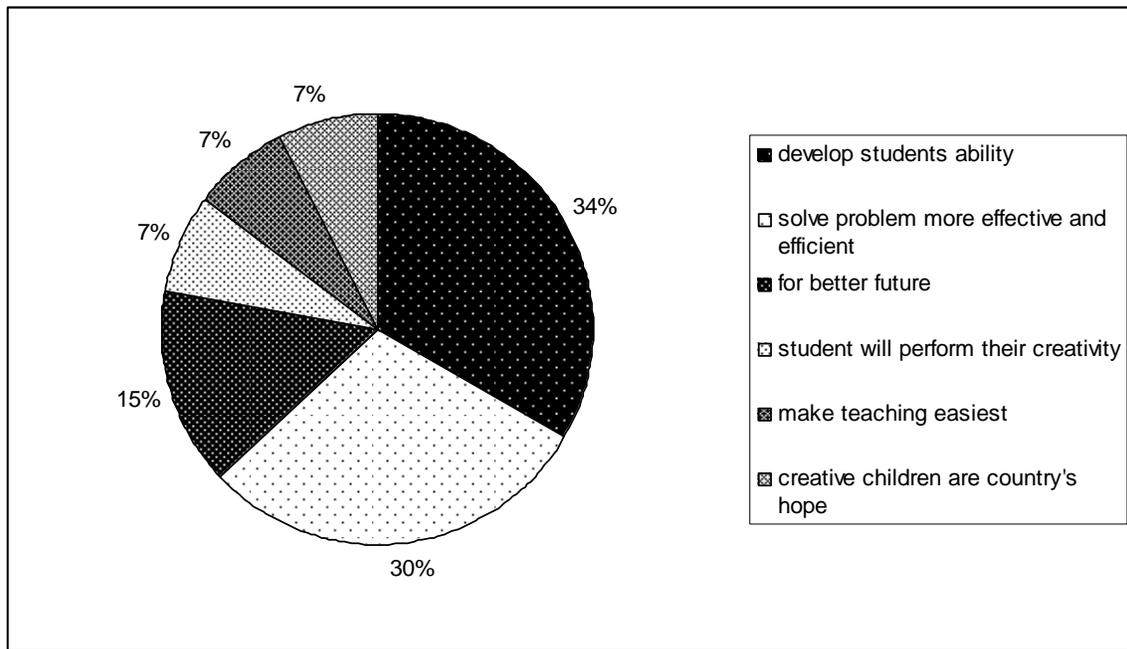
On creativity studies, there isn’t any standard definition for creativity. The experts of creativity have their own definition about creativity. Rhodes (1961) found something remarkable, four basic themes of research in creativity emerged. He proposed a model of creativity components. The components are product, person, process and the environment. Creative describes characteristics of a product that is new and useful in some way, creative also describes individuals whose output or lifestyles are uniquely different from our own. Creative has also come to signify the process used, including various tools and techniques, to motivate and encourage, and

facilitate the emergence of meaningful new ideas and fulfilling solutions. Creative has also been attributed to the environment in which the creative process occurs.

For the explanation, we can see that as teacher must have this knowledge, in case of recognize student creativity and prepare a creative situation for their students so the students can produce something creative.

### ***Attitude Towards Creativity as Teachers and Intended Strategies to Teach Creativity***

100% of the student teachers believed that it's important for their students to be creative. Figure 1 below provides a breakdown of the reasons behind this belief.



*Figure 1. Participants' Responses: why is it important for your students to be creative?*

The responses from the participants in their teaching strategies to develop their students' creativity were quite different for the pre-training and post-training surveys. In the post-training surveys, the teaching strategies mentioned were more specific and were related to the creative thinking training. Figure 2 and Figure 3 below present the details of the participants intended teaching strategies to teach creativity pre and post training.

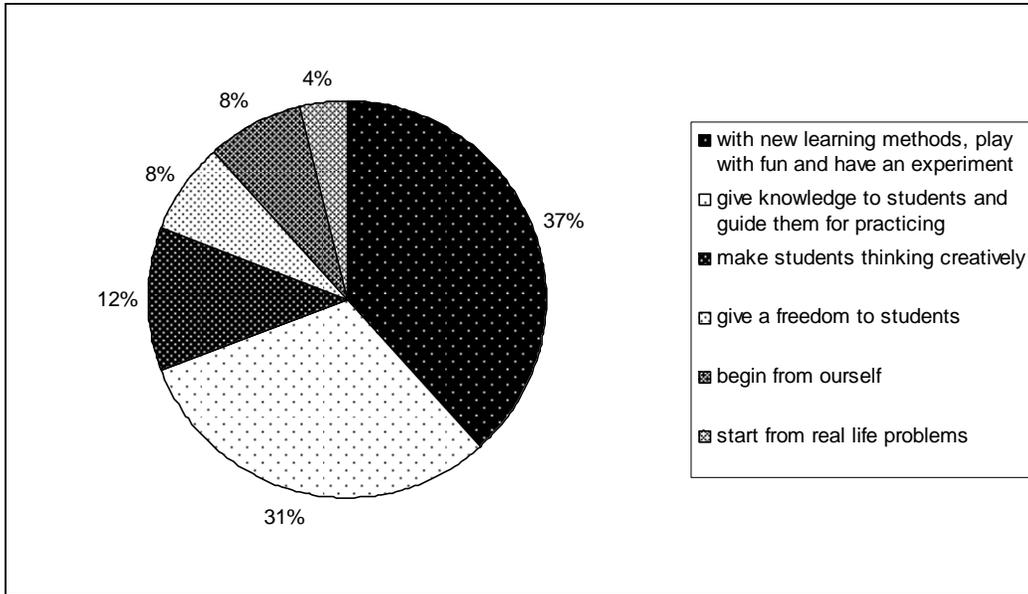


Figure 2. Pre-training responses on teaching strategies to teach creativity

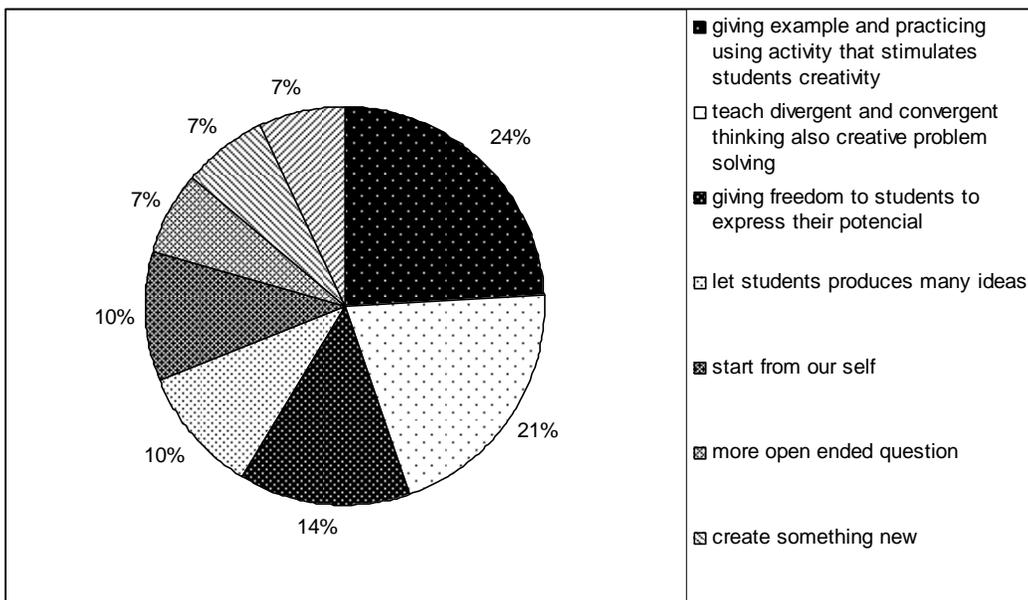


Figure 3. Post-training responses on teaching strategies to teach creativity

The fact that student teacher want their future students to be creative is a very positive foundation for progress to be made in Indonesia's education system. Equipped with such a positive mindset about the importance of creativity and that it needs to be taught, teachers need to be equipped with creativity knowledge and the

know-how in teaching creativity. As discussed above, before teachers can develop their students' creativity, they must first believe they are creative and indeed be able to think and behave creatively in order to be role models for their students on how to think and act creatively.

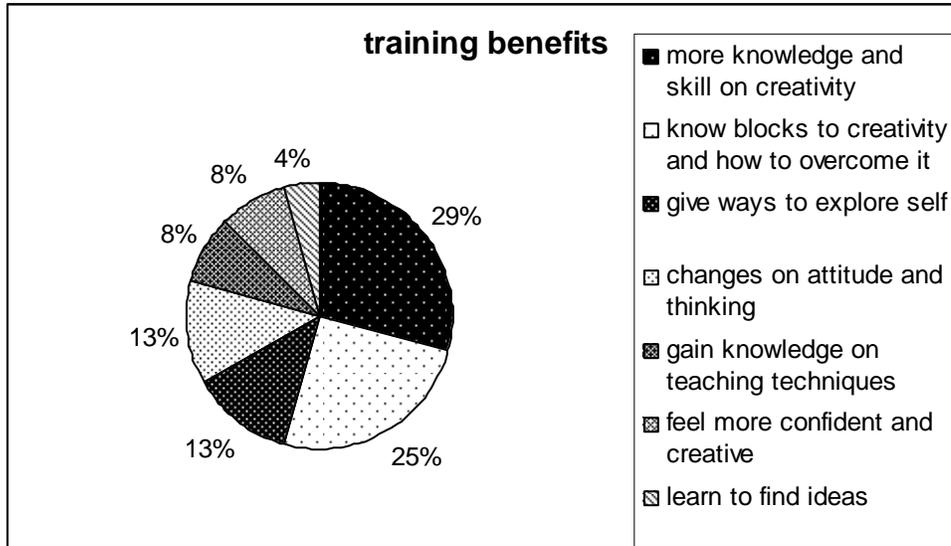
Teacher creativity is a crucial factor to juggle teaching goals and objectives and to keep creativity flowing in the classroom. Torrance (1970) claimed that creative teachers have more reservoirs of creative skills as well as more repertoires for handling problems better and have the ability to generate better solutions than their less creative peers. Thus, creative teachers provide good examples to their students while engaging in the creative process and they may teach specific ways of thinking creatively by offering more stimuli in learning (Torrance & Myer, 1970).

Creativity is complex and consists of many factors. It involves attitude, values, goals and motivation, as well as specific thinking skills, appropriate knowledge and opportunity. These components can at least to some extent, be influenced by the teacher in the classroom (Cropley, 1997). Teachers can offer opportunities for the emergence of creativity in a number of ways; they can help students to produce ideas of an inventive and original kind, and be willing to tolerate creative behaviour; they can build up pupil's interest in creativity and convince them of their own potential for being creative. All of this can only be addressed if the teachers have a confidence in their own creativity and an awareness that creativity can be learned and taught. . If they have this it will easier to teach creativity to their students. Teachers can stimulate creativity in the classroom through the kinds of model they display in their own attitudes and behaviour. Torrance (1965) demonstrated that positive attitude to creativity among teachers fosters creativity in pupils (cited by Cropley, 1997).

In summary, the student teachers are mentally ready to teach creativity. We must ask the question of whether they are sufficiently equipped to teach creativity in order to see fruits from such positive intentions. Do they have enough creativity knowledge and specific teaching strategies to see this through?

### ***Influence of Training and Benefits Gained***

89% of participants benefited from the training. The kind of benefits gained can be seen in Figure 4.



*Figure 4. Participant responses on training benefits*

The training was beneficial to the participants, as evidenced by 82% of the participants providing positive responses to the benefits and outcomes of training. Results also show that creativity training can build self-confidence and a positive attitude on problem solving that can influence the performance of a teacher. Specifically, training has had a positive effect on the perception of the participants' creativeness and their creative attitude, has enabled participants to feel more creative, and has equipped the participants with creativity knowledge and the strategies to be more creative in addition to providing them with opportunities to know themselves better as creative individuals.

### **Conclusion**

Findings from the investigation indicate that student teachers lack readiness to be creative teachers but that creativity training can address some of the issues, specifically:

1. Student teachers lack self-confidence in their own creativity but creative ability is perceived to be important for creative teaching.

2. Student teachers have intention to teach creativity but are not well equipped with know-how.
3. Creativity training can build self-confidence in one's creativity and a positive attitude on problem solving.
4. Creativity training provides student teachers with specific ideas on how to teach creativity.

Given the benefits of training in creativity, it is suggested that the most appropriate time to help teachers take control of their individual creativity and to gain knowledge in creativity in order to be able to teach creativity effectively is during pre-service teacher training courses.

### **References**

Cropley, Arthur (1997). *More Ways Than One: Fostering Creativity in the Classroom*. Connecticut: Ablex Publishing Corporation

Cropley, Arthur (2003). *Creativity In Education And Learning*. London: Kogan Page

Davis, Gary (2004). *Creativity is Forever*. Iowa: Kendall/Hunt Publishing Company

Freund & Holling (2008). Creativity in The Classroom: A Multilevel Analysis Investigating the Impact of Creativity and Reasoning Ability On GPA. *Creativity Research Journal*, 20, 309-318

Oral, Günseli (2006). Creativity of Turkish Prospective Teacher. *Creativity Research Journal*, 18, 65-73.

Rhodes, M. (1961). An analysis of creativity. *Phi Delta Kappa*, 42, 305-310

Smith-Bingham, Richard (2006) Public policy, innovation and the need for creativity. In Jackson, Norman et al. *Developing creativity in Higher education* (pp.10). NY : Routledge

Stein, Morris (1974). *Stimulating Creativity*. New York: Academic Press

Torrance, E. Paul (1963). *Education And The Creative Potential*. Minneapolis: The University of Minnesota Press

Torrance& Myers (1970). *Creative Learning and Teaching*.New York: Dodd, Mead & Company.

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