

Creative Abilities of Students and Teaching for Creativity; A Comparative Study of Public and Private Schools of Lahore City

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Abstract

This study was designed to explore the creative thinking abilities of primary school students in Pakistan. The study also explored teachers' perceptions about the creative abilities of students. Multistage sampling was applied to select the sample. Four primary schools (2 from public sector and 2 from private sector) from Lahore city were selected randomly to collect the data. 100 students and 100 teachers were selected by applying cluster sampling. Torrance Tests of Creative Thinking (TTCT) were conducted to identify the abilities of students related to creativity. A questionnaire was developed to identify the perceptions of teachers regarding the development of creativity among students. Reliability of the questionnaire was .855. Independent sample t-test was applied to identify the difference between the creativity of public and private sector school students and perceptions of teachers. Findings show that students who were studying in private schools are more competent in creative writing and have more expressive ability than public school students. Teachers of private schools were using the methods and techniques more effectively for teaching creativity. The study has important implications for the development or otherwise of creativity in primary schools in Pakistan.

Keywords: Creativity, Students, Teachers, Public and Private Schools,

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Introduction

Creativity brings innovation in human thought process. Creativity is important standard of successful teaching and learning. Edwards (2003) compared “learning and creativity to two sides of the same coin, and both represent vital issues in education.” Lubart (2008) suggests that “creative thinking can stimulate people’s learning process as a mechanism of knowledge construction.” Originality of idea is considered central trait of creativity (Cropley, 2004). Novelty of ideas and actions or goods that is central for creativity needs to be accepted by society in its wider norms (Rudowicz, 2003).

Ideas based on innovative thinking are relatively new for people and sometime takes time for the acceptance from wider socio-cultural background (Sternberg, 2006). Good education, liberty for thinking and acceptance of innovative expressions motivate and instigate the people to think creatively (Mangal, 2002). Findings of the researches indicates the positive effects of creative thinking on learning of individuals (Sharma & Chandra, 2003; Schacter, Thum, & Zifkin 2006; Palaniappan 2008). Educationists suggests that teaching for creativity is essential for all level of education. Teaching for creativity make the learning more meaningful. (Brundrett, 2007; Shaheen, 2010; Antonietti, Colombo, & Pizzingrilli, 2011; Griffiths, 2014;) Curriculum of all levels is primarily responsible to address the component of creative thinking (Davies et al, 2013; Richardson & Mishra, 2018). Initial years of child’s life are critical to develop and shape them for future life. Primary level schooling provides children the joy of learning and discovery, problem solving, creative writing, being creative in art and music, maturing socially and emotionally and developing their self-confidence as learners.

Asian countries are blamed to ignore the nourishment of creative abilities in their people. They are usually blind flowers and prefer to depend on others. In order to come out from this dependency of develop countries, Asian people need to become creative and productive (Sinlarat, 2002). Citizens can educate to nourish their creative abilities. Structuring education to work for the nourishment of creative abilities is the need of hour. (Boden, 2004).

Teachers role is very important to nourish the creative abilities of students. Teacher can initiate the effective creative learning activities by involving students efficiently. Teacher can do so, if s/he has command on learning by doing and have the ability to provide direct learning experiences to students (Chantarasombat, 2007). Creative teaching provides a unique, personalized, and exchange of knowledge among all learners (Jennifer, 2011). Creative teaching enhances the probabilities of producing creative outcome (Jeffrey & Woods, 2003). Questions that have multiple answers are good to ask to encourage creativity among students. But usually teachers avoid this practice because planning of such activities need hard work and ample time (Runco & Cayirdag, 2013). Although creativity is a forecaster of achievement, but the concept of creative teaching is different from one classroom to another classroom, depends on how teacher think about creativity (Freund & Holling, 2008). Findings of researchers found that teacher’s attitude is a barrier for creative teaching. Imaginative thinking is discouraged in the classroom (Fleith 2000; Schacter, Thum, & Zifkin 2006; Beghetto 2007; Kim 2008; Makel, 2009). Reluctancy for creativity in the classroom is sometime conscious and sometime unconscious act of teacher. Teachers feel uncomfortable to promote creativity because of unmanageable size of class. Teachers are unable to employ creativity in the class because they have not proper training to promote creativity. (Fleith 2000; Kim 2008).

Amabile’s (1998) three-part model presents important creative teaching approach. The model based on three components i.e. expertise, motivation, creative thinking skills:

- *Expertise:* Teacher should be expert in certain skills, such as, pedagogical, planning, assessment, and classroom management skills.
- *Motivation:* Amabile stresses that intrinsic motivation is important for creativity. Runco and Cayirdag (2013) said that motivation is extremely important to become creative because it persistently energies an individual to explore the new ways to solve problem.

- *Creative thinking skills*: The person who is going to teach creativity should have creative thinking skills. A person who can think is naturally bestowed with the ability to generate different ideas and many from these ideas may be inappropriate, or not useful, but practice to be a divergent thinker can help a person become more creative. (Amabile,1998).

Creativity is appreciated in formal educational environments for inventive thinking in any domain. Education system of Pakistan is criticized for encouraging rote learning where the cramming of facts have supreme standing (Qureshi, 2006). This is happening in our education system in the era when the world is depending on creative potential of individuals for its progress (Boden, 2004; Kelley & Kelley, 2013). The present world is not comprehending the importance of creativity and most schools are not teaching for creativity or train teachers to teach for creativity (Kaplan, 2019). Teachers are needed to prepare and plan for creative teaching environment to prepare individuals for creative thinking (Rogers & Fasciato, 2005; Compton & Nahmad-Williams, 2009). The present study, therefore, aimed to explore the level and kind of creative abilities in selected public and private sectors schools in Pakistan. The study also aimed to explore teacher's role and perceptions regarding the issue under study.

2. Research Methodology

Psychometric approach was used to investigate the creativity of students. This approach suggests to measure the creativity of individual directly. It explores the everyday creativity using various tests or expert judgments (Mayer, 2004).

2.1. Instrumentation: Two instruments were used for data collection: Torrance Tests of Creative Thinking (TTCT) and Questionnaire to Assess the Creativity of Teachers (QACT).

- *Torrance Tests of Creative Thinking (TTCT)*: Most popular tests that are used to measure creativity includes Torrance Tests of Creative Thinking (TTCT). TTCT regarded as appropriate for discovering and encouraging everyday life creativity (Kim, 2006). In this study Torrance Tests (1960-1964, non-verbal, picture completion) and Evan-Moor Tests (1979, verbal, creative writing) were used to check the creative abilities of students. The dimensions which are measured through these tests were verbal & non- verbal. Creativity tests were assessed by using four measures: Originality, flexibility, fluency, elaboration. These four measures are defined as:
 - ◆ *Originality*: Ability to create original ideas and responses.
 - ◆ *Flexibility*: Ability to produce a variety of ideas and responses.
 - ◆ *Fluency*: Ability to produce a large number of ideas or responses.
 - ◆ *Elaboration*: Ability to elaborate an idea with details.
- *Questionnaire to Assess the Creativity of Teachers (QACT)*: To identify the teacher's efforts for teaching creativity a questionnaire was developed by reviewing the literature. Questionnaire consist on 15 statements relating to three aspects of creative teaching as suggested by Ambile 1998 ; expertise , motivation and creative thinking skills.

Table 1. detail of statements added in the questionnaire related to each aspect

Aspect to be Measure	Statement No.
Expertise of teacher to teach creativity	4,8,9,11,12,16(Total=6)
Motivating students to be creative	2,3,5,6,10,15(Total=6)
Encouraging creative thinking in the classroom	1,7,13,14(Total=4)

The questionnaire was initially pilot tested before the use. This pilot testing helps the researchers to add two statements regarding the expertise of teachers for creativity and to remove one statement that is used twice (have similar meaning) in the questionnaire. The reliability of questionnaire was .855.

2.2. Sample for study: Four primary schools (2 from public sector and 2 from private sector) of Lahore city were selected randomly to collect the data. After that 100 students were selected from public and private sector schools by applying cluster sampling technique. 100 teachers from 10 primary schools 5 public and 5 private sector schools of Lahore city were selected conveniently to take the responses to identify their efforts to teach for creativity.

2.3. Data Collection Procedure: Brief description of the objectives of creativity tests was given to the students. The creativity tests (verbal) were in English and for the better understanding of statements, the creativity test was translated into Urdu. Tests of creativity were administered with the permission of school administration on grade 3 & 4 in all schools of sample. Researchers personally went to the schools to take the teachers responses on questionnaire.

3. Data Analysis

Tests taken from students were analyzed on four measures: Originality, flexibility, fluency, elaboration by applying inter-rater reliability; based on consensus in the ratings given by two teachers. To address the issue of consistency in rating system inter-rater reliability is useful, in which two or more examiners or observers are given the responsibility of evaluating the same task. In this study two expert teachers evaluated the test against the given criteria i.e. originality, flexibility, fluency, elaboration. Analysis of tests was completed in two phases. In first phase tests were analyzed and scored out of 20 marks by two teachers separately. Each teacher given the marks for four standards that was originality (5 marks), flexibility (5 marks), fluency (5 marks), elaboration (5 marks), total marks was 20. In second phase both teachers matched the analysis of creativity tests (verbal and non-verbal). Mean score of students' creativity tests was taken to determine their creative abilities. Independent sample t-test was applied to check the difference between creative abilities of government and private school students. Responses of teachers were analyzed by taking percentage according each response mean score. Independent sample t-test was also applied to compare the performance of teachers in the promotion of creativity among students.

Table 2. *comparison of creative abilities of public and private school students*

Aspect Creativity	of Student Institution	N	Mean	Std. Deviation	Std. Error T Mean	Df	Sig value
Originality	Private	50	3.37	.75	.10	7.63	.000
	Public	50	1.50	1.55	.22	7.63	70.78
Flexibility	Private	50	4.24	1.37	.19	6.69	.000
	Public	50	2.30	1.51	.21	6.69	97.19
Fluency	Private	50	3.53	.75	1.15	10.40	.000
	Public	50	1.33	1.55	.95	10.40	94.55
Elaboration	Private	50	3.34	1.63	.23	2.27	.000
	Public	50	2.18	3.20	.45	2.27	72.92

The table 2 indicates that the difference in creativity abilities of public and private school students. In originality of ideas private school's students mean is 3.37 & public school students mean is 1.50. For flexibility of ideas private school's students mean is 4.24 & public school mean is 2.30. In fluency of ideas private school students mean is 3.53 & public school students mean is 1.33. Elaborative abilities are also better in private sector school students with significant difference in mean score as mean is 3.34 & 2.21 respectively both for private and public. Significant value for all measures of creativity is 0.00 which is less than p.value .05. That shows the significant difference in the performance of private and public sector school students.

Table 3. *responses of public and private school teachers for their role to teach for creativity*

	Institute	N	Mean	Std. Deviation	Std. Error Mean	T	df	Sig.
Expertise	Public School	25	8.96	2.97	.59	-.718	48	
	Private Schools	25	9.64	3.68	.73	-.718	45	.077
Motivation	Public School	25	8.04	3.50	.70	.311	45.98	
	Private Schools	25	14.68	4.61	.92	.311	48	.006
Thinking Skills	Public School	25	6.24	4.14	.82	-.448	44.77	
	Private Schools	25	14.84	5.25	1.05	-.448	45.52	.003

Table 3 shows the results of teachers' responses about their role to teach for creativity. Mean of private school teachers' responses is 9.64 and for public school teachers are 8.96. Significant value is .077 which shows insignificant difference between expertise of public and private school teachers. Private school teachers used more motivational techniques as compare to private school teachers as the mean for public and private school teachers is 8.04 & 14. 68 respectively. Public school teachers have less thinking skills for teaching creatively, mean for public sector school teachers are 6.24 and for private school teachers mean is 14. 84. Significant value is .003.

4. Discussion

Creative potential of an individual is always admirable and considered an important human characteristic. It is encouraged in modern systems of education all over the globe. But the findings of the present study revealed critical status of creative abilities of students in selected schools of Pakistan. In the light of findings, it was evident that students who are studying in private schools were more competent in creative writing and have more expressive ability than public school students. Private schools' students were more competent and innovative in expressing their ideas. Creativity is not only the result of one's heredity, inborn capacity of God's gift but it can be acquired and nurture likes other human traits. Creative potential of individuals grows its maximum in a democratic environment where they get the liberty for every positive action (Mangal, 2002) . Early years teachers are more helpful in developing young children creative talent by providing a creative environment, helping children to build up their skills through innovative methods of teaching, motivating and praising children's creative efforts. Education systems are busy to fix the experimental facts into the minds of young learners. Finding clearly showed that teachers from both schools public and private have the expertise to use creative methods of teaching. They are not relying on traditional ways of teaching. They prefer activity-based teaching, ask questions and are using

figures, charts, pictures gadgets etc. in their daily teaching. Teachers are claiming that they are using problem solving exercises to encourage the creative potential of their students. However, teachers of private schools were more efficient in encouraging and motivating students for creative thinking than government school teachers.

Recommendations

Creativity remained neglected in the educational systems of developing countries, where the educational philosophy of developing countries strongly rely on promoting the creative potential of learners (Oral, 2006). Findings of this study also endorse this fact. To improve the creative thinking abilities of students there is need to take immediate steps. In this regard teacher role is very important. Creative classrooms give liberty of mistakes to learners (Craft, 1997). Learners take the risks and try variety of options while finding the solutions of problems. (Claire, 2005). So, it is suggested that teachers should be trained to teach for creatively. Public school teacher should be encouraged to use latest teaching methodologies that will be effective for teaching creativity. Teacher should be motivated to use different worksheets to enhance creative level of students in public schools. Teacher should use different method tactics and techniques of teaching to promote creativity. Teacher should keep in mind mood of students and their surroundings to build creativity in positive way.

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