



A STUDY ON ROLE OF CREATIVE THINKING ABILITY AMONG B.ED. TRAINEES

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ABSTRACT

This study is aimed to find out the role of creative thinking ability among B.Ed. Trainees. Creative Thinking Ability aimed at formulates facility to Creative thinking means thinking about new things or thinking in new ways. Creative thinking ability is "thinking outside the box." Creativity in this sense involves what is called lateral thinking or the ability to perceive patterns that are not obvious. Basically, creativity exhibits itself in some sort of response or behavior.

Objectives: The main objectives of the study is to find out significant difference on the creative thinking ability of B.Ed trainees in relation with certain demographic variables such as gender, age, marital status, subject, community, living locality and family head annual income.

Hypotheses: there is no significant difference on the creative thinking ability of B.Ed trainees in relation with certain demographic variables such as gender, age, marital status, subject, community, living locality and family head annual income.

Findings: it is found that the male: (N=06), (Mean =20.50), (SD=2.073) and female: (N=94), (Mean =20.48), (SD=2.399). It is found that 55%, 49% and 32% of B. Ed trainees strongly agreed that they are thinking different from others, doing things with imagination and carry out novel things in life respectively. 40% of B. Ed trainees disagreed that they are hidden the originality in many times. 41% of B. Ed trainees strongly disagreed that they are hard to understand the beauty of art.

Conclusion: The role of creative thinking ability among B.Ed Trainees has attempted to explore all feasible findings related to constructed objectives. This study had nullified the significant differences in relation with selected personal/demographic variables. This study clearly revealed that the creative thinking ability had made significant difference among B.Ed. Trainees.

KEYWORDS : Creative Thinking Ability, B.Ed. Trainees

INTRODUCTION

According to Craft (2000) stated that 'creativity involves being imaginative, going beyond the obvious, being aware of one's own unconventionality and being original in some way. It is not necessarily linked with a product-outcome. Creative thinking Ability is one of the life skills components. Let we know the meaning of life skills: it is abilities for adaptive and positive behaviour that enable individuals to deal effectively with the demands and challenges of everyday life (WHO 1993). Here, the teachers play a vital role in [education](#) and also in the life of student. A person with proper vision, experience, and an education degree can enter the teaching profession. Teaching job is more of a responsibility than a mere job. It has an impact on the growth and well-being of the nation. The teacher today is quite diverse than past and has an extensive role in almost every occupation. In many cases of a successful student, there seems to be a good teacher. The relation in between seems to be very harmonious with complete dedication and affection from the teacher towards the student. This phenomenon had never been the other way.

Creative Thinking Ability

Creative thinking Ability means thinking about new things or thinking in new ways. It is "thinking outside the box." Creativity in this sense involves what is called lateral thinking or the ability to perceive patterns that are not obvious. Basically, creativity exhibits itself in some sort of response or behavior. Whenever it reveals itself, it displays novelty and originality. Creativity involves playfulness, curiosity, sensitivity, self awareness, independence, imagination, discovery and invention. Torrance (1963) defined creativity in terms of divergent thinking, which involves fluency, flexibility, originality, and production of many new ideas. Guilford (1967) reported that fluency, flexibility, and originality are considered as important divergent production abilities because they contribute to the more complex construction of creativity. According to National Advisory Committee on Creative and Cultural Education (1999) creativity is an imaginative activity fashioned so as to yield an outcome that is of value as well as original'. From all these above definitions, we find three main tenets of creativity i.e. fluency, flexibility, and originality.

Fluency: Fluency refers to the ability to produce many numbers of unrepeatable ideas in a given-task. The more the number of ideas a person produces, the higher is his/ her fluency ability. **Flexibility:** Flexibility refers to the ability of the individual to produce different categories or varieties of ideas. That means a person's movement of thinking from one category to other categories regarding a particular task. It indicates the varieties of thinking. **Originality:** It is the ability to produce new or unusual ideas.

Creative thinking techniques are conscious and deliberate procedures for producing new combinations of ideas. There are other researchers who worked with different types of media, modules, silent films etc. for fostering creativity and found them effective for developing creativity (Sharma, 1995). In Indian set-up, Patel & Lozinskaya (2011) tried to show the effectiveness of brain-storming technique/method for facilitating creativity. Creative thinking included: Generate unique ideas; produce ideas that others could not think of; shift from normal perspective to take a different point of view; view things other than normal ways; imaginative; aesthetic orientation; understand the beauty of art; potential for generating further ideas and changes; able to produce an abundance of ideas in a fixed time; the tendency to view a problem instantly from a variety of perspectives; do not get stuck by assuming the rules which do not apply to a problem; likely to bend the rules; need some breathing space for incubation in the middle of creative process; able to resist the tendency to leap to conclusion prematurely; able to keep open and to make the mental leap beyond the limit freely; able to capture the essence of a given information, to produce imaginative, abstract but appropriate title; able to communicate clearly and powerfully through storytelling; like to fantasize. It provides an almost inexhaustible supply of analogies that useful in stating and solving problems creatively; like daydreaming and emotional; the tendency to combine two elements into one; the tendency to present and recognize idea or objects in unusual visual. Other than static, upright, straight on view, the usual and common perspective given by the majority of people; able to visualize beyond exteriors and pay extension to the internal, dynamic working

of things; ability to extend and break the boundaries of the problem; and good sense of humor (humor is basically creative because it involves unusual and surprise).

Creative people can devise new ways to carry out tasks, solve problems and meet challenges. They bring a fresh and sometimes unorthodox perspective to their work and can help departments and organizations to move in to more productive directions. Creative thinking means thinking about new things or thinking in new ways. It is thinking outside the box. Often, creativity in this sense involves what is called lateral thinking, or the ability to perceive patterns that are not obvious. Critical and creative thinking are integral to activities that require students to think broadly and deeply using skills, behaviours and dispositions such as reason, logic, resourcefulness, imagination and innovation in all learning areas at school and in their lives beyond school. Creative thinking means thinking about new things or thinking in new ways. It is "thinking outside the box." Creativity in this sense involves what is called lateral thinking or the ability to perceive patterns that are not obvious. Basically, creativity exhibits itself in some sort of response or behavior. Whenever it reveals itself, it displays novelty and originality. Creativity involves playfulness, curiosity, sensitivity, self awareness, independence, imagination, discovery and invention. Creative thinking is defined as a way to look at and solve problems from a different perspective, avoiding orthodox solutions and thinking outside the box. This creative process allows you to explore connections, meet new challenges and seek solutions that are unusual, original and fresh.

Types of Creative Thinking

Creative thinking mainly divided into five as divergent thinking (exaggeration), lateral thinking (out-of-box), aesthetic thinking (beauty and taste), system thinking (synthesis towards a whole) and inspirational thinking (emergent, radical insights) These five types into one type, simply called creative thinking. This is based on old bi-polar concepts such as right verses left-brain thinking or rational verses intuitive thinking. So often hear that a person is either a right-brain or a left-brain thinker, or have either a creative or a logical personality. That can certainly be useful sometimes.

Importance of Creative thinking

The main benefits of developing creative thinking include: Increase self-confidence, Solve problems more efficiently, Earn respect, Be an innovator, Make a difference and Be more successful at work. Some people are naturally more creative than others, but creative thinking can be strengthened with practice such as: Brainstorming- thinking about something and putting down all the ideas that is come to mind-regardless how silly or unrelated they might seem at first. Mind mapping - the process of connecting the dots and about arranging thoughts, thinking in a logical way, using associations, recognizing patterns and creating an order. Reframing- analyzing the same situation or a problem from a different perspective or changing the frame of things or to take a look at a problem or a situation in a different way or to be able to come up with a new and innovative approach. Envisaging the future- train the mind to anticipate future based on the images of today, using images or data to understand it and try to think about future and where it wants future to take. Role play- a good way to change the way you're thinking and explore the situation from a different perspective and assuming a new role and encourages to come up with solutions that might not be typical but they are what is needed for creative problem solving.

Need and Importance of the Study

The need is realized to visualize Creative thinking Ability programme for the youth, adolescents and the teachers to be introduced at all levels of education. Very less has been done

to provide life skills education in Indian schools. Indian educational practices give much importance to numeral and literacy/language skills. It is more concentrated on developing the cognitive aspects rather than on the applying reflective practices and developing psychological dimensions. Policy makers and administrators have to recognize that teaching core subjects alone is not sufficient to equip students for the knowledge economy. Students are to be prepared for the demands of the knowledge economy and students need to know how to use their knowledge and skills in a given situation. Here, main question may raised on creative thinking ability is having high spirits in carry out tasks, carry out novel things in life, thinking different from others, creativity is not helpful for the career, hide the originality many times, doing things with imagination and hard to understand the beauty of art.

There are a large number of instructional and related activities to be performed by the teacher inside and outside the classroom. These activities are of varied types. The effective organization of these activities would require that a teacher possesses a certain amount of knowledge and also certain attitudes and skills. Teachers help students to become a good human being. Good human being can contribute to the development of society. A developed society with good people helps others to become successful and happy. We need great teachers in schools who think about the future of the country. Teacher's roles are really important to teach students what is right or wrong and what the effects of doing certain things. Teachers are to become high-quality professionals. Only professionally qualified people produce quality services and produce good students which play the huge role in the development of the country. Educationists should build the capacities of the spirit of inquiry, creativity, entrepreneurial and moral leadership among students and become their role model as said by A.P.J Abdul Kalam, which is required the able competencies and life skills of creative thinking ability to teachers to become a good teacher. It is essential to sensitize students regarding emotions then only they can survive in the world of satisfaction. To understand others, cooperation, social responsibility and good interpersonal relations are essential for prospective teachers (NCFTE, 2009). NCF, 2005 acknowledged adolescent education and life skills of creative thinking ability linked to health, consumer rights and legal literacy as important areas in school education and included accordingly in secondary school curriculum.

Statement of the Problem

The statement of the problem for the present investigation is described as below:

The consequence of Creative thinking Ability for B.Ed trainees as a discipline cannot be over emphasized at present due to its all enveloping applications as a subject in Teacher Education curriculum. The imbibing of Creative thinking Ability by the students required sound knowledge with proper knowledge and application of Creative thinking Ability to the existing B. Ed trainees. The method of inputting Creative thinking Ability to the existing B. Ed trainees should not be over burden and it should be enjoyable in learning. Therefore, this study is considering all possible and practicalities to develop a Creative thinking Ability for B.Ed Trainees with given importance their own convenient. Further, this study is to know how far these Creative thinking Ability are in turn their knowledge which is core of the B.Ed Trainees. The results of this study will help in future to link Creative thinking Ability in a single capsule in teacher education for the betterment of prospective teachers.

Objectives of the Study

1. To find out the significant difference on Creative thinking Ability of B. Ed trainees in Sivagangai District of Tamil Nadu in relation with certain demographic variables such

as gender, age, marital status, subject, community, living locality and family head annual income.

Hypothesis of the Study

1. There is no significant difference on Creative thinking Ability of B. Ed trainees in relation with gender, age, marital status, subject, community, living locality and family head annual income.

Development of Research Tool Used in the Study

Data are required to carry out any type of educational research because answer to these research problems is sought on the basis of empirical data. Data can be collected using readily available tools of those which are modified or developed by the investigator with proper validations. The investigator has to take important decisions regarding the selection of appropriate tools for data collection. So in the present study, the investigator used a questionnaire for collecting data. The investigator **K.Gopinath (2019)** prepared tool as **Creative Thinking Ability Assessment Scale (CTAAS)**.

Creative Thinking Ability Assessment Scale (CTAAS)

For the development of Creative thinking Ability Assessment Scale, the investigator carefully gone through the review of related literature and found some of the relevant tools related to the assessment of Creative thinking Ability in India and abroad. Erawan (2010), Prawit Erawan (2010) and Cauthen et. al., (2013) developed the Creative thinking Ability instruments for schools and Tariq Jawameh (2013), Mallick (2015), Beni (2017) and Prashant Thote (2015) assessed Creative thinking Ability particularly for teachers and prospective teachers in abroad. The works of Subasree and Radhakrishnan Nair (2010), Pramod and Pereira Celine (2011), Momin (2013), Sabale and Patil (2013), Jayachitra (2015), Prashant Thote (2015), Velmurugan and Manimehalai (2015) and Sarika Chauhan (2016) is more relevant to the assessment of Creative thinking Ability for teachers and teacher trainees in Indian context. Considering the above all works on research tool for the assessment of Creative thinking Ability in relevance to B. Ed trainees, the investigator has pooled 7 Creative thinking Ability item statements and proceeding to pilot stage.

Pilot Stage

7 Creative thinking Ability item, both positive and negative statements are given with five point scales such as Strongly Agree (SA), Agree (A), Un-Decided (UD), Disagree (D) and Strongly Disagree (SD) with a score of 5, 4, 3, 2, and 1 respectively. The negative statements of Creative thinking Ability statements are scored reversely. After pooling 7 Creative thinking Ability item statements, the investigator has sought field experts opinions about the statements with the relevancy of the Creative thinking Ability statements pooled by the investigator. The field experts consist of teacher educators, educationalists, school administrators, principals and teachers. Based on the suggestions and opinions given

by the field experts about the pooled statements by the investigator, necessary omission and addition have been made.

Item Analysis

The investigator has applied item analysis for 7 item statements from the pilot stage. 6 Creative thinking Ability item statements items with the weightage of 30 scores (6 items x 5scores) was given to 50 B.Ed trainees who are studying in Meenamal College of Education, Tamil Nadu. From the responses obtained, 'r' is calculated by correlating the individual item score and the corresponding component score. The correlation coefficient at 5% level of significant is 0.42 to 0.90 (Best, 1989). Finally 6 items out of 7 items having 'r' Values between is 0.42 to 0.90 significant at 0.05 levels are selected for the final format of Creative Thinking Ability Assessment Scale (CTAAS).

Calculated 'r' Values with applying Item Analysis for Creative Thinking Ability Assessment Scale (CTAAS)

S. No	Competency	Item Statements	r' Values
1.	Creative Thinking Ability	1. Having high spirits in carry out tasks	0.723
		2. Carry out novel things in life	0.635
		3. Thinking different from others	0.574
		4. Creativity is not helpful for the career	0.358@
		5. Hide the originality many times	0.654
		6. Doing things with imagination	0.465
		7. Hard to understand the beauty of art	0.582

@ Not Significant at 0.05 levels, those items are omitted in the final format

Reliability of the Developed Research Tool

Best, (1977) a test is reliable to the extent that it measures accurately and consistently from one time to another. So, it is necessary to establish the reliability and validity of the tools to be used in any study. Garrett and Wood Worth (1966) described the following methods of establishing the reliability of a test. They are: Test-retest method, Alternative or Parallel forms, Split-half method, Rational equivalence method and Kuder's Richardson Method (K-R-20 and K-R-21). In this study, the Test- Re-test method, Spilt-Half Method and Kuder Richardson Method (K-R-20) are used to establish the reliability of the Creative Thinking Ability Assessment Scale (CTAAS) after Item Analysis.

Overall Findings of the Study

There is significant positive low correlation exists between creative thinking with communication (0.199) significant at 0.05 level. The following table shows the Overall Mean, SD and percentage of Creative Thinking of B. Ed Trainees

Overall Mean, SD and percentage of Creative Thinking Ability of B. Ed Trainees

Name of the Skill	Item Statements		Mean	SD	Percentages				
					Sa5	A4	Ud3	D2	Sd1
Creative Thinking	1.	Having high spirits in carry out tasks	3.88	1.113	31	45	11	7	6
	2.	Carry out novel things in life	3.59	1.280	32	26	17	19	6
	3.	Thinking different from others	4.45	0.716	55	38	4	3	0
	4.	Hide the originality many times	2.02	0.987	0	13	12	40	35
	5.	Doing things with imagination	4.31	0.873	49	39	9	0	3
	6.	Hard to understand the beauty of art	2.23	1.294	3	24	7	25	41
Overall Creative Thinking (68.30%)			20.49	2.371					

From the above table the following findings are drawn: 55%, 49% and 32% of B. Ed trainees strongly agreed that they are thinking different from others, doing things with imagination and carry out novel things in life respectively. 40% of B. Ed trainees disagreed that they are hidden the originality in many times. 41% of B. Ed trainees strongly disagreed that they are hard to understand the beauty of art.

Finding on Significant Difference on the Creative Thinking Ability

Significant Difference on the Creative Thinking Ability of B. Ed Trainees in relation with Gender and the Calculated 't' Values: It is found that the 't' values 0.134 of creative thinking is not significant at 0.05 level in relation to gender of the B. Ed trainees. Therefore, the gender of the B.Ed trainees is not made any significant differences on creative thinking. It is found that the 't' 8.182 values of creative thinking is significant at 0.01 level. Therefore, the age of the B. Ed trainees is made significant differences on creative. From the mean values Below 25 Yrs (20.91) are better than other two age groups such as 26 – 35 Yrs (19.71) and 36 & Above Yrs (18.30) in creative thinking. The 't' values 2.113 of creative thinking is significant at 0.05 level. Therefore, the age of the B. Ed trainees has made significant differences on creative thinking. From the mean values single B.Ed trainees (20.83) are better than the married B.Ed trainees (19.78). It is found that the 'F' values 0.530 creative thinking are not significant at 0.05 level in relation to subject of the B. Ed trainees. It is found that the 'F' values 0.469 creative thinking is not significant at 0.05 level in relation to community of the B. Ed trainees. Therefore, the community of the B. Ed trainees has not made any significant creative thinking. It is found that the 'F' 0.566 creative thinking is not significant at 0.05 level in relation to living locality of the B. Ed trainees. Therefore, the living locality of the B. Ed trainees has not made any significant difference on creative thinking. It is found that the 'F' values 0.304 creative thinking is not significant at 0.05 level in relation to family head annual income of the B. Ed trainees. Therefore, the family head annual income of the B. Ed trainees has not made any significant difference on creative thinking.

Suggestion for further research

1. Similar type of studies may be carried out for Higher Secondary, College, University and Other students.
2. Similar type of studies may be carried out for Adults, Differently able persons, working sectors and Rural People

CONCLUSION

It is concluded that the role of creative thinking ability among B.Ed. Trainees. Creative Thinking Ability aimed at formulates facility to Creative thinking means thinking about new things or thinking in new ways. The study is to find out significant difference on the creative thinking ability of B.Ed trainees in relation with certain demographic variables such as gender, age, marital status, subject, community, living locality and family head annual income.

REFERENCES

1. Advisory Committee on Creative and Cultural Education (1999) Retrieved from, Report to the Secretary of State for Education and Employment the Secretary of State for Culture, Media and Sport.
2. Arulsamy, S. & Sivakumar, P. (2004). Interactive Multimedia in Technology and Learning. University. News, 42(30), 5-9.
3. Cauten, H. A. (2013). The Development of a Sport-Based Life Skills Scale For Youth to Young Adults, 11-23 years of age (Doctoral dissertation, The Chicago School of Professional Psychology).
4. Erawan, P. (2010). Developing life skills scale for high school students through mixed methods research. European Journal of Scientific Research, 47(2), 169-186
5. Gopinath, K. & Sivakumar, P. (2018). Predictor Variables of Life Skills and Teaching Competencies of Prospective Students in College of Education, PARIPEX - Indian Journal of Research, Vol. 7 | Issue 12.
6. Prashant Thote and L.Mathew (2011) A study of preference of Life Skill in the school Students .India Journal of Life Skills.
7. Prawit Erawan (2010). Developing Life Skills Scale for High School Students

through, Mixed Methods Research, European Journal of Scientific Research. ISSN 1450-216. X-Vol.47, No.2, pp.169-186.

8. Ramnath, R. & Sivakumar, P. (2011). Constructivism and Skill based Pedagogy in the Higher Education Context. Indian Journal Applied Research, 1(3), 61-62.
9. Torrance (1963) Retrieved from Torrance Center for Creativity/The Center for Gifted, Glenview, IL, in partnership with the Torrance Center for Creativity and Talent Development at the University of Georgia.
10. Vinothkumar, P. & Sivakumar, P. (2013). Blog based Learning: An Innovative approach. Edutracks, 12(6), 3-6.