



## A Study on In-service Teachers Creative thinking about Teaching

Md Habibur Rahaman, Ph.D., Department of Education  
Education College, Basantapur, Domkal, Murshidabad, West Bengal, INDIA

### ORIGINAL ARTICLE



#### Author

Md Habibur Rahaman, Ph.D.

E-mail : mdhabiburrahman803@gmail.com

shodhsamagam1@gmail.com

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### ABSTRACT

People who are creative are able to make a contribution to society that no intelligent person can. Most of the researchers measured creative thinking of students of different levels through test of general creativity, test of scientific creativity and test of linguistic creativity, though creativity. It covers all fields and activities of people life like teaching and others professions. The quality of education depends on quality of teachers. As such in-service teachers' creative thinking about teaching should be properly identified creative student. The creative in-service teacher differs in teaching with reference to others, in the present study the researcher decided to study "In-service teachers' creative thinking about teaching process". Creative thinking is considered a high-order thinking skill, logical, and scientific thinking, and is associated with a vocabulary which includes the following words: innovation, paradox, invention, problem, idea, and originality. The objectives of this research are to study the in-service teachers' creative thinking about teaching due to gender, management and stream variations. The null hypothesis tested for significance in the results section has been interpreted in tends of rejection and acceptance depending upon the result. There was significant difference between male-female, govt-private and science-arts in-service teachers' creative thinking about teaching.

### KEY WORDS

In-Service, Teacher, Creative Thinking and Teaching.

### INTRODUCTION

The world is changing rapidly and most of the changes in the society are the product of creativity. Only a creative person can change the world. The

creative person can change society which even the intelligent person cannot. The present study can lead to developing the atmosphere for nurturing the creative teaching of prospective teachers. Researchers also felt that some innovative In-service teachers think of their unique lesson plans. The creative in-service teacher differs in teaching with reference to others, but no research can be found in this area. As such, in the present study, the researcher decided to study “In-service teachers’ creative thinking about teaching”.

## **Review of Literature Conducted in India**

### **Review of Literature Conducted in India**

**Gulati, (1995):** He conducted a study to analyse how instructional materials helped children’s creativity in classroom and its effectiveness in fostering creativity.

It was found that the difference between mean scores of In-test and post-test were consistently significant both in case of flexibility (verbal and non-verbal) and originality (verbal and non-verbal).

**Mahapatra, (2000):** conducted a study on developing creative expressions in elementary grades through enrichment programmes.

It was found that the experimental treatment had a positive impact on the children. Girls were found to be better in developing composition writing as compared to boys.

**Chaudhary, (2003):** He made an attempt to find out the relationship between creativity, level of aspiration and personality characteristics among high school students and found a significant difference between the components of creativity, level of aspiration and personality characteristics of creative and non-creative students.

**Singh and Singh, (2003):** They investigated the impact of socioeconomic status upon divergent thinking abilities. Their findings are:-

The results indicated that differences in socioeconomic status produced differences in divergent thinking abilities. The study reported that higher the SES, better the level of divergent thinking abilities.

### **Review of Literature Conducted Abroad**

**Thabor, (2004):** Thabor reported that urban secondary school students have significantly higher creative thinking ability than rural students and also found that non-tribal secondary school students have significantly higher creative thinking than the tribal students.

**Dineen and Collins, (2005):** stressed that creativity researchers overemphasise the superficially understood knowledge-what rather than the experiential knowledge-how, and suggested a synthesis of the two. Based on our data analysis, we will go even further, emphasising the need for a third pillar, the knowledge-why.

Knowledge - why is connected with reflective and caring thinking (components of the manifold - thinking framework), which are almost completely absent from the primary-school learning environment.

**Karwowski and Soszynski, (2008):** They conducted a training programme for undergraduate education female students with a view to developing creativity using creative imagination, the Role Play Training in Creativity (RPTC). They studied the effectiveness of RPTC.

Their findings are the results showed statistically significant increase of results in the Test of Creative Thinking – Drawing Production and two of three Test of Creative Imagination - fluency and originality.

**Lin, (2010):** He analysed attribute patterns of creative problem solving ability among upper elementary students in Taiwan. He developed Creative Problem Solving Attributes Inventory (CPSAI) for measuring attributes of creative problem solving and compared with other established instruments. The major findings are:

The results showed that creativity is evidenced as multi- faceted and domain – specific. The data showed three different patterns of attribute composition and the threshold effect on students creative problem solving. In addition, the CPSAI produced good internal consistency, good construct validity, and marinated discriminate validity with the data.

## Rationale of the Study

Creative thinking skills are thought of as an important goal in developed countries at all education levels from in school to the university level, and education programs are in paired accordingly. For an individual to think creatively, he or she should be able to come up with new ideas and solutions. The relationship between creative thinking of in-service teacher is very important for the effective teaching. Therefore, in-service teachers and their critical thinking are focal point in this study. The aim of this study was to evaluate the levels of creative thinking of in-service teachers who have received education in the creative thinking about teaching and to analyse the data in terms of different variables such as gender, management, and stream (science and arts) teachers.

## Statement of the Problem

For the present study the research stated the problem to achieve the objective of the study “A study on in-service teachers’ creative thinking about teaching”.

## Objectives of the Study

The following objective have been formulated in this research work:

- i. To study the in-service teachers’ creative thinking about teaching due to gender variations,
- ii. To found out the in-service teachers creative thinking about teaching due to management variations.
- iii. To know the in-service teachers creative thinking towards teaching due to stream variations.

## Hypothesis of the Study

The following null hypotheses have been set up for the study on the basis of the objectives research questions asked. All the hypotheses have been expressed in the null form:

- H<sub>01</sub>** There does not exist any significant mean difference in creative thinking of in-service teachers’ about teaching due to their gender variation.
- H<sub>02</sub>** There does not exist any significant mean difference in creative thinking of in-service teachers’ about teaching due to their management variation.
- H<sub>03</sub>** There does not exist any significant mean difference in creative thinking of in-service teachers’ about teaching due to the variation of in streams of their teaching subject.

## Operational Definitions

In the title of the order to understand study more clearly the terms used in the study have been defined and clarified in the following way:

- i. **In-service teachers:** It refers that student teachers who are engaged in Teaching services and trained by doing training under the University of BSAEU (WBUTTEPA), NCTE affiliating training institution.
- ii. **Creative Thinking:** Here the term refers that the teacher appliances Innovative, creative ideas during teaching in classroom which make standard score of fluency, flexibility, originality.
- iii. **Teaching:** Here, teaching means all the instructional process & components Provided by the school teachers at the time of teaching learning process.

## Scope and Delimitations of the Study

Due to an unavailability of time, cost and other resources it is not possible to cover or complete all B.Ed. colleges of Murshidabad District. However the study is tried out on 50 samples from the in-service teachers will be carried out randomly. The scope of the study is to access in-service teachers’ creative thinking about teaching with respect of their gender, management and stream variation.

The study is delimited to four (4) B.Ed. colleges, one Government and three private institutes. Out of the four B.Ed. colleges fifty (50) students, 28 male and 22 female have been selected for the sample of the study from the Murshidabad district.

### The Design

The main objectives of the study are to find out In-service teachers' creative thinking about teaching with variation gender, management and stream. It is a descriptive survey method cum ex-post facto design where the data have been collected from normative groups.

### Sample

The sample of study consists of four B.Ed. colleges, one Government and three Private Colleges from Murshidabad district. The students of these colleges in the sample are given below:

Variation	Respondents	No.	Total
Gender	Male	28	50
	Female	22	
Management	Govt.	40	50
	Private	10	
Stream	Science	25	50
	Arts	25	

### Tools Used for the Study

Self-made tools were used by the researcher to complete the task.

Validity of a research depends on the appropriate tools used for the study. The tools must cover all expected responses to verify the hypotheses by statistical approaches. The following tools were used in the study:

1. A verbal test of creative thinking about teaching.
2. The characteristics of the creative In-service teachers.

### Techniques use for Data Analysis

The data for the present study has been collected through the self-developed standardized tools quantitative analysis was selected owing to the nature of data collected. The data was scored manually and organized into frequency distribution tables, for quantitative analysis of data, difference statistical descriptive statistics and inferential statistics techniques will be used, like mean, median, standard deviation, t-test. Data will also be presented graphically.

### Result and Discussion

The data will be analysed and discussed according to the research question, objectives and hypothesis of the study by using appropriate statistical means, considering whatever fit for the study.

### Analysis & Interpretation of data

#### Testing of Hypothesis

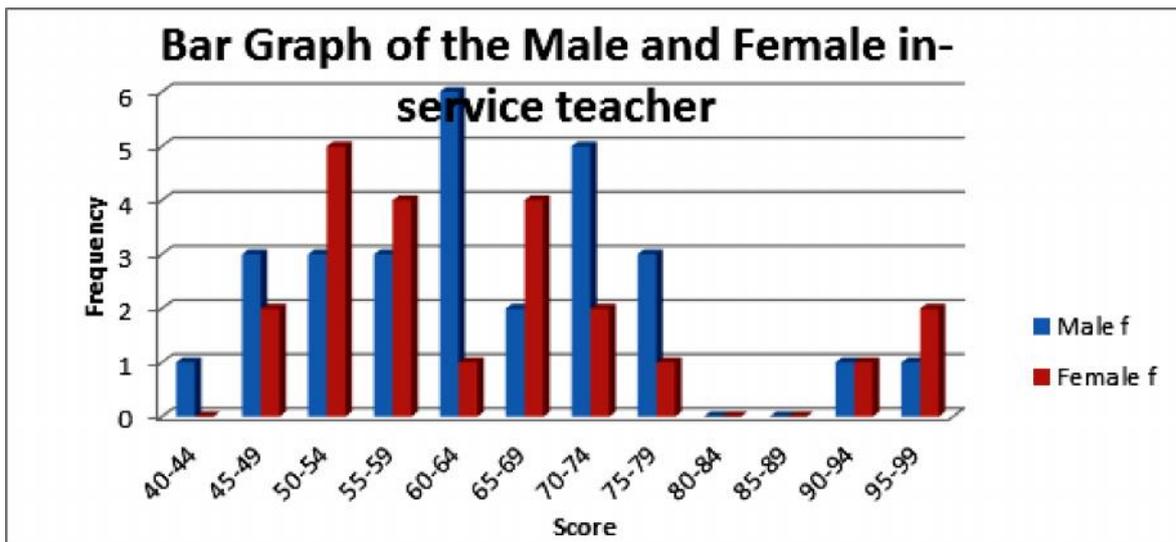
		No.	Mean	SD	M <sub>1</sub> - M <sub>2</sub>	???	't'
Gender	Male	28	64.15	12.88	0.35	3.96	0.088
	Female	22	64.5	14.68			
Management	Govt.	40	64.37	13.61	0.37	4.89	0.075
	Private	10	64.00	13.92			
Stream	Science	25	65.20	12.63	1.8	3.85	0.467
	Arts	25	63.40	14.59			

**Testing of  $H_{01}$ :** On perusal the above table, in gender variation it was revealed that the calculated value of 't' being 0.088 was upper than the table value of 't' is 1.98 at 47df even at 0.01 level of significance. Hence it is not significant. Therefore,  $H_{01}$  accepted.

**Testing of  $H_{02}$ :** In Management variation the calculated value of 't' 0.075 is lesser than the value of 1.98 at df 0.01 level so it is not significant. Therefore,  $H_{02}$  is accepted.

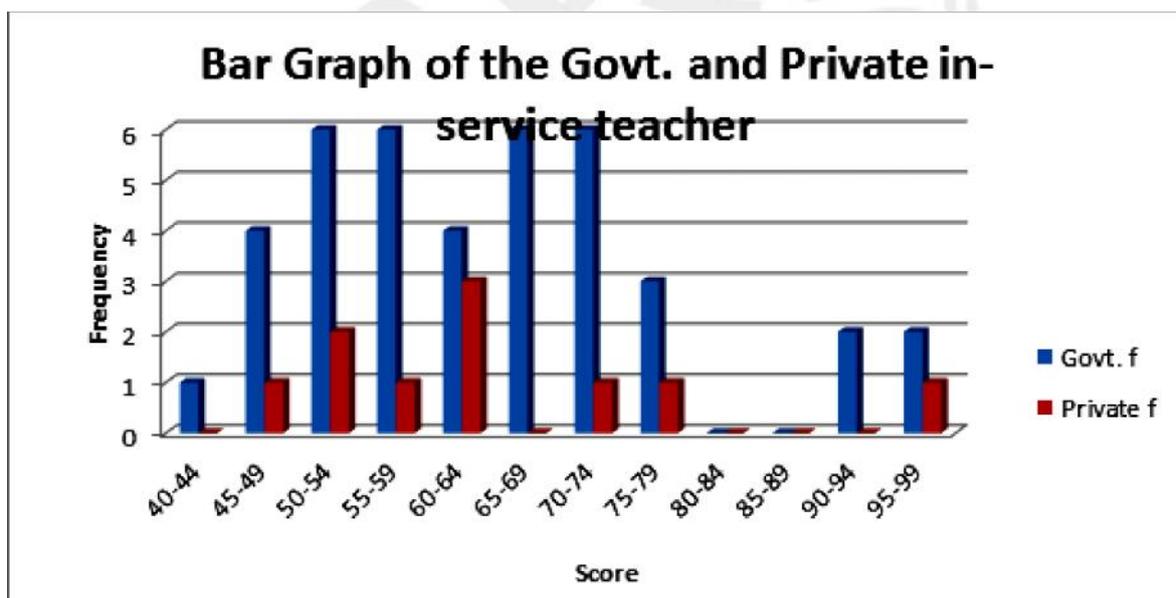
**Testing of  $H_{03}$ :** In Stream variation the calculated value of 't' 0.467 is lesser than the value of 1.98 at df 0.01 level. So it is not significant. Therefore,  $H_{03}$  is accepted.

**Figure 1:** Bar Graph of the distribution of the scores obtained in creative thinking about teaching test by the males and females In-service teachers.



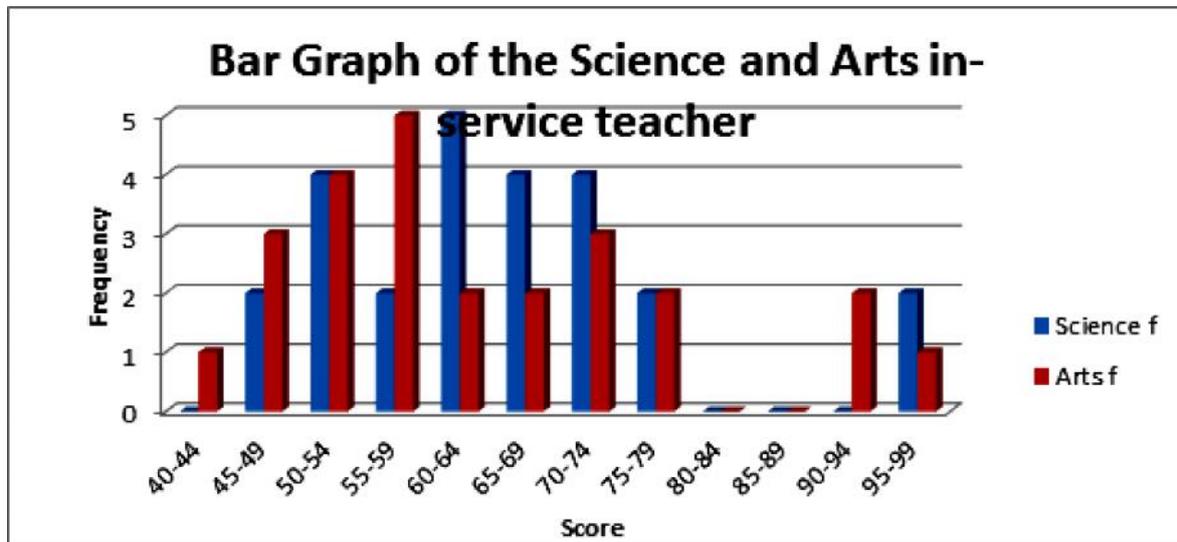
**Analysis:** Two comparison Bar Graph represent some cases female teacher > Male teacher and some cases male teacher > female teacher.

**Figure 2:** Bar Graph of the distribution of the scores obtained in creative thinking about teaching test by Male and Female In-service teachers.



**Analysis:** Two comparison of Bar Graph represent that Govt. in-service teachers > Private in-service teachers, and private median > govt. median.

**Figure 3:** Bar Graph of the distribution of the scores obtained in creative thinking about teaching test by the Science and Arts In-service teachers.



**Analysis:** Two comparison Bar Graph represent some cases arts in-service teacher > science in-service teacher again some cases science in-service teacher > arts in-service teacher.

## Findings

Results obtained were discussed in the light of the objectives and hypothesis framed. The null hypothesis tested for significance in the results section has been interpreted in terms of rejection and acceptance depending upon the result. The verbal test of Test of Creative Thinking about Teaching, developed by the Investigator, proved a reliable and valid tool. There was significant difference between male and female in-service teachers' creative thinking about teaching. There was significant difference between govt. and private in-service teachers' creative thinking about teaching. There was significant difference between science and arts in-service teachers' creative thinking about teaching.

## CONCLUSION

The present study revealed following significant conclusion with respect to the in service teachers creative thinking about the teaching of B.Ed. College trainee teachers. There is variation in creative thinking of male-female, govt.-private and science-arts in service B.Ed. trainees towards creative thinking.

## Recommendations and Suggestions

Research works never end. There was always scope for further research in same field and it leads to the increase of knowledge. The study gives rise to various problems for further research, such as the same study can be conducted on large sample of the same district by including so as presenting clear picture of the study. A study be conducted by considering other related variables like gender, management, stream etc. A comparative study of the creative thinking about teaching can be undertaken among different states and different countries.

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