



Attitude Towards Development of Creative Thinking among Prospective Teachers

Ignatius Topno. Ph.D.

Professor

St. Xavier's College of Education, Dighaghat, Patna, Bihar-800011, India

Abstract - Creativity is the gateway to innovative outcomes that are important to any high performance team's ability to deliver the results needed by their clients and customers. Creativity is not a myth that is the result of magic, madness or mystery. Instead, creativity can be influenced by variables you can control and affect! Increased creativity and problem solving skills will help to ensure that the desired outcome of all engagements and work is successfully completed in a timely and cost effective manner. Creativity is a trait that exists in *everyone*. Regardless of individuals' experiences with creativity, it is a disposition we can nurture and cultivate. Therefore, in order to assess the issue on attitude towards the development of creative thinking of prospective teachers the researcher used survey method with 200 samples to study the objectives with respect to gender, streams of study, medium of instructions and locality. The questionnaire on creative thinking inventory prepared and validated by the researcher was executed. The results show that there is a significant difference between the means scores of attitude towards the development of creative thinking of prospective teachers on the basis of science and arts, arts and commerce, medium of instructions and locality whereas there is no significant difference between the means scores of attitude towards the development of creative thinking of prospective teachers on the basis of gender and science and commerce.

Key Words : innovative, creativity, disposition, creative thinking, prospective teachers.

I. INTRODUCTION

Creativity is the gateway to innovative outcomes that are important to any high performance team's ability to deliver the results needed by their clients and customers. Creativity is not a myth that is the result of magic, madness or mystery. Instead, creativity can be influenced by variables you can control and affect! Increased creativity and problem solving skills will help to ensure that the desired outcome of all engagements and work is successfully completed in a timely and cost effective manner. In addition, the outcome(s) will tend to exceed customer expectations and will be more satisfying for yourself and your team on both personal and professional levels.

What comes to one's mind when one hears the words "creative" or "creativity"? Perhaps images of people who express themselves freely and confidently through their work or daily life experiences; people who tend to think "outside the box" when coming up with ideas to address situations or solve everyday problems? What about artists, actors, writers, designers or performers who share their experiences, emotions or wisdom through their work and craft? Researchers, scientists, inventors, or entrepreneurs who come up with original, progressive, never-conceived-before ideas or technologies that improve our lives? You might even think of individuals who seem to find joy in everyday things such as cooking, gardening, decorating a home, or taking care of children.

Defining creativity is not as easy as it may seem. As you read above, creativity can mean different things to different people. It could be a talent, such as singing or dancing, or it could be a different way of thinking or being in the world. Creativity is a trait that exists in *everyone*. Regardless of individuals' experiences with creativity, it is a disposition we can nurture and cultivate. Therefore, it is important to begin thinking about "how" an individual is creative rather than "if" an individual is creative (Cropley, 2001).

Creativity is the utility to create; a creation of one person might mean discovering a new planet to another painting usually good picture or to another playing the piano, or tennis well or to another, it might simply mean trying something new. Abraham Maslow (1970) started first rate of soup is more creative than a second rate of painting. The studies which stimulated much of this recent interest in creativity were concentrated on its cognition aspects. A creative teacher is seen as an information processor, problem finder, a problem poser and a problem solver. She/he accepts teaching as an exercise of imagination to generate number of novel ways of organizing learning experiences and ideas, think of alternative materials and medias of expression, evolves strategies of involving each child in the creative process and maintains the status of a well aware facilitator who understands and respects learning capacities and capabilities of the children.

II. SIGNIFICANCE OF THE STUDY

Creativity plays a vital role in our everyday lives and our society as a whole . We need creativity to overcome obstacles, to adapt to change and to find our own way to cope with a huge variety of situations. Creativity as a new and appropriate solution to a problem is indispensable for a society to further advance. Besides, embracing and practicing creativity can increase emotional and physical health. There also exists evidence that creativity plays an important role in ethical reasoning and decision making. Creativity is not the exclusive province of the artist; creative life is an opportunity – and responsibility – for every conscious individual. So the role of the creator is that of a mediator, a transformer of energy. The creative individual provides a physical outlet for the expression of any ideas or energies he can contact. The energy which flows through the creative individual manifests spontaneously, as it is focused and directed by that individual. The specific focus and direction of this spontaneity is dependent upon the receptivity of the individual's environment and his personal tendencies. The flow of ideas and energies through creative people ranges from the artist at his easel to the conscious soul utilising his very lifetime for the expression of some ideal or work of God.

III. STATEMENT OF THE PROBLEM

Attitude Towards the Development of Creative Thinking Among Prospective Teachers

IV. OPERATIONAL DEFINITIONS

Attitude - A predisposition or a tendency to respond positively or negatively towards a certain idea, object, person, or situation.

Towards - in the direction of.

Development - the process of developing or being developed.

Creative - relating to or involving the use of the imagination or original ideas to create something.

Thinking - the process of considering or reasoning about something.

Creative Thinking - looking at something in a new way.

Among - in the middle of or surrounded by other things

Prospective - expected or expecting to be the specified thing in the future.

Teachers - a person whose job is to teach students about certain subjects

Prospective Teachers - Teacher candidates who are enrolled in a teacher education program

V. OBJECTIVES OF THE STUDY

- i. To find whether there is any significant difference between male and female prospective teachers in their creative thinking.
- ii. To find whether there is any significant difference between science and arts background prospective teachers in their creative thinking.
- iii. To find whether there is any significant difference between science and commerce background prospective teachers in their creative thinking.
- iv. To find whether there is any significant difference between arts and commerce background prospective teachers in their creative thinking.
- v. To find whether there is any significant difference between English medium and Hindi medium prospective teachers in their creative thinking.
- vi. To find whether there is any significant difference between rural and urban prospective teachers in their creative thinking.

VI. TOOL USED

A self-constructed and validated tool of Creative Thinking has been used in this study.

VII. METHOD USED

The investigator method adapted for the present study is the survey method for the present study.

VIII. POPULATION FOR THE STUDY

The population selected for the study are the prospective teachers of Patna district.

IX. SAMPLE

There were 200 prospective teachers chosen from Patna Educational District of Bihar State.

X. STATISTICAL TECHNIQUES USED

- i. Mean
- ii. Standard Deviation
- iii. t-ratio

XI. DELIMITATIONS OF THE STUDY

- i. The study was limited to attitude towards Creative Thinking
- ii. The study is limited to teacher's training colleges in Patna district.
- iv. Only the 200 prospective teachers are taken as sample.

XII. NULL HYPOTHESIS

- i. There is no significant difference between the mean scores of prospective teachers in their creative thinking on the basis of gender.
- ii. There is no significant difference between the mean scores of prospective teachers in their creative thinking on the basis of streams.
- iii. There is no significant difference between the mean scores of prospective teachers in their creative thinking on the basis of streams.
- iv. There is no significant difference between the mean scores of prospective teachers in their creative thinking on the basis of streams.
- v. There is no significant difference between the mean scores prospective teachers in their creative thinking on the basis of medium.
- vi. There is no significant difference between the mean scores of prospective teachers in their creative thinking on the basis of locality.

Null Hypothesis - 1

There is no significant difference between the mean scores of prospective teachers in their creative thinking on the basis of gender.

Table – 1
Creative thinking of prospective teachers on the basis of gender

Gender	N	Mean	S.D	t-ratio	Level of significance
Male	48	101.32	8.873	0.290	NS
Female	152	100.90	8.976		

(At 5% level of significance, the table value of 't' is 1.96)

There is no significant difference in their creative thinking.

It is inferred from the above table that the t-value is 0.290 which is less than table value 1.96 at 0.05 level of significance. Hence, the null hypothesis is accepted. It means, therefore, there is no significant difference between the mean scores of prospective teachers in their creative thinking on the basis of gender .

Null Hypothesis - 2

There is no significant difference between the mean scores of prospective teachers in their creative thinking on the basis of streams.

Table – 2

Creative thinking of prospective teachers on the basis of streams

Streams	N	Mean	S.D	t-ratio	Level of significance
SCIENCE	110	101.69	8.696	2.11	S
ARTS	87	100.92	9.013		

(At 5% level of significance, the table value of 't' is 1.96)

There is a significant difference in their creative thinking.

It is inferred from the above table that the t-value is 2.11 which is more than table value 1.96 at 0.05 level of significance. Hence, the null hypothesis is rejected. It means, therefore, there is a significant difference between the mean scores of prospective teachers in their creative thinking on the basis of stream.

Null Hypothesis - 3

There is no significant difference between the mean scores of prospective teachers in their creative thinking on the basis of streams.

Table - 3

Creative thinking of prospective teachers on the basis of stream

Stream	N	Mean	S.D	t-ratio	Level of significance
Science	110	101.69	8.696	0.080	NS
Commerce	3	92.67	10.017		

(At 5% level of significance, the table value of 't' is 1.96)

There is no significant difference in their creative thinking.

It is inferred from the above table that the t-value is 0.080 which is less than table value 1.96 at 0.05 level of significance. Hence, the null hypothesis is accepted. It means there is no significant difference between the mean scores of prospective teachers in their creative thinking on the basis of streams.

Null Hypothesis - 4

There is no significant difference between the mean scores of prospective teachers in their creative thinking on the basis of streams.

Table – 4

Creative thinking of prospective teachers on the basis of stream

Stream	N	Mean	S.D	t-ratio	Level of Significance
Arts	87	100.92	9.013	2.52	S
Commerce	03	92.67	10.017		

(At 5% level of significance, the table value of 't' is 1.96)

There is a significant difference in their creative thinking.

It is inferred from the above table that the t-value is 2.52 which is more than table value 1.96 at 0.05 level of significance. Hence, the null hypothesis is rejected. It means there is a significant difference between the mean scores of prospective teachers in their creative thinking on the basis of streams.

Null Hypothesis - 5

There is no significant difference between the mean scores prospective teachers in their creative thinking on the basis of medium.

Table – 5

Creative thinking of prospective teachers on the basis of medium

Medium	N	Mean	S.D	t-ratio	Level of significance
ENGLISH	116	102.10	8.569	3.714	S
HINDI	84	100.00	9.198		

(At 5% level of significance, the table value of 't' is 1.96)

There is a significant difference in their creative thinking.

It is inferred from the above table that the t-value is 3.714 which is more than table value 1.96 at 0.05 level of significance. Hence, the null hypothesis is rejected. It means, therefore, there is a significant difference between the mean scores of prospective teachers in their creative thinking on the basis of medium.

Null Hypothesis - 6

There is no significant difference between the mean scores prospective teachers in their creative thinking on the basis of locality.

Table – 6

Creative thinking of prospective teachers on the basis of locality

Locality	N	Mean	S.D	t-ratio	Level of significance
Rural	115	99.88	8.295	2.286	S
Urban	84	102.99	9.159		

(At 5% level of significance, the table value of 't' is 1.96)

There is a significant difference in their creative thinking.

It is inferred from the above table that the t-value is 2.286 which is more than table value 1.96 at 0.05 level of significance. Hence, the null hypothesis is rejected. It means, therefore, there is a significant difference between the mean scores of prospective teachers in their creative thinking on the basis of locality.

XIII. CONCLUSION

Creative thinking is not a process that can be learned in a initial attempt. We know creative thinking is something that one has or doesn't have but it can also be learned step by step starting from kindergarten. The way of education in school has a big effect on person's creative thinking. Different projects and presentations give us a chance to improve our creative thinking skills.

Creative thinking in business life differs from school methods. In order to be successful in business life, company needs to have creative staff and creative ideas to make the business bloom. Creative thinking people can easily be promoted.

Creative thinking has a big role in one's life and endeavors. It shows in various ways adding new feathers using different kinds of sources to make one's work more effective and meaningful. Everybody has different kinds of creative thinking and in any undertaking. One tries to put them together to reflect and use them in day today ways of working. The results show from the above research that there is a significant difference between the means scores of attitude towards the development of creative thinking of prospective teachers on the basis of science and arts, arts and commerce, medium of instructions and locality whereas no significant difference between the means scores of attitude towards the development of creative thinking of prospective teachers on the basis of gender and science and commerce.

REFERENCES

- [1] Butcher, H.J. (1980). Recent research into creativity, divergent thinking In Great Britain. In M.K. Raina (Ed.), Creativity Research : International perspective. New Delhi : NCERT.
- [2] Bybee, R. (1980). Creativity-Nurture and stimulation. Science and ChUdren.17 (4), 7-9.
- [3] Cropley, A.J. (1980). Research on measurement of creativity. In M.K. Raina (Ed.), Creativity Research : International perspective (pp. 45-54). New Delhi : NCERT.
- [4] Deshmukh, M.N. (1987). An analytical study of some scholastic conditions and practices as contributory factors to creative ability. In M.B. Buch (Ed.), Third survey of research in education, 1978-1983. (p. 343). New Delhi : NCERT.
- [5] Dey, (Smt.) P. (1086). Measurement of creative ability : An investigation. Indian Eklucational Review.21 (1). 68-76. Experiential learning in an agricultural and life sciences course” , Texas A&M University,
- [6] Guilford. J.P. (1070). Creativity : Retrospect and prospect. Journal of Creative Behavior.4 (3), 149-155.
- [7] Gupta. S.M. (1087). Standardization of a test of creativity in physical sciences. Thesis submitted to Kurukshetra University, 1980. In M.B. Such (Ed.), Third Survey oj Research in Education (p. 487). New Delhi : NCERT.
- [8] Isaksen, S.G. and Treffinger, D.J. (1085). Creative Problem Solving, The basic course. Buffalo, NY : Bearly Ltd.
- [9] Kant. Ravi, (2012), “a study of creativity of secondary school children as a correlate of some television viewing habits”, Maulana Azad National Urdu University, Bihar

