



ORIGINAL RESEARCH PAPER

Education

IMPACT OF CREATIVE THINKING ABILITY ON ACADEMIC ACHIEVEMENT OF D.EI.ED STUDENTS

KEY WORDS: Creative Thinking Ability, Academic Achievement and D.EI.Ed Students

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ABSTRACT

This present study examined the Creative thinking ability and its impact on academic achievement of D.EI.Ed students. The investigator used Stratified Random Sampling technique for selecting the sample. The data were collected from 739 D.EI.Ed students of Tirunelveli District, Kanyakumari District and Tuticorin District. Data for the study were collected using the self made tool for Creative thinking ability and also the researcher has developed academic achievement tool in 2015 with the help of the Source book. The statistical techniques used were Arithmetic Mean, Standard Deviation and 't' test for the study. Findings show that there was significant difference in the Creative thinking ability of D.EI.Ed students due to the type of Institute and Marital status. The results of the present study reported the importance of creativity in predicting the student's academic success and achievement-orientation.

Introduction:-

Kothari commission (1964-66) stated that yesterday's education system cannot satisfy the present need and even lays so the tomorrow's need. To meet the present need, education of youth should be changed from the world of school to the world of work and life.

Creative thinking ability to make something new and it generates new ideas, new concepts, new designs and new opportunities while innovation helps to add values to new products. Creativity means different images comes in our mind. According to Akinboye (2003), without creativity, a person is not able to access the fullness of information and resources available but is locked up in old habits, structures, patterns, concepts and perceptions. This is why creativity, generative perception, constructive and design thinking plus innovation should form the basis of any education for sustainable development. There are optimistic people who express usual thoughts, who are motivating and inspiring others. People are imaginative, inventive risk takers and competitors. But their quality is different in extent from one person to another. The creativity depends upon on their originality and creativity. Winners do not do different things, but they do things differently (Haldar, 2009). Creativity is the ability of a person to solve a problem in creative manner. With the use of creative knowledge can solve specific problems. A person needs opportunity to be creative and apply creativity. Creativity energies are group of ideas, which we need regularly. For creativity people must have desire to create something new, and people need to have the talent to carry out and emerge this wish and drive.

Creativity is defined as the creative human attributes and qualities concerned with imagination, inventiveness, improvisation, insight, institution and curiosity – the natural artful, genius and talent of people (Lloyd 2007). According to Kesim, The Dictionary definition of the word "Creativity" is the ability to create or the ability to produce something new through imaginative skill. (Kesim 2009,p.81). The National Advisory committee on Creative and Cultural education (NACCCE) present a definition of Creativity as imaginative activity fashioned so as to produced outcomes that are both original and of value. This definition expresses five characteristics of creativity, Using imagination, a fashion process, Pursuing purpose, Being original, Judging value (Kesim,2009).

Academic Achievement:-

Education is the general form of learning in which the knowledge, skills, and behaviours of a group of people are shared from one generation to other through teaching, training or research. Academic achievement is the important part of the education. The term academic achievement refers to how the student deals with their studies and how they cope with or accomplish different tasks given to them by their teachers. Academic achievement is the outcome of education and it explores at which extent a student, teacher or institutions has achieved their educational goals.

Academic achievement reflects the student ability and the students who are academically successful have higher self-esteem, and they have lower level of depression and anxiety and academically successful students have higher self-confidence as compare to others. Academic success is important because it will help to students to tackle the technology demanding occupations of the future.

There have been numerous interesting studies made on creativity including the impact that individual artistic techniques have on the development of creativity. Different studies that searched for a correlation between intelligence and creativity indicated that all combinations were possible between intelligence and creativity. A research on academic achievement revealed that various variables had been identified as correlates of academic achievement

Need and significance of the study:-

The result of present study will provide a base which may help in strengthening or improving the achievement of the adolescents. The findings will also act as a linkage of creative thinking ability which in turn imparts a significant role in the development and academic achievements of adolescents. In the words of Smith (2009) in Teachers for the Real World keeping in mind the present day requirements remarks, If a student's is to be prepared for the evolving world, than an essential attribute of effective teacher is awareness of the realities of the world. Therefore, the primary school teachers have a great role in molding future generation. In order to be better teachers, they need to be creative and effective in their performance. The foundational seed to reach to this state is being sown in the initial stages of schooling. The potential seed is sown by the primary school teachers. Therefore, the investigator inclines to study the variables creative thinking ability and academic achievement of D.EI.Ed students.

Title of the study:-

Statement of the problem is entitled as Impact of creative thinking ability on the Academic Achievement of D.EI.Ed Students.

Objectives of the study:-

The following objectives have been formulated for the purpose of the study:

1. To find out the level of creative thinking ability of D.EI.Ed students.
2. To find out the level of Academic achievement of D.EI.Ed students.
3. To find out the difference, if any, in the creative thinking ability of D.EI.Ed students in terms of demographic variables such as, nature of institution and marital status.
4. To find out the difference, if any, in the Academic Achievement of D.EI.Ed students in terms of demographic variables such as nature of institution and marital status.
5. To find out significant relationship between creative thinking ability and the academic achievement among D.EI.Ed

students.

Methodology:-

The investigator adopted survey method. This method of investigation which attempts to describe and interpret what exists at present in the form of conditions practices, process, trends, effects, beliefs etc. The survey method gathers data from relatively large number of case at a particular time.

Sample:-

The investigator had used stratified random sampling technique for selecting the sample. The investigator randomly selected the Teacher trainees from three districts are Tirunelveli, Tuticorin and kanyakumari. The selection was done on the basic of the type of institution and location of the institution. From these institutions, 739 teacher trainees were randomly selected on the basis of the criteria.

Research Tools:-

Creative thinking ability tool was designed by Rasel. Academic Achievement tool was developed by the researcher in the year 2015, with the help of source book.

Procedures:-

The above inventory was administered to subjects. Each item was scored with the help of scoring key. The data thus collected are tabulated to arrive at meaningful inference.

Statistical Techniques:-

The tabulation and analysis of data done by using appropriate statistical techniques such as Mean, Standard deviation and 't' test.

Analysis and interpretation of data:-

To find out the meaningful interpretation of the raw scores the data were analyzed, the results of the study are presented in the following tables.

TABLE – 1 LEVEL OF CREATIVE THINKING ABILITY AND ACADEMIC ACHIEVEMENT OF D.EI.ED STUDENTS

Category	Total	Low		Moderate		High	
		No.	%	No	%	No	%
Creative thinking ability	739	136	18.4	565	76.5	38	5.1
Academic Achievement		146	19.8	485	65.6	108	14.6

The table indicates that 18.4 of the D.El.Ed students have low level, 76.5 percent have moderate level and 5.1 percent have high level of Creative thinking ability. It is inferred from the table reveals that 19.8 percent of the D.El.Ed students have low level, 65.6 percent have moderate level and 14.6 percent have high level of academic achievement. Further it is concluded that a good percentage of D.El.Ed students have average level of Creative thinking ability and academic achievement.

TABLE – 2 SIGNIFICANT DIFFERENCES AMONG THE CREATIVE THINKING ABILITY OF D.EI.ED STUDENTS IN TERMS OF DEMOGRAPHIC VARIABLES

Creative Thinking Ability		N	Mean	SD	DF	Calculated 't' value	π -value
Nature of Institution	Girls	329	40.32	2.849	737	4.666	0.000**
	Co-Education	410	39.34	2.858			
Marital Status	Married	86	40.69	2.198	737	3.909	0.000**
	Unmarried	653	39.66	2.954			

The table 2 reveals that the calculated *p* value for the Creative thinking ability is more than 0.01 and so are significant at 1% level. It means that there is significant difference in the Creative thinking ability of D.El.Ed students due to the Nature of Institution. Hence the formulated null hypothesis, "there is no significant difference

in the Creative thinking ability of D.El.Ed students with regards to the nature of institute" is rejected.

The Above table it was known that the calculated *p* value for the Creative thinking ability is less than 0.01 and so are significant at 1% level. Hence the null hypothesis, "there is significant difference in the Creative thinking ability of the D.El.Ed students in terms of their marital status" is rejected. It means that there is significant difference in the Creative thinking ability of the D.El.Ed students due to the marital status.

TABLE – 3 SIGNIFICANT DIFFERENCES AMONG THE ACADEMIC ACHIEVEMENT OF D.EI.ED STUDENTS IN TERMS OF DEMOGRAPHIC VARIABLES

Academic Achievement		N	Mean	SD	DF	Calculated 't' value	π -value
Nature of Institution	Girls	329	36.64	9.085	737	5.220	0.000**
	Co-Education	410	33.25	8.543			
Marital Status	Married	86	40.69	2.198	737	3.909	0.000**
	Unmarried	653	39.66	2.954			

The table 3 reveals that, the calculated *p* value for the academic achievement is less than 0.01 and so it is significant at 1% level. It means that there is significant difference in the academic achievement of D.El.Ed students due to the nature of institution. Hence the formulated null hypothesis, "there is no significant difference in the academic achievement of D.El.Ed students due to the nature of institute" is rejected with record to the academic achievement. The calculated *p* value for the academic achievement is less than 0.01 and so it is significant at 1% level. It means that there is significant difference in the academic achievement between married and unmarried D.El.Ed students. Hence the formulated null hypothesis, "there is no significant difference in the academic achievement of D.El.Ed students in terms of their marital status" is rejected

TABLE – 4 TO FIND THE RELATIONSHIP BETWEEN CREATIVE THINKING ABILITY AND THE ACADEMIC ACHIEVEMENT OF D.EI.ED STUDENTS

Variables	Total	Pearson correlation (r value)	P value	Remarks
Creative thinking ability	739	0.298	0.000	S**
Academic Achievement				

The table 4 reveals that the calculated *p* value for the Creative thinking ability is less than 0.01 and is significant at 1% level. This having positive correlation and significant at 1% level. Hence the formulated null hypothesis, "there is no significant relationship between the Creative thinking ability and the Academic achievement of D.El.Ed students" is rejected.

Findings and Interpretations:-

After making an analysis and interpretation of data, the following findings have been drawn from the present study. In this chapter, major findings of the study are discussed in relation to the objectives of the study.

Findings based on the objectives and followed by data analysis are given as follows: According to the table -1 show that the high level creative thinking ability groups there are 38, the moderate level creative thinking ability groups there are 565 and in the low level creative thinking ability groups there are 136 D.El.Ed students. This may be due to the maturity level of the D.El.Ed students. As they are matured and educated, there is likelihood that their creativity level may be developed.

In the prospective D.El.Ed students the level of academic achievement is moderate. Majority of the elementary teacher trainees are moderately accomplished in academic achievement (65.6) is mainly because in our society, academic achievement is considered as a key criterion to judge one's total potentialities and capacities. Also a sense of achievement is a source of joy and good feeling resulting in a large percentage of elementary teacher trainees with an average level of academic achievement.

There is significant difference in creative thinking ability of D.El.Ed students due to the nature of institution. The girl's institutes D.El.Ed students are better than their co-education institute counter parts in creative thinking ability. The mean scores of girls institute (mean = 40.32) and co-education institute (mean = 39.34) D.El.Ed students in their creative thinking ability. Girls institute D.El.Ed students are better than the co-education institute D.El.Ed students in their creative thinking ability. It may be due to the fact that they have practical knowledge and a good grounding on the civilization heritage and understand the value system of society. They have the good imprints about students' attitude and encouraged to think creatively while being developed emotionally as well as academically.

There is significant difference in Creative thinking ability of married and unmarried D.El.Ed students. While comparing the mean scores of married (mean = 40.69) and unmarried (mean = 39.66) D.El.Ed students in their creative thinking ability. Married are better than the unmarried D.El.Ed students in their creative thinking ability. This may be due to the fact that marital status has impact on creative thinking ability. It shows that family and parental responsibility affect the creative thinking ability.

There is significant difference in the academic achievement between Girls and Co-education institute of D.El.Ed students. Further it is observed that the girls institution D.El.Ed students are better than the co-education institute D.El.Ed students in their academic achievement. While comparing the mean scores, girls institute (mean = 36.64) achieve more than co-education institute D.El.Ed students (mean = 33.25). This may be due to the fact that the nature of institute of elementary teacher trainees has impact whatsoever on academic achievement.

There is significant difference in the academic achievement between married and unmarried D.El.Ed students. Further, it is observed that the married D.El.Ed. students are better than the unmarried D.El.Ed students in their academic achievement. While comparing the mean scores, married students (mean = 38.31) achieve more than unmarried students (mean = 34.29). This may be due to the fact that the marital status of elementary teacher trainees has impact on academic achievement. It shows the family and parental responsibility affect the academic achievement.

There is significant relationship between the Creative thinking ability and the academic achievement of D.El.Ed students. The correlation co-efficient between Fluency Creative thinking ability and academic achievement is [$r > 0.097$, $r = 0.269$, $P < 0.008$, $P = 0.000$], Flexibility Creative thinking ability and academic achievement is [$r > 0.078$, $r = 0.190$, $P < 0.034$, $P = 0.000$], Originality Creative thinking ability and academic achievement is [$r > 0.086$, $r = 0.165$, $P < 0.020$, $P = 0.000$], Elaboration creative thinking ability and academic achievement is [$r > 0.135$, $r = 0.241$, $P < 0.000$, $P = 0.000$] and Creative thinking ability as a whole and academic achievement is [$r > 0.153$, $r = 0.298$, $P < 0.000$, $P = 0.000$]. All these are having positive correlation and are significant at 1% level creative thinking ability and academic achievement. The possible reason for this could be that Creative thinking ability people have belief in their abilities and so have high academic achievement. Teachers have higher to be trained to know and adopt methods which foster creativity. Equipped with this knowledge, they will be in a better position to boost their students' academic level.

Conclusion:-

The positive relationship between creative thinking ability and academic achievement provides confidence for educators that achievement tests can assess knowledge and skills, but also can be possible predictors for creative performance. This study confirms the argument that academic achievement can be improved with the enhancement of creative thinking abilities. Although acquiring knowledge and skills does not guarantee the development of creative abilities, a positive correlation confirms that creative thinking and knowledge can enhance each other.

To summarize, the present research presents a predictive

instrument of academic achievement that can be utilized by parents, teachers, policy makers and guidance personnel for substantially enhancing the academic performance of students, especially for those studying in teacher training institutes. Hence, the investigator has the opinion that is the right time to take necessary steps and adequate care for improving their emotional intelligence and creative thinking ability among the chosen population to develop their academic achievement in the future.

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