

A STUDY OF CONCEPT ATTAINMENT AMONG B.ED. TRAINEES

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ABSTRACT:

The present study was explored to find out the level of concept attainment among B.Ed. trainees. A stratified sample of 93 B.Ed. trainees was selected from Bareilly District. Teacher Education Concept Attainment Test (TECAT) by Dr. A.M. Ajatha Swamy and Smt. Shagufta Momin was used by the investigators for the present investigation. Data was analyzed by Mean, SD and t-test. Findings indicated that majority of the B.Ed. trainees have moderate level of concept attainment. Results also revealed that gender, type of college and stream of study

didn't influence in concept attainment of B.Ed. trainees significantly.

KEYWORDS:

Concept Attainment, B.Ed. Trainees.

INTRODUCTION

Teachers are perhaps one of the most important sections of society that helps build a better society for the future. They play a vital role in shaping the citizens of tomorrow. Today teaching has become a complex profession with the teacher playing a multitude of roles a knowledge disseminator, a friend, a guide, an arbitrator etc. Teachers of the 21st century are expected to not only convey the relevant know-how to their students but also help them to build theories and constructs. In the long term, education must aim for active use of knowledge and skill (Perkins, 1992). This is possible only when there is conceptual understanding of the various concepts being taught in the class. In order to facilitate this level of conceptual understanding among the students, it is essential that the teachers themselves have clear understanding of various concepts.

The entire process of promoting conceptual understanding starts at the teacher training stage wherein we have students aspiring to be teachers. If the trainee teachers are able to grasp various concepts then we can envisage a future where the school students in their classrooms exhibit conceptual understanding. Concept formation is aimed at teaching students how to categorize data in any category they would like while concept attainment is a strategy that aims at teaching students to identify positive and negative examples of a concept.

Results obtained in a study conducted by Khalijah, Subahan and Khyasudeen (1991) on students of

higher learning institutions, including teacher trainees reported more than 50 percent of the respondents involved as facing problems related to the conceptual understanding. Prevalent teacher education programmes in India have given greater emphasis to subject content and methodology of teaching rather than preparing teacher trainees to possess strong pedagogic skills of analyzing, organizing, and evaluating the content of instruction from the learner's perspective. Students have been found to encounter difficulty when asked to apply a concept or line of reasoning to a situation different from which it was learned (Boudreaux, 2004). Saleh (2011) in her study on the level of Malaysian B.Sc. (Ed) students' conceptual understanding of Newtonian physics confirmed that generally, undergraduates' students are still having problems to conceptually understand physics concepts taught to them. This sad practice in teacher education field continues to teacher trainees having high academic scores but deficient or lacking in actual expertise in content or related pedagogical skills. These findings have been confirmed in a study by Gafoor and Ragisha (2012).

Teacher preparation itself should ensure that there is attainment of concepts by the teacher trainees. Once the teacher trainees have reached the concept formation stage, they can easily identify the positive and negative examples of a concept and hence attain the concepts. Today teachers need to possess pedagogical content knowledge in order to be successful in their classrooms. It is a blend of content and pedagogy that includes effective ways to conceptualize and represent commonly taught topics in a given subject and an understanding of the reasons for certain topics are easy or difficult for most students. This can happen only when the teachers themselves have clear and strong conceptual foundations of their subject matter. The present study is aimed at investigating the level of concept attainment among the B.Ed. trainees.

OBJECTIVES OF THE STUDY

- * To study the level of concept attainment among B.Ed. trainees.
- * To find out the concept attainment of B.Ed. trainees with respect to gender.
- * To find out the concept attainment among B.Ed. trainees with respect to type of college.
- * To find out the concept attainment among B.Ed. trainees with respect to stream of study.

HYPOTHESES OF THE STUDY

1. There is no significant difference in concept attainment of B.Ed. trainees in terms of gender.
2. There is no significant difference in concept attainment of B.Ed. trainees in terms of type of college.
3. There is no significant difference in concept attainment of B.Ed. trainees in terms of stream of study.

Research Method: The descriptive survey method has been applied for this study.

Population: Population consisted of male and female B.Ed. trainees enrolled in B.Ed. colleges of Bareilly District, affiliated to M.J.P. Rohilkhand University, Bareilly.

Sample: The researchers employed stratified random sampling technique to select a sample of 93 B.Ed. trainees (46 male and 47 female) from govt. aided (47) and self-finance (46). While 42 B.Ed. trainees were from the science stream and 51 were from the arts stream.

TOOL

Teacher Education Concept Attainment Test (TECAT) by Dr. A.M. Ajatha Swamy and Smt. Shagufta Momin. It consists of 40 items covering philosophical and sociological foundation of education, educational psychology, educational technology, teaching strategies and evaluation, and educational management areas. Each item has 4 alternatives with only one correct response. '1' is awarded for each correct response and '0' for each incorrect response. The maximum possible score on the TECAT is 40 while the minimum is

'0'.

ANALYSIS AND INTERPRETATION OF DATA

Table 1: Level of Concept Attainment among B.Ed. Trainees

B.Ed. Trainees	N	Mean	SD
	93	19.53	4.78

From Table-1, the level of concept attainment among B.Ed. trainees has a mean of 19.53 with SD of 4.78. Since the neutral point for the TECAT is 20, the level of concept attainment among B.Ed. trainees may be described as average.

Table 2: Concept Attainment among B.Ed. Trainees in terms of Gender

Gender	N	Mean	SD	t-value	Level of Significance
Male	46	18.67	4.01	1.36	Not Significant
Female	47	19.96	5.07		

From Table-2, the t-value 1.36 is not significant at 0.05 level. Thus the difference in concept attainment of male and female B.Ed. trainees is not statistically significant. Hence the hypothesis-1 is accepted.

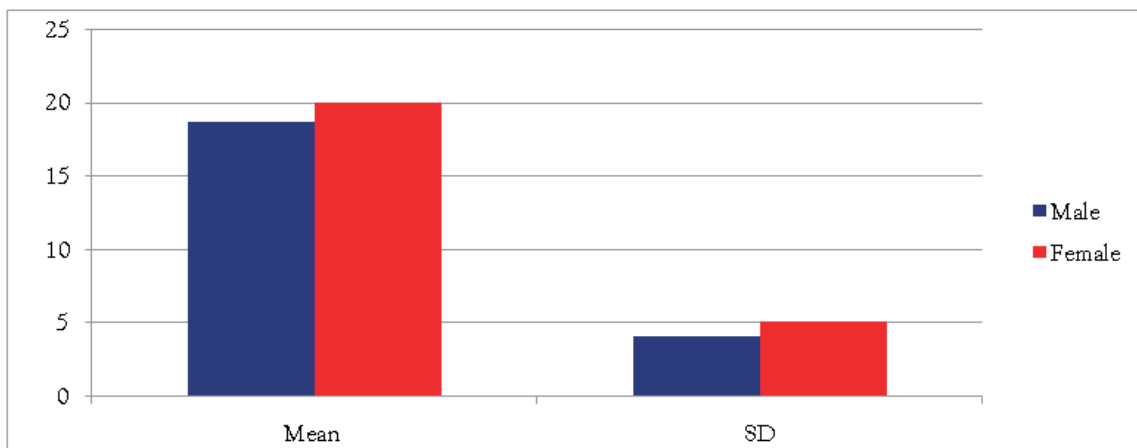


Figure 1: Concept Attainment of Male and Female B.Ed. Trainees

Table 3: Concept Attainment among B.Ed. Trainees in terms of Type of College

Type of College	N	Mean	SD	t-value	Level of Significance
Govt. Aided	47	20.19	4.46	1.86	Not Significant
Self-Finance	46	18.44	4.61		

From Table-3, the t-value 1.86 is not significant at 0.05 level. Thus the difference in concept attainment of govt. aided and self-finance B.Ed. trainees are not statistically significant. Hence the hypothesis-2 is accepted.

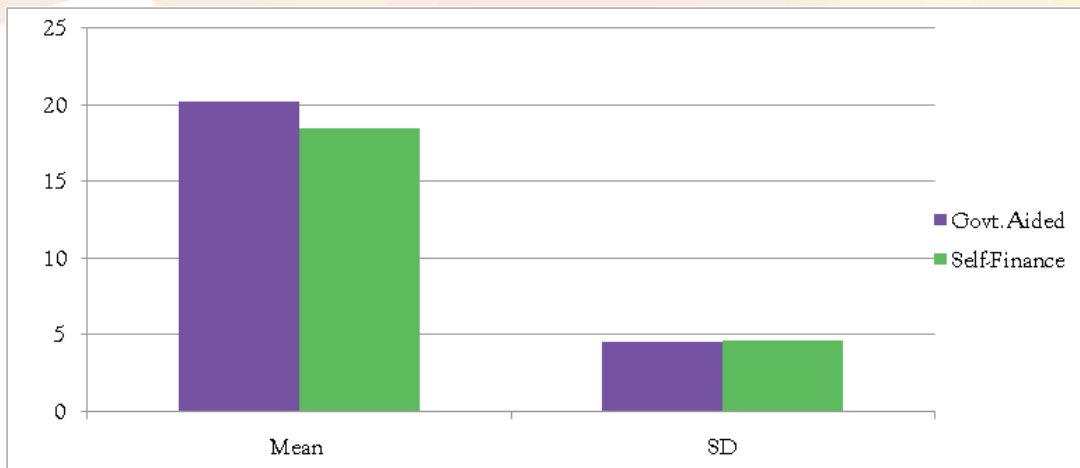


Figure 2: Concept Attainment of Govt. Aided and Self-Finance B.Ed. Trainees

Table 4: Concept Attainment among B.Ed. Trainees in terms of Stream of Study

Stream of Study	N	Mean	SD	t-value	Level of Significance
Science	42	19.52	4.22	0.18	Not Significant
Arts	51	19.35	4.82		

From Table-4, the t-value 0.18 is not significant at 0.05 level. Thus the difference in concept attainment of science and arts stream B.Ed. trainees is not statistically significant. Hence the hypothesis-3 is accepted.

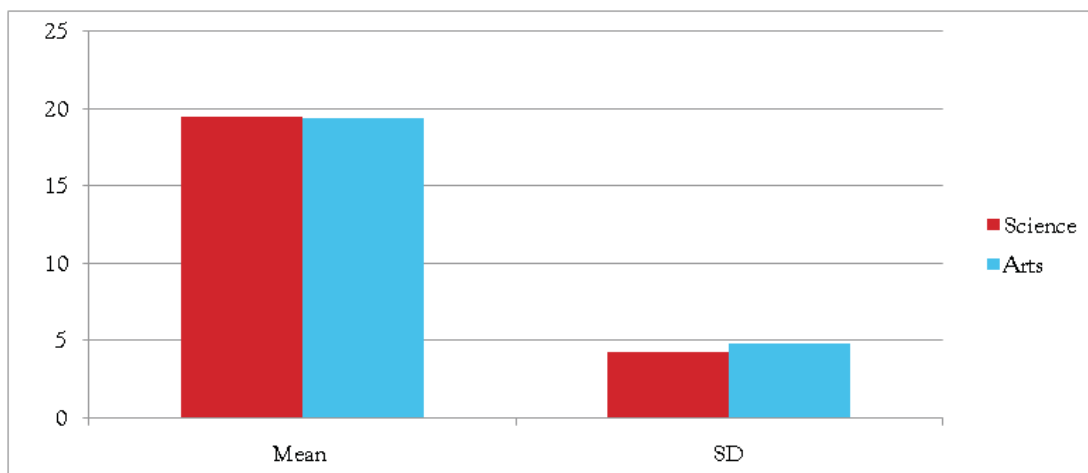


Figure 3: Concept Attainment of Science and Arts Stream B.Ed. Trainees

MAJOR FINDINGS

1. The majority of the B.Ed. trainees have moderate level of concept attainment.
2. There is no significant difference in concept attainment of B.Ed. trainees with regard to gender, type of college, and stream of study.

EDUCATIONAL IMPLICATIONS

Result shows that B.Ed. trainees have only moderate level of concept attainment. This is a serious

issue since these trainees are the teachers of tomorrow, and if they themselves have not clearly understood basic concepts, how can they be expected to pass o such conceptual knowledge to their students. There is an urgent to revisit this issue in greater detail and try to evolve measures to promote better conceptual understanding among B.Ed. trainees. This could involve developing more interesting study material, better designing of curriculum or even training the teacher educators for providing more opportunities to the teacher trainees to grasp various concepts.

REFERENCES

1. Boudreax, A. (2004). Tracing difficulties with relativistically invariant mass to difficulties with vector addition of momentum in Newtonian context. In Marx, Heron, Franklin, eds. 2004 Physics Education Research Conference, Sacramento, California. 4-5 August 2004. American Institute of Physics Conference Proceedings.
2. Gafoor, A.K. & Ragisha, K.K. (2012). Status of pre- service elementary teacher education in Kerala: Educators view. In S. Sabu, (Ed.). Teacher Education in the New Millennium. New Delhi: APH Publishing Corporation.
3. Khalijah Mohd. Salleh, T. Subahan Mohd. Meerah & Khyasudeeen Abd. Majid. (1991). Force and motion (Results in Malaysia), ASPEN APPTA Workshop II on research for students, conceptual structures and changes in learning Physics. Asian Physics, Education Network, University of Philippines, Manila.
4. Perkins, D.N. (1992). Smart schools: From training memories to educating minds: New York: The Free Press.
5. Saleh, S. (2011). The Level of B.Sc. (Ed) Students' Conceptual Understanding of Newtonian Physics. International Journal of Academic Research in Business and Social Sciences, 1(3), 249-256.