



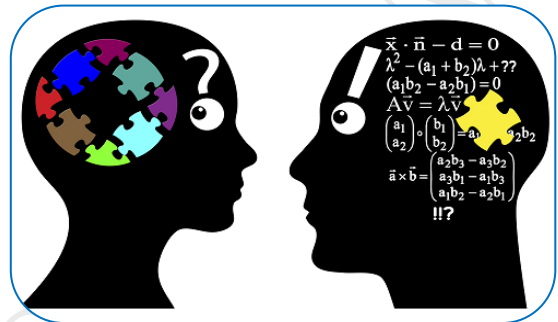
ATTITUDE OF B.ED. STUDENTS OF MATHEMATICS ABOUT LEARNING DESIGN

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ABSTRACT :

A learning design is creating an environment for leaning by structuring content and creating activities that engage students and facilitate meaningful learning. Also critical to the concept of learning design is acknowledging that it supports the process of learning rather than the process of teaching. The purpose of this study was to examine the attitude of B.Ed. students of Mathematics about Learning Design. For this purpose the investigator has constructed a Questionnaire on "Learning Design on Triangle" containing three dimensions for B.Ed. III semester students to collect the data. The researcher selected one private B.Ed. College (Education College) in Murshidabad district from urban areas. The questioners were supplied to 10 students (5 boys & 5 girls). In this present study, the investigator has followed the Normative Survey design of ex-post facto type. There is no significant difference of the mean scores of B.Ed. students attitude after prepare Learning Design of Triangle towards understanding, entry level behaviour and learning strategies development due to gender variation.



KEYWORDS : Learning Design, Normative Survey, Ex-post facto, Urban Areas.

INTRODUCTION:

In the late 1990s and early 2000s the concept of learning design arrived in the literature. The concept teaching and the concept of learning design emerged at the same time.

"The description of teaching learning process that takes place in a unit of learning (eg. A course, a lesson or any other designed learning event)."

A learning design is creating an environment for leaning by structuring content and creating activities that engage students and facilitate meaningful learning. Also critical to the concept of learning design is acknowledging that it supports the process of learning rather than the process of teaching. Skilled learning designers are not the subject matter experts, but collaborate with the experts o create environment where students can participate in rich, meaningful learning experiences.

Learning Design is also explained as "a systematic process that is employed to develop education and training programs in a consistent and reliable fashion" (**Reiser& Dempsey, 2007**).

Learning Design is important because it describes and implements learning activities based on different pedagogies including group work and collaborative learning.

It also helps to coordinate multiple learners and multiple roles within a multi learner model. On the other hand it also supports single learner activities.

Learning Design further coordinates the use of learning contents with collaboration services. It supports multiple delivery models including mixed mode learning or blended learning. Transfer of learning designs between systems can enable by it. The learning design and materials can be reused. The most importance part of learning design is that it is directly link learning goals to activities.

In B.Ed. training course learning design may help to link educational materials with real world situation. Thus this concept are brought to life and made them immediately relevant. Case studies and simple anecdotes from instructor or subject matter experts may go a long way towards promoting improved learner understanding and recall.

The Knowledge dimension	The cognitive process dimension	Verbs
Factual Knowledge	A – Remembering	Tell, List, Describe, Write, State, Name, Identify, Recall, Define, Recognize, Select.
Conceptual Knowledge	B – Remembering	Restate, Find out more information
	B – Understanding	Explain, Discuss, Distinguish, Compare, Relate, Generalize, Summarize, Covert, Classify.
	B – Applying	Solve, Show, Use, Illustrate, Complete, Choose, Interpret, Put together, Change, Apply, Produce, Calculate, Manipulate, Put into practice
	B – Analysis	Analyze, Separate, Distinguish, Compare, Categorize, Sub-divide.
Procedural Knowledge	C – Remembering	List, Describe, Mention, Select, Choose
	C – Understanding	Relate, Find cause and effect, Select appropriate procedure.
	C – Applying	Examine suitability of process, apply new techniques, modify techniques
	C – Analysis	Contrast, Investigate, Separate, Take apart, Sub-divide
	C – Evaluation	Judge, Justify, Verify, Decide.
	C – Create	Predict, Hypothesis.
Meta-cognitive	D – Evaluation	Criticise, Value, Weigh.

Fig-1: Conceptual Framework of Learning Design (Revised Bloom’s Taxonomy model)

OBJECTIVE:

- i) To examine the B.Ed. students attitude after prepare Learning Design of Triangle due to gender variation.
- ii) To find out the B.Ed. students attitude after prepare Learning Design of Triangle towards understanding, entry level behaviour and learning strategies development due to gender variation.

Hypotheses:

H₀₁:There is no significant difference of the mean scores of B.Ed. students attitude after prepare Learning Design of Triangle due to gender variation.

H₀₂:There is no significant difference of the mean scores of B.Ed. students attitude after prepare Learning Design of Triangle towards understanding development due to gender variation.

H₀₃:There is no significant difference of the mean scores of B.Ed. students attitude after prepare Learning Design of Triangle towards entry level behaviour development due to gender variation.

H₀₄:There is no significant difference of the mean scores of B.Ed. students attitude after prepare Learning Design of Triangle towards learning strategies development due to gender variation.

Delimitation of the Problem:

- **Sample:** The sample was selected from one Private B.Ed. College (Education College).
- **Number of Candidate:** 10 B.Ed. students of Mathematics (5 boys & 5 girls).
- **Learning Design:** Here the researcher follows the Revised Bloom’s Taxonomy model. During the 3 month teaching internships the B.Ed. students are prepared the learning design of Triangle for class VIII of different sections in different schools.
- **Area:** Domkol, Murshidabad.
- **Area of Content:** 3 point likert’s scale of 20 statements containing Learning Goals, Entry Level Behaviour, and Learning Strategies dimensions.
- **Class:** B.Ed. III semester students.

Methodology:

It is a Descriptive method i.e normative survey method of investigation. It is ex-post facto type as the current status of phenomena what exists at present has been considered.

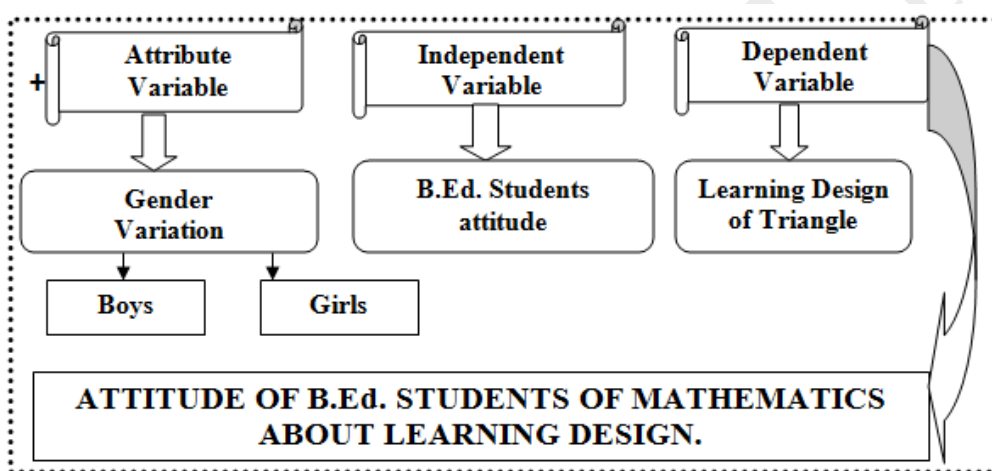


Fig-1: Schematic Design

The present study is conducted upon the B.Ed. students in Mathematics of West Bengal from the district Murshidabad, taking one institution under the WBUTTEPA. Simple Random Method collected for the study. The researcher selected one B.Ed. College [Education College, Domkol] in Murshidabad district. The questioners were supplied to 10 B.Ed. Students in Mathematics (5 boys & 5 girls).

Tool:

For this purpose the investigator has constructed a self developed *Questionnaire on Learning Design of Triangle* containing Learning Goals, Entry Level Behaviour, Learning Strategies dimensions. There are three opinion indicators i.e. agree, neutral and disagree.

Blue Print of the Question Paper

Sl. No.	Dimension Name	Item No.
1	Learning Goals	1-10
2	Entry Level Behaviour	11-15
3	Learning Strategies	16-20

Validity of the test:

Content Validity– This Questionnaire was sent to 3 resource persons and requested them to make some suggestion about the Test Item. After consulting the opinion and suggestion of the resource person, the researcher compares those opinions and modified the test item according to their suggestion. The researcher finally selected 20 items out of 35 items according to the resource person opinion; the test was then making to final form.

Reliability of the test:

Reliability was calculate in Split-half method in which the attitude scale was broken into two parts and the correlation of these halves was computed upon the scores obtained from the respondents on single administration of the tool. From the split-half test reliability, reliability of the whole scale was further estimated by the Spearman Brown formula. The reliability of the attitude scale was found to be 0.632 which is highly significant at 0.05 level.

Scoring Key:

In scoring Procedure, in case of positive items 3,2,1 for A, N, D and negative items 1,2,3 for A,N,D.

Nature of Questions	Item No.	Total No.
Positive	1,2,3,5,9,11,12,13,14,15,17,18,19,20.	14
Negative	4,6,7,8,10,16.	6

Data Analysis:

Table-1
Independent Samples Test

	Levene's Test for Equality of Variances	t-test for Equality of Means								
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Learning Design Scores	Equal variances assumed	.020	.890	-.632	8	.545	-.600	.949	-2.788	1.588

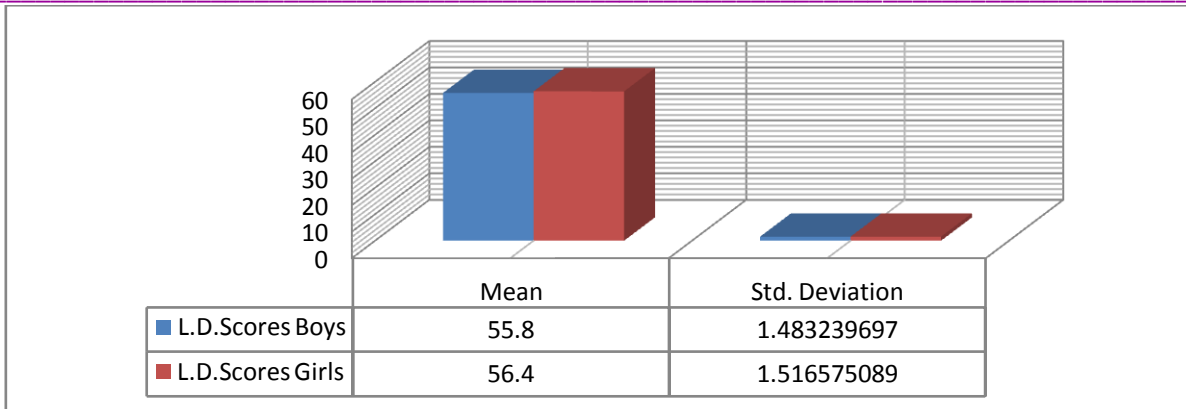


Fig-2: Bar-diagram showing the mean scores of B.Ed. students attitude after prepare Learning Design of Triangle due to gender variation.

Table-2
Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Understanding	Equal variances assumed	.000	1.000	.756	8	.471	.400	.529	-.820	1.620

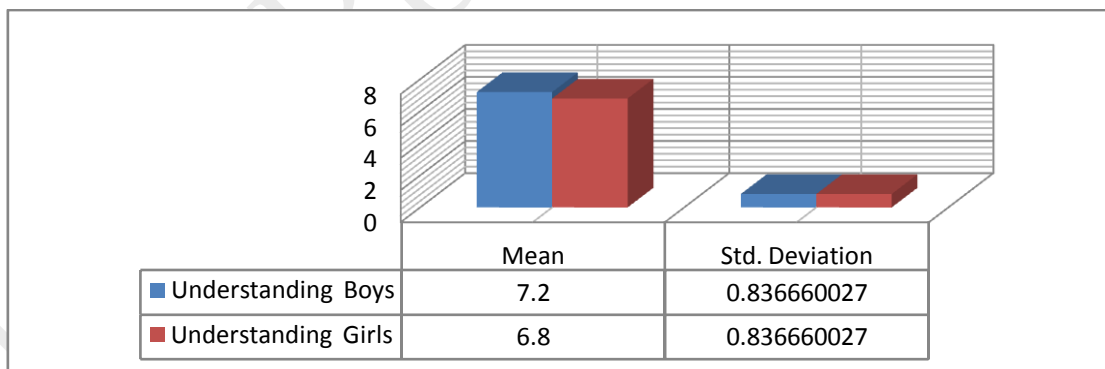


Fig-3: Bar-diagram showing the mean scores of B.Ed. students attitude after prepare Learning Design of Triangle towards understanding development due to gender variation.

Table-3
Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means							
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference		
										Lower	Upper
Entry Level Behaviour	Equal variances assumed	.000	1.000	.000	8	1.000	.000	.529	-1.220	1.220	

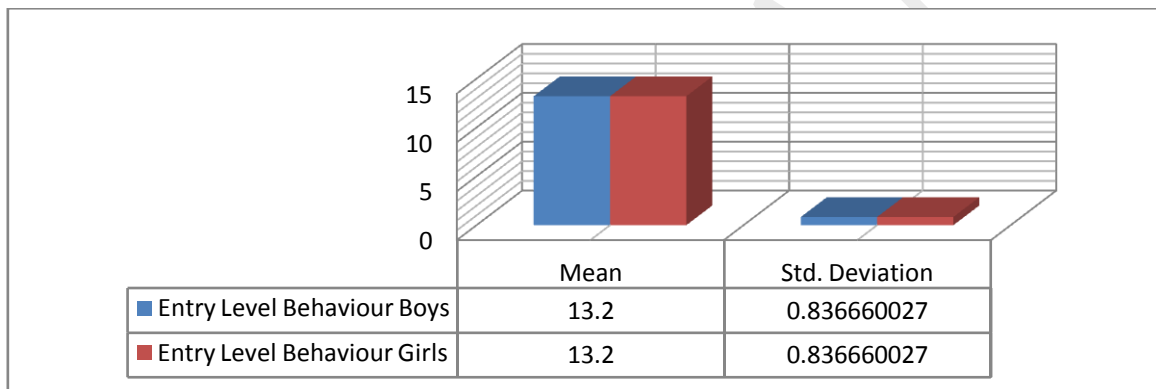


Fig-4:Bar-diagram showing the mean scores of B.Ed. students attitude after prepare Learning Design of Triangle towards entry level behaviour development due to gender variation.

Table-4
Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means							
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference		
										Lower	Upper
Learning Strategies	Equal variances assumed	.000	1.000	.577	8	.580	.200	.346	-.599	.999	

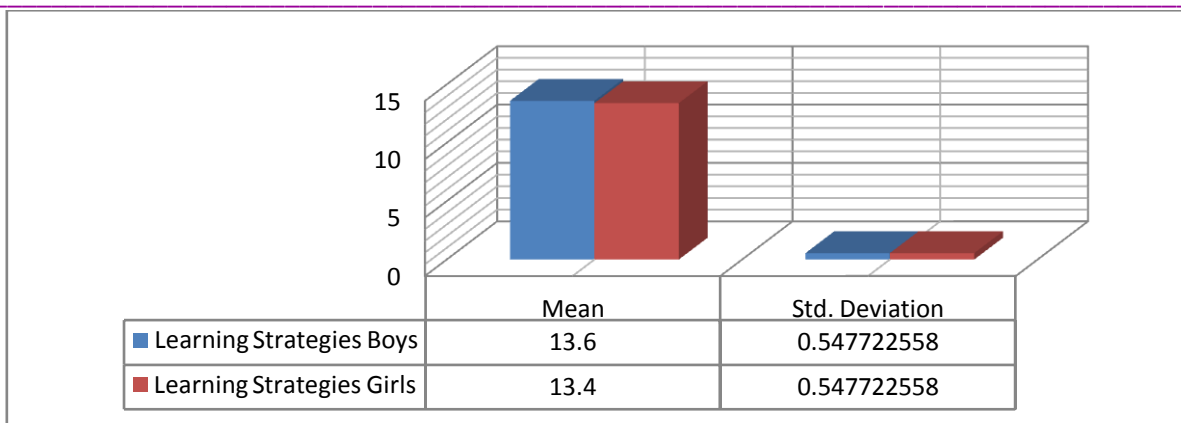


Fig-5:Bar-diagram showing the mean scores of B.Ed. students attitude after prepare Learning Design of Triangle towards learning strategies development due to gender variation.

DISCUSSION:

For Null Hypothesis 1 was tested at statistical significance level of 0.05 and the results showed that at $df = 8$, $p = 0.545$ which is greater than 0.05. Therefore Null Hypothesis 1 is accepted.

For Null Hypothesis 2 was tested at statistical significance level of 0.05 and the results showed that at $df = 8$, $p = 0.471$ which is greater than 0.05. Therefore Hypothesis 2 is accepted.

For Null Hypothesis 3 was tested at statistical significance level of 0.05 and the results showed that at $df = 8$, $p = 1.000$ which is greater than 0.05. Therefore Hypothesis 3 is accepted.

For Null Hypothesis 4 was tested at statistical significance level of 0.05 and the results showed that at $df = 149$, $p = 0.580$ which is greater than 0.05. Therefore Hypothesis 4 is accepted.

FINDING:

- There is no significant difference of the mean scores of B.Ed. students attitude after prepare Learning Design of Triangle due to gender variation.
- There is no significant difference of the mean scores of B.Ed. students attitude after prepare Learning Design of Triangle towards understanding development due to gender variation.
- There is no significant difference of the mean scores of B.Ed. students attitude after prepare Learning Design of Triangle towards entry level behaviour development due to gender variation.
- There is no significant difference of the mean scores of B.Ed. students attitude after prepare Learning Design of Triangle towards learning strategies development due to gender variation.

CONCLUSION:

From the above discussion the researcher finds no significant difference of the mean scores of B.Ed. students attitude after prepare Learning Design of Triangle due to gender variation and no significant difference of the mean scores of B.Ed. students attitude after prepare Learning Design of Triangle towards understanding, entry level behaviour and learning strategies development due to gender variation. There is a positive attitude of teachers educators after prepare the learning design. And they are also happy to teach with the help of learning design. During preparing learning design, the teacher educators prepare for their next lesson.

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