



## Study of Opinions of B.Ed. Trainees on Self Assessment by Computerized Question Bank in the Subject 'Applications of Technology in Education'

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### Abstract:

*Today in the time of modernization. Technology has become an important part of human life. In every field like business, trade, industry and social life there is more and more use of technology. From the last decade information technology has established its power on human life and society. Today each country is trying to grow up in economic, social and cultural dimensions, using more and more technology. In this case education is not far away. There are so many efforts being made to use technology in education. Therefore now education is being transferred into technology based education bringing many changes in teaching - learning & assessment process. In this context researcher has taken up this study to know how much effective are the changes by examining the opinions of B.Ed. Trainees (who are to become teachers in near future).*

*Total 135 B.Ed. trainees of two B.Ed. colleges affiliated to Hemchandracharya North Gujarat University, Patan having sufficient computer lab facility were selected and data was collected using normative survey method with the help of self constructed computerized question bank. Using proper statistics the effectiveness of the tool for self learning and self assessment has been studied.*

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**Keywords:** *Computerized Question Bank, Education, Information Technology, B.Ed. trainees*

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### 1. Introduction

During last 20 years information technology has brought many changes in human life that no other invention has done so far. Information Technology has the power to transform society into a knowledge based society. Our government has made so many efforts to bring modernization in education and make today's children and youngsters capable to take step with the world. As a part of these efforts there are many educational software's- CDs-DVDs available today. The aim after these efforts is to make the teaching-learning process effective and to develop a system of self learning and self assessment in students. After the entrance of technology in education the whole teaching learning process and assessment system has changed, for example, CAL, CAI, Online exam, OMR sheet etc.. So after learning in classroom, trainees can check their knowledge of the subject at their own time by self assessment with the help of computerized question bank. The

researcher has taken up this study to examine the opinions of B.Ed. trainees on self assessment by computerized question bank for the subject ‘Applications of Technology in Education’.

## 2. Objectives

1. To examine the effect of gender on the opinions of B.Ed. trainees of self assessment by computerized question bank.
2. To examine the effect of Stream on the opinions of B.Ed. trainees of self assessment by computerized question bank.
3. To examine the effect of area on the opinions of B.Ed. trainees of self assessment by computerized question bank.

## 3. Hypotheses

- Ho<sub>1</sub>** There is no significant difference between the opinion scores of total boys and total girls on self assessment by computerized question bank.
- Ho<sub>2</sub>** There is no significant difference between the opinion scores of Science stream and Arts stream trainees on self assessment by computerized question bank.
- Ho<sub>3</sub>** There is no significant difference between the opinion scores of urban area and rural area trainees on self assessment by computerized question bank.

## 4. Method of Sampling

From B.Ed. colleges affiliated to Hemchandracharya North Gujarat University, Patan, using normative survey method two B.Ed. colleges having sufficient computer lab facility were selected and from those two colleges a total of 135 B.Ed. trainees formed the sample in this study. The details of sample are as under.

**Table 1**  
**Sample for Data Collection**

Area	Total Boys		Total Girls		Total
	Science Stream Trainees	Arts Stream Trainees	Science Stream Trainees	Arts Stream Trainees	
Urban Area	15	08	14	25	62
Rural Area	10	22	08	33	73
<b>Total</b>	<b>25</b>	<b>30</b>	<b>22</b>	<b>58</b>	<b>135</b>

## 5. Tool Used for Data Collection

The data was collected using self constructed computerized questions bank which consists of 90 objective questions for B.Ed. trainees on the subject ‘Applications of Technology in Education’. The question bank is constructed with the help of expert opinions and reference readings. There are three main sections and each section has total 30 questions distributed in three sections like 10 Easy questions, 10 hard questions and 10 Very Hard questions. Thus the question bank is a tool of total 90 multiple questions. Each question carries 1 mark. At the end of the test the trainee who uses this question bank knows his result in marks out of 90. The details of the tool are mentioned in table 2.

**Table 2**  
**Format of Computerized Question Bank**

Sr. No.	Name of Section	Sub Section	No. of Ques.	Total Questions
1	Computer Fundamental Different Parts & Peripherals	Easy	10	30
		Hard	10	
		Very Hard	10	
2	Computer Language, Operating System, Information Technology & Network	Easy	10	30
		Hard	10	
		Very Hard	10	
3	Application Programmes: MS. Word, MS. Excel, MS. PowerPoint	Easy	10	30
		Hard	10	
		Very Hard	10	
<b>Total</b>				<b>90</b>

#### 6. Method of Research

Normative survey method is used for data collection in this study.

#### 7. Techniques of Data Analysis

The Standard parameters of statistics like mean, median, mode, standard deviation and t-values were calculated for the analysis and interpretation of data.

#### 8. Testing of the Hypotheses

**Study 1:** ‘There is no significant difference between the opinion scores of total boys and total Girls on self assessment by computerized question bank’ was tested with the help of following statistical analysis.

**Table 3**  
**Total Boys and Total Girls**

Group	No. of Students	Mean	SD	SED	t-value	Significance level	Remark
Total Boys	55	40.02	1.87	0.28	2.39	0.01	Accepted
Total Girls	80	40.70	1.18				

**Study 2:** ‘There is no significant difference between the opinion scores of Science stream and Arts stream trainees on self assessment by computerized question bank’ was tested with the help of statistical analysis mentioned in table 4.

**Table 4**  
**Trainees of Science Stream and Arts Stream**

Group	No. of Students	Mean	SD	SED	t-value	Significance level	Remark
Trainees of Science Stream	47	40.30	1.67	0.29	0.52	0.05	Accepted
Trainees of Arts Stream	88	40.15	1.47				

**Study 3:** ‘There is no significant difference between the opinion scores of urban area and rural area trainees on self assessment by computerized question bank’ was tested with the help of following statistical analysis.

**Table 5**  
**Trainees of Urban Area and Rural Area**

Group	No. of Students	Mean	SD	SED	t-value	Significance level	Remark
Trainees of Urban Area	62	40.32	2.11	0.30	2.30	0.01	Accepted
Trainees of Rural Area	73	41.09	1.08				

### 9. Interpretation and Findings

From the following statistical analysis, following interpretations and findings can be pointed out.

There is no significant difference between the score of opinions of total boys and total girls, B.Ed. trainees of Science stream and Arts stream and B.Ed. trainees of urban area and rural area about self assessment by computerized question bank. So it is concluded that computerized question bank is an effective and useful tool for self learning and self assessment.

### 10. Conclusions

From this study the researcher tried to examine the opinions of B.Ed. trainees about self assessment by computerized question bank and after the study the following conclusions can be made.

- Computerized question bank is useful for easy, fast and objective assessment.
- The habit of self learning and self assessment will be developed in trainees.
- This type of questions bank can be prepared for various teaching points and motivate the students to use it.
- At a particular time teacher/lecturer can make changes in question bank and put it as a new question bank.
- This type of computerized question bank will be very useful to know the effectiveness of teaching - learning process held by teacher/lecturer in the classroom.

In the era of modernization computerized question bank has its own importance. At this time learning by question bank is a new pattern of learning which plays an important role in the development of education. So computerized question bank is a useful tool for good and effective teaching learning process.

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