

## **EDUSAT AWARENESS AMONG WOMEN STUDENT: Teachers of B.Ed. In Distance Education At ANNAMALAI University**

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### **ABSTRACT**

The present study aims at investigating the EDUSAT Awareness among Women Student-Teachers of B.Ed. in Distance Education at Annamalai University. Survey method was adopted for the present study. A sample of 500 Women Student-Teachers of B.Ed. in Distance Education at Annamalai University were chosen by using simple random sampling technique.

The data were subjected to descriptive and differential analysis for verifying null hypotheses. The result revealed that the EDUSAT Awareness among Women Student-Teachers is not adequate.

**Keyword:** EDUSAT awareness, Women Student-Teachers of B.Ed., Distance Education and Annamalai University.

### **INTRODUCTION**

The world is changing rapidly and the growth of knowledge is phenomenal. To cope up with this rapid change need for a change in the present system of education, as yesterday's education system will not meet today's need, and even less, the needs of tomorrow. As education is the key to national prosperity and welfare, it is essential that it should change rapidly.

In the field of education, Educational Technology emerged and has come to stay. Due to multi - dimensional development of Educational Technology, it has made the teacher capable of communicating the knowledge and facts with the taught in the process of imparting education within shorter time, than he could do before. Science and Technology has provided a momentum to the process of educating the people.

They are not merely AV aids. They include the Tape recorder, Slides projector, Over Head Projector, Film projector, Television, Video, Computer, Internet, Teleconferencing, Video Conferencing, Online and EDUSAT. These are outstanding devices, which present new dimensions on communication technology especially in providing classroom instructions.

### **EDUSAT**

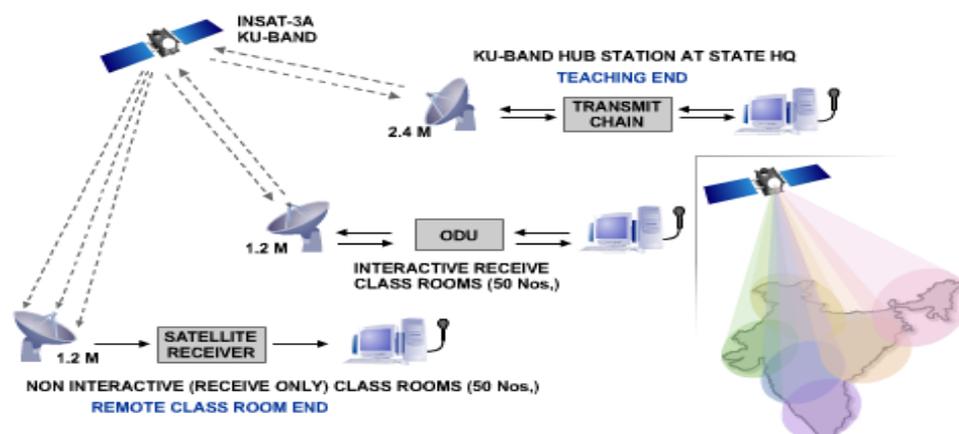
EDUSAT is the first Indian satellite built exclusively for serving the educational sector and it was launched successfully by GSLV-F01 on 20-9-2004. It is mainly intended to meet the demand for an interactive satellite based distance education system for the country. It strongly reflects India's commitment to use space technology for national development, especially for the development of the population in remote and rural locations.

## EDUSAT in DISTANCE EDUCATION

EDUSAT is primarily meant for providing connectivity to school, college and higher levels of education and also to support non-formal education including developmental communication. The quantity and quality of the content would ultimately decide the success of EDUSAT System. Satellites can establish the connectivity between urban educational institutions with adequate infrastructure imparting quality education and the large number of rural and semi-urban educational institutions that lack the necessary infrastructure. Besides supporting formal education, a satellite system can facilitate the dissemination of knowledge to the rural and remote population about important aspects like health, hygiene and personality development and allow professionals to update their knowledge base as well. Thus, in spite of limited trained and skilled teachers, the aspirations of the growing student population at all levels can be met through the concept of tele-education.

## EDUSAT in EDUCATION

EDUSAT is a powerful communication tool for emulating virtual classroom in an effective manner. EDUSAT makes it possible to conduct virtual classes in remotes places in parallel. The teacher at the transmission end virtually becomes available to all the receiving end virtual classrooms. This process can help in overcoming the shortage of trained teachers by providing in service training to the existing teachers at block level, in a time bound program. It seems the most economic may to achieve the benefits of EDUSAT.



EDUSAT can provide virtual class rooms in a multi class and studio environments with two way interactions between the teachers and students in a collaborative framework. It can provide one to one, one to many connectivity, through the broadcasting network in a multicasting mode of delivery. It can enable a remote teacher to become a teacher to all the students in a session, and the teacher to take the student to a live virtual tour of the subject. This can provide a cost effective solution for interactive content delivery.

## ADVANTAGES OF USING EDUSAT IN EDUCATION

EDUSAT can provide education without face to face meetings but through on line setup. The following uses can be effected age, region and time:

- It covers all geographical area inside the country
- It can provide interactive and cost effective education
- It can provide consistency to information

- **The spot beams used in the EDUSAT are more powerful and signals can be received with a smaller satellite dish**
- **It is a satellite, fully dedicated to the cause of education**
- **It can provide audio visual medium and interactive multimedia facility.**
- **It can open up many possibilities like on line teaching, video conferencing etc.**
- **It can be used at all levels of education from primary schools to professional courses.**
- **It can provide live lecture sessions from the best and expert teachers. Before establishing the EDUSAT quality classes and classes handled by experts benefited only urban students. But with the working of the EDUSAT rural students also can enjoy its benefit.**
- **Students will get the facility to see what they read in their textbooks and to do experiments with the help of multimedia technologies.**
- **Providing opportunity beyond age, region and time**
- **Provide life time education**
- **Equaling regional education**
- **Being flexible**
- **Lowering the educational expenses with high effect**
- **Extending the educational facilities**
- **Upgrading educational materials**
- **Avoiding psychological tension.**

### **NEED FOR THE STUDY**

**Modern technologies have several stages and sequences in the earlier decades. Teacher should be exposed to modern technology in the designing and use of instructional systems appropriate to classroom situations.**

**The Student - Teachers create many programs and software to achieve learning objectives. It implies the application of Psychological, Sociological and Scientific Principles. Students interact with experts, when they learn the subject through the EDUSAT programme.**

**It motivates the Student to watch the programme. EDUSAT programme provides better teaching -learning performance and relate the learning to suit their cognitive potentials. EDUSAT awareness is very essential to the Student- Teachers in Teacher Education.**

**Educational Technology as an elective/optional paper in the B.Ed. courses, finds justification in view of the role of Educational Technology for effective, classroom instruction. The teacher trainee in Educational Technology should not only be aware of different hardware, but also must know how to use them effectively. Practice in the use of over head projector, projector slides, epidiascope, film projector, radio, television, video, computer, internet, online, teleconferencing, videoconferencing and EDUSAT is a must. Some researches concentrated on general education but adequate research has not been conducted so deeply for the Student - Teachers, especially in the area of Student - Teacher's EDUSAT awareness. So, the investigator selected a topic for research to find out the EDUSAT awareness among the Student-Teachers.**

### **OBJECTIVES OF THE STUDY**

**The following are the objectives of the present study:**

- **To find out the EDUSAT awareness among Women Student-Teachers of B.Ed. in Distance Education at Annamalai University.**

- To find out whether there is any significant difference between the mean scores of EDUSAT awareness of Women Student-Teachers who are below 25 years and above 25 years.
- To find out whether there is any significant difference between the mean scores of EDUSAT awareness between the Women Student-Teachers with Under-graduate and Post-graduate qualification.
- To find out whether there is any significant difference between the mean scores of EDUSAT awareness between the Rural and Urban Women Student-Teachers.
- To find out whether there is any significant difference between the mean scores of EDUSAT awareness between Arts and Science Women Student-Teachers.
- To find out whether there is any significant relationship between the mean scores of EDUSAT awareness among the Women Student-Teachers of various groups, based on their Father's Educational Qualifications.

### **HYPOTHESES OF THE STUDY**

The hypotheses of the present study are formulated as follows:

- EDUSAT awareness among Women Student-Teachers is not adequate.
- There is no significant difference between the mean scores of EDUSAT awareness of Women Student-Teachers who are below 25 years and above 25 years.
- There is no significant difference between the mean scores of EDUSAT awareness between the Women Student-Teachers with Under-graduate and Post-graduate qualification.
- There is no significant difference between the mean scores of EDUSAT awareness between the Rural and Urban Women Student-Teachers.
- There is no significant difference between the mean scores of EDUSAT Awareness between Arts and Science Women Student-Teachers.
- There is no significant relationship between Women Student-Teachers' EDUSAT Awareness with reference to Father's Educational Qualification (Illiterate, Upto Higher Secondary, Degree holder).

### **METHODOLOGY OF THE STUDY**

The investigator followed the "Survey" method for the present study. The Questionnaire was developed and administered to the Women Student-Teachers of B.Ed. in Distance Education at Annamalai University. The Student-Teachers have responded to the questionnaire. The data thus collected were put into appropriate statistical analysis.

#### **Sample for the Study**

*Random* sampling technique was adopted for the present study. The investigator decided to collect data from Women Student-Teachers of B.Ed. in Distance Education at Annamalai University. 500 Women Student-Teachers are the sample for this study.

#### **Tools Used for the Study**

Effectiveness of evaluation largely depends upon the accuracy of measurement. Accuracy of measurement in turn depends on the precision of the instrument. The tool is of many types. The investigator had selected the questionnaire form. The tool had 20 items. Each item was in the form of multiple choices. The correct response of every item carried *one* point score. The Questionnaire prepared and developed by the investigator was used to collect the data in this study. The reliability and validity of the tool were established.

- A blank bio-data (For Women Student-Teachers)
- EDUSAT Awareness Inventory

### Statistical Techniques Used

Statistical Techniques serve the fundamental purpose of the description and inferential analysis. The following statistical techniques were used in the study.

- 't' test for determining the significance of difference between means of two variables.
- f' test is used to find out the significance of difference between two sub - group variables.

### FINDINGS AND INTERPRETATIONS

The hypotheses formulated for the present study were tested by applying statistical techniques. Descriptive and inferential analyses were used.

**Table: 1**  
**Mean Score of EDUSAT awareness among Women Student-Teachers**

S. No.	Women Student-Teachers	N	Mean	S.D.
1.	Entire Sample	50	9.38	3.01

From the above table it was found that the Student-Teachers had EDUSAT Awareness of 9.38 out of 20 (46.9 per cent).

This null hypothesis was accepted because the mean scores of EDUSAT Awareness among Women Student-Teachers were not significant (50 per cent).

It was declared that the Student-Teachers of Colleges of Education do not have adequate EDUSAT Awareness as the mean awareness score was less than fifty per cent.

**Table: 2**  
**Significance of difference between means of EDUSAT awareness of Women Student-Teachers for Age-wise sub group**

No.	Age	N	Mean	S.D.	t' value	Level of Significance
2.	Below 25 years	26	7.7	1.6	16.2	Significant at 0.01 level
	Above 25 years	24	11.3	3.2		

The calculated t' value 16.2 is greater than the table value 2.59 at 0.01 level. This implies that the relationship between the variables under study is significant at 0.01 level. Hence the null hypothesis is rejected.

It was found that the Women Student-Teachers who are Below 25 years have less awareness of EDUSAT than those who are Above 25 years.

**Table: 3**  
**Significance of difference between means of EDUSAT awareness of Women Student-Teachers for Qualification-wise sub group**

S. No.	Qualification	N	Mean	SD.	t' value	Level of Significance
3.	Under-Graduate	291	8.1	2.2	12.9	Significant at 0.01 level
	Post-Graduate	209	11.2	3.1		

The calculated  $t'$  value 12.9 is greater than the table value 2.59 at 0.01 level. This implies that the relationship between the variables under study is significant at 0.01 level. Hence the null hypothesis is rejected.

It was found that the Under-Graduate Women Student-Teachers have less awareness of EDUSAT than Post-Graduate Women Student-Teachers.

**Table: 4**  
Significance of difference between means of EDUSAT awareness of Women Student-Teachers for Subject-wise sub group

S. No.	Subject	N	Mean	S.D.	$t'$ value	Level of Significance
4.	Arts	187	9.9	3.1	2.7	Significant at 0.01 level
	Science	313	9.1	3		

The calculated  $t'$  value 2.7 is greater than the table value 2.59 at 0.01 level. This implies that the relationship between the variables under study is significant at 0.01 level. Hence the null hypothesis is rejected.

It was found that the Science Subject Women Student - Teachers have less awareness of EDUSAT than Arts Subject Women Student-Teachers.

**Table: 5**  
Significance of difference between means of EDUSAT awareness of Women Student-Teachers for Locale-wise sub group

S. No.	Locale	N	Mean	S.D.	$t'$ value	Level of Significance
5.	Rural	259	8.4	2.5	7.6	Significant at 0.01 level
	Urban	241	10.4	3.2		

The calculated  $t'$  value 7.6 is greater than the table value 2.59 at 0.01 level. This implies that the relationship between the variables under study is significant at 0.01 level. Hence the null hypothesis is rejected.

It was found that the Rural Area Women Student-Teachers have less awareness of EDUSAT than Urban Area Women Student-Teachers.

**Table: 5**  
Significance of difference between means of EDUSAT awareness of Women Student-Teachers for Locale-wise sub group

S. No.	Locale	Categories	Sum of Squares	df.	Mean	F' value	Level of Significance
6.	Father's Educational Qualification	Between Group	1315.545	2	657.773	101.9	Significant at 0.01 level
		Within Group	3208.727	497	6.456		
		Total	4524.272	499			

The calculated F value 101.9 is greater than the table value 4.65 at 0.01 level. This implies that the relationship between the sub group variables under study is significant at 0.01 level. Hence the null hypothesis is rejected.

It was found that the Women Student-Teachers whose Fathers are Degree holder have more EDUSAT Awareness than those of the remaining two viz. Up to Higher secondary and Illiterate.

## CONCLUSION

The present study concluded that there was no adequate EDUSAT Awareness among Women Student-Teachers of B.Ed. in Distance Education at Annamalai University. However, Women Student-Teachers who are Above 25 years, Post-Graduate, Science Subject, Urban have EDUSAT Awareness. The Student - Teachers whose Father's Qualification is Degree holder have EDUSAT Awareness.

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## REFERENCES

- Aggarwal, Y. R., (1988). *Statistical Methods*, Sterling Publications Pvt. Ltd., New Delhi.
- Menakath, H. (2007). *EDUSAT as a source of information for the Academic pursuit of Teachers*, University News, Vol.45, No10.
- Singh, S. K. (1999). *Methodology of Research in Education*, Sterling Publications, New Delhi.
- Nair, G. M. (2005). *EDUSAT: Heraldng a New Era in Distance Education*, University News, 43 (39).
- Mukhopadhyay, M. (2006). *Story of EDUSAT*, Shipra Publication, New Delhi.
- Robert Heinich (1993), *Instructional Media*, Fourth Edition, Macmillan Publishing Company, New Delhi.
- Sampath K. et.al. (1998), *Introduction to Educational Technology*, Fourth Edition, Sterling Publishers, New Delhi.
- Mehta, S. (2004). *Space Technology in Education-Indian context*, Space Application centre, ISRO, Ahamedabad.