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A COMPARATIVE STUDY OF ATTITUDE OF UPPER-PRIMARY SCHOOL  
TEACHERS OF RURAL AREAS TOWARDS USING ICT  
IN SCIENCE TEACHING



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Short Profile

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**ABSTRACT:**

In the present study, An attempt is made to find out the attitude of the Upper-Primary School Teachers of Rural areas towards using ICT in Science Teaching. A sample of 50 Upper-Primary School Teachers of science subject, including 25 Teachers of Government/Non-Government schools and 25 Teachers of Private schools selected from Rural areas of Baldeo block, Mathura District, Uttar Pradesh. The researcher used Teacher's Attitude

Scale towards using ICT in science teaching developed by himself for data collection. The present study revealed that there is no significant difference between Attitude of Upper-Primary School Teachers of Government/Non Government and Private schools of Rural areas towards Using ICT in Science Teaching due to difference in type of school.

**KEYWORDS**

*Science Teaching, studies and developments, society.*

**INTRODUCTION :**

We live in the age of science; Science has brought about tremendous change in the life of man. The study of sciences increases pupil's curiosity about phenomena in the world around them and offers opportunities to find explanations. They are closely linked aspects of society and the studies and developments in both of science and technology are essential for the overall progress of the society. It is proved that technology-enhanced classroom students demonstrated statistically significant increase in student engagement and improved academic achievement. The technological instruments should be used during the science teaching-learning process. This will help to change the monotonous environments in the classroom created due to the lecture method used by science teacher.

Information and communication Technology (ICT) has become an integral part of today's teaching – learning process. Countries across the world are using ICT in facilitating information dissemination and communication in all areas of education and training. There are now educational and training institutions imparting skills in the basic and advanced concepts of ICT. Besides, ICT is being used in facilitating distance learning. It is enabling online designing of courses, online delivery of courses, computer-aided teaching, on-line assessment besides management and networking of a large number of educational institutions. ICT – based systems, CD- based courses, online courses and digital libraries, discussion forums, digital portfolios, teleconference, etc. have made e-learning a reality today.

In the Eleventh Five-Year Plan (2007-2012) importance of ICT in education has been emphasized. In these plan 10,000 crore rupees has been allocated for ICT integration including improving the infrastructure and trainings programmes. Out of this 5000 crore rupees is for ICT integration in school education and another 5000 crore for higher education. Several attempts have been made to evolve an ICT strategy for government schools, both by the Ministry of MHRD and the Department of Information Technology (DIT).

According to latest effort the committee on technology in education (with representation from MHRD and DIT) in 2005 made the following recommendation-out of a total of 10,00,000 schools in the country, the programme "Technology in Education" will cover 6,42,600 schools, which include 4,22,400 primary schools, 1,61,700 upper primary schools and 58,500 secondary schools. Every school will have server, five PCs, printer, Internet connectivity of 256 kbps plus other consumable, etc. During the 11th plan period, It is proposed to spread the coverage of ICT to all the 360 universities and 17,625 colleges in a phased manner. Therefore all the teachers and aspiring teachers should acquire necessary ICT skills to harness the opportunity that could come their way because of those programs.

According to NCERT's "National Curriculum Framework" the process of education cannot ignore social and psychological impacts of technology that structures information. "National Curriculum Framework" (2005) emphasized the judicious use of technology to increase the reach of educational programmes, facilitate management of the system as well as address specific learning needs and requirements.

NCTE has also directed integrating ICT in to teacher education curriculum. As a result Educational Technology is taught as a compulsory/elective paper in B.Ed in many universities.

## OBJECTIVES

The main objectives of the study are:

- 1.To Study the Attitude of the Upper-Primary School Teachers of Government/ Non-Government Schools of Rural areas towards using ICT in Science Teaching.
- 2.To Study the Attitude of the Upper-Primary School Teachers of Private Schools of Rural areas towards using ICT in Science Teaching.
- 3.To Study the difference between Attitude of Upper-Primary School Teachers of Government/Non Government and Private schools of Rural areas towards using ICT in Science Teaching.

## HYPOTHESIS

There is no significant difference between Attitude of Upper-Primary School Teachers of Government/Non Government and Private schools of Rural areas towards Using ICT in Science Teaching.

## METHOD

The descriptive method was applied in this comparative study to find out the difference between Attitude of Upper-Primary School Teachers of Government/Non Government and Private schools of Rural areas towards using ICT in Science Teaching.

## SAMPLE

The sample consisted of 50 Upper-Primary School Teachers of science subject including 25 Teachers of Government/Non-Government school and 25 Teachers of Private schools from Rural areas of Baldeo block, Mathura District (Uttar Pradesh), on the basis of Simple random purposive sampling technique was adopted in order to select the Schools and purposive sampling technique was adopted in order to select the Teachers of Government/Non-Government and Private schools to collect the relevant data.

## TOOL

The self-made Teacher's Attitude Scale towards using ICT in science teaching tool was used for collection of data in this study. The Reliability of the tool is 0.91 (odd-even method) and validity (face, content) is high.

## PROCEDURE

50 Upper-Primary School Teachers of science subject of different school were given the above test with short introduction and instruction. This test is a five point scale. It has 40 items under five categories, viz. Strongly agree, agree, Undecided, Disagree, Strongly disagree. The data collected from

them were scored.

### ANALYSIS AND INTERPRETATION

For analysis and interpretation of the data collected by the investigator Mean, Standard deviation and Critical Ratio was calculated.

#### OBJECTIVE 1 :

Study the Attitude of the Upper-Primary School Teachers of Government / Non-government schools of rural areas towards using ICT in Science Teaching.

The mean value of the Attitude of the Teachers of Government / Non-government schools of rural areas was found 176 and value of the standard deviation was found 11.10 towards Using ICT in Science Teaching.

#### OBJECTIVE 2:

Study the Attitude of the Upper-Primary School Teachers of Private schools of rural areas towards Using ICT in Science Teaching.

The mean value of the Attitude of the Teachers of private schools of rural areas was found 175.48 and value of the standard deviation was found 11.576 towards Using ICT in Science Teaching.

#### OBJECTIVE 3:

Study the difference between Upper-Primary Schools teachers' Attitude of Government/Non Government and Private schools of rural areas towards Using ICT in Science Teaching.

TABLE-1

Types of School	N	Mean	S.D.	C.R. Value
Gov. / Non-Gov.	25	176.00	11.10	0.162
Private	25	175.48	11.57	

It reveals from the above table that the mean value of the Attitude of the Upper-Primary Schools Teachers of Government / Non-government schools of rural areas was found 176 and value of the standard deviation was found 11.10 while the mean value of the Attitude of the Teachers of private schools was found 175.48 value of the standard deviation was found 11.576 and the value of Critical ratio was found 0.162 towards Using ICT in Science Teaching

The calculated C.R. value of attitude Upper-Primary Schoolteacher towards Using ICT in Science Teaching of two groups Government / Non-government schools and private schools of rural areas, is found not significant at both .05 level.

## FINDINGS

- Results are showing that There is no significant difference between Upper Primary Schools teachers' Attitude of Government/Non Government and Private schools of rural areas towards Using ICT in Science Teaching.
- Hence, the null hypothesis of no significant difference between Attitude of Upper-Primary School Teachers of Government/Non Government and Private schools of Rural areas towards Using ICT in Science Teaching is not rejected.

## CONCLUSION

It shows that the factor- type of school (Government / Non-government and private) has no impact on the attitude Upper-Primary Schoolteacher towards Using ICT in Science Teaching. Attitude of Upper primary school teacher of government schools of rural areas is positive comparison to attitude of Upper primary school teacher of Private schools of rural area.

## REFERENCES

1. Best, John W. and Kahn, J.V. (1995) Research in Education, Prentice Hall publication, New Delhi
2. Garret, H.E. (1967) Statistics in psychology and Education, Bombay Vakils Feffer and Simons, Ltd.
3. Singh, A. K. (2010) Research Methods in Psychology Sociology and Education. New delhi.
4. Vanaja, M. and Rajasekar, S. Education Technology and Computer Education. Neekamal Publications Pvt. Ltd. Hyderabad.
5. National Policy on Education (revised), M.H.R.D., Government of India, New Delhi.
6. National Curriculum Frame work (2005), N.C.E.R.T.
7. Uplane, Megha M., Sonawane Sanjeev A. and Padmini, M. S. (2011) CAI: An Effective Instructional Method for Secondary School low Achivers. EDUTRACKS (Journal), March VOL. 10, No. 7.
8. Jaiswal, D. (2011) Role of ICT in Teacher Education. EDUTRACKS, March VOL. 10, No. 11.
9. Parveena, K.B. and Srinivasa, K.S. (2011) Interactive Multimedia, A Technological Wave in Education. EDUTRACKS, March VOL. 10, No. 11.
10. Vijaykumar, R. (2011) Technology: A Catalyst of Teaching Learning Process. EDUTRACKS, July VOL. 10, No. 11.
11. Yasothapriya, M. (2011) The Role of ICT in Improving the Quality of Education .EDUTRACKS, December, VOL. 10, No. 4.

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