

Information And Communication Technology Awareness Among Senior Secondary School Teachers Of Aligarh District: A Study

Paper ID

IJIFR/V3/ E8/ 043

Page No.

3171-3176

Subject Area

Education

KeyWords

Information and Communication Technology, UNESCO, Curriculum, ICT Pedagogy

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Abstract

Dissemination of knowledge and learning is the process requiring transmission of the subject matter to the student or the learner coherently and conducive. As the field of knowledge is vast its comprehension, retention and onward transfer need devices that help promote the process. Information and communication technology is one such medium and a potent force that has the requisites required for the purpose. Across the past few decades the impact of ICT has enormously changed the process of dissemination of different branches of knowledge such as engineering, architecture, banking, medicine, travel/tour, business and what not. The objectives of the present study undertaken is to find out whether there is any significant difference between male and female, graduate and post graduate, trained and untrained, married and unmarried senior secondary school teachers towards Information and Communication Technology awareness. Random sampling technique was used to draw hundred senior secondary school teachers of six different schools of Aligarh district. A standardized tool on Information and Communication Technology were used for the collection of data. The tool consisted of fifty items. Each item has four alternative choices. On the basis of this analysis, the result shows that there are significant differences between male and female, graduate and post graduate, trained and untrained, married and unmarried senior secondary school teachers. It is concluded that the senior secondary school teachers of Aligarh district are well aware of the uses of Information and Communication Technology in their day-to-day teaching learning process.

1. INTRODUCTION

ICT refers to Information and Communication Technology. ICT has become the most widely used and pronounced buzzwords of the computer industry as well as in academics. It has helped all walks of life in one way or another. ICT is the modern science of gathering, storing, manipulating, processing and communication desired types of information in a specific environment. 'Computer technology and Communication technology' are the two main supporting pillars of this technology and impact of these two in the information storage and dissemination is vital.

ICT has entered our lives in a big way and we are responding to these trends. Mishra, Rajendra (2008) as quoting the definition of ICT given by United Nations have said, "As per the definition used by United Nations, ICT can be described as a varied set of goods, applications and services used to produce, store, process, distribute and exchange information. They include both the most familiar technologies of television, radio and telephone and the relatively newer ones---personal computers, mobile phones, satellite and wireless technologies and the Internet". National Curriculum Framework (NCF, 2005) pronounces, "ICT is an important tool for bridging social divides. ICT should be used in such a way that it becomes an opportunity equalizer by providing information, communication and computing resources in remote areas". Taj Hassen (2004) writes that, "Information and Communication Technology (ICT) can be defined as tools and applications support through which or by means of which information is transferred, recorded, edited, stored, manipulated and disseminated with enormous quantities in them minimum possible time." From the above quoted definitions, it can be concluded that the ICT covers all the three types of technologies, i.e., Hardware, Software and System Approach and is based on the principle of Psychology, Science and Technology and Management, etc.

Importance of ICT is there in every affairs of education. It is useful for curriculum planning, curriculum development, curriculum transaction and curriculum evaluation. ICT is associated with the objectives specification of a programme to the evaluation of the programme. Focusing the advantages of ICT in classroom situation Babu, S. Sudhakar (2007) concludes, "These advantages include: opportunities to deploy innovative teaching methodologies and to deploy more interesting material that creates an interest in the students: Enables better management of classroom and students thereby improving the productivity of the tutor as well as the taught; Enables the teacher to concentrate on other tasks such as research and consultancy; Enables optimum utilization and sharing of resources among institutions thereby reducing the costs of implementing ICT solutions." Explaining the need of ICT for the development of teacher education, Sahoo, Namita (2009) has conveyed, "Teacher education institutions may either assume a leadership role in the transformation of education or be left behind in the swirl of rapid technological change. For education to reap the full benefits of ICTs in learning, it is essential that pre-service and in-service teachers have basic ICT skills and competencies. Teacher education institutions and programmes must provide the leadership for pre-service and in-service

teachers and model the new pedagogies and tools for learning.” It is quite evident that it is difficult to talk of education without ICT in this age of information. Teacher, student, policy maker, curriculum planner, every one now need ICT to monitor functions smoothly.

UNESCO has established International Institute of Technologies in Education at Moscow. It has started looking at the various aspects of ICT policies, education, training and development related to Asia-pacific regions and regional office of UNESCO. Bangkok is encouraging development of ICTs in education at different levels in Asia region. There are many emerging issues that necessitate integration of ICT in education such as, technological, pedagogical, ethical and economic processes. ICT awareness involves knowing about the existence and importance of ICT tools and their application. Potential ICT users should be enriched with a number of ICT awareness programmes in order to increase the uses of ICT facilities. This can be achieved through promotional programmes which includes electronic media resources such as radio, Television and website; print media such as newspapers, magazines etc; organization of workshops, seminars, conferences and public lectures. ICT awareness can also be created through the inclusion of ICT courses into students’ curriculum. In developing countries, ICT is now becoming a valuable vehicle for supporting lifelong learning and other socio-economic activities. Lack of information searching skills is the main hindrance to the utilization of available facilities to retrieve electronic information. Information users spend long time searching for literature with limited relevant results if there is absence of information skills.

2. OBJECTIVES OF THE STUDY

The present study has the following objectives:

- I. To find the difference in awareness between the graduate and post-graduate senior secondary school teachers towards ICT.
- II. To find the difference between the trained and untrained senior secondary school teachers towards ICT awareness.
- III. To find the difference between the male and female senior secondary school teachers towards ICT awareness.
- IV. To find the difference between the married and unmarried senior secondary school teachers towards ICT awareness.

3. HYPOTHESES FOR THE STUDY

The hypotheses that are formulated so as to carry out the present study are as following:

- I. There is no significant difference between the graduate and post-graduate senior secondary school teachers towards ICT awareness.
- II. There is no significant difference between the trained and un-trained senior secondary school teachers towards ICT awareness.

- III. There is no significant difference between the male and female senior secondary school teachers towards ICT awareness
- IV. There is no significant difference between the married and unmarried senior secondary school teachers towards ICT awareness

4. METHODOLOGY OF THE STUDY

4.1 Sample

In the present study, the population consisted of senior secondary school teachers of Aligarh district. Six different senior secondary schools of Aligarh district were randomly selected. Fifty percent of teachers of each of the six senior secondary schools were randomly taken. The sample consisted of hundred senior secondary school teachers working in these six schools located in Aligarh.

4.2 Tools for the Study

The Information and Communication Technology questionnaire was developed by the author himself and was used to so as to undertake the present investigation. It consisted of fifty items. Every item has four options. For each correct response 1 mark was allotted and for each wrong response 0 marks were allotted. The aggregate score of the questionnaire is fifty.

5. DATA INTERPRETATION AND ANALYSIS

Hypothesis---1: There is no significant difference between the graduate and post-graduate senior secondary school teachers towards ICT awareness.

Table-1

S. No.	Qualification	N	Mean	S.D.	t-ratio	Level of significance
1.	Graduate	26	36.35	6.34	3.19	Significant at 0.01
2.	Post-Graduate	74	30.91	10.05		

It can be seen from table 1, that the ‘t’-ratio of 3.19 is significant at 0.01 level. Thus there is a significant difference between the graduate and post-graduate senior secondary school teachers towards their ICT awareness. Hence, the null hypothesis stands rejected. Since the mean value of graduate senior secondary school teachers (36.35) is higher than the mean value of post-graduate senior secondary school teachers (30.91), this shows that graduate senior secondary school teachers are having more awareness than post-graduate senior secondary school teachers towards ICT.

Hypothesis-2: There is no significant difference between the trained and un-trained senior secondary school teachers towards ICT awareness.

Table-2

S. No.	Training	N	Mean	S.D.	t-ratio	Level of significance
1.	Trained	89	31.62	9.71	3.54	Significant at 0.01
2.	Untrained	11	38.0	4.90		

It can be seen from table 2, that the ‘t’-ratio of 3.54 is significant at 0.01 level. So, there is a significant difference between the trained and untrained senior secondary school teachers towards their ICT awareness. Hence, the null hypothesis stands rejected. Since the mean value of untrained senior secondary school teachers (38.0) is higher than the mean value of trained senior secondary school teachers (31.62), this shows that untrained senior secondary school teachers are more aware of ICT than trained senior secondary school teachers.

Hypothesis-3: There is no significant difference between the male and female senior secondary school teachers towards ICT awareness.

Table-3

S. No.	Gender	N	Mean	S.D.	t-ratio	Level of significance
1.	Male	51	30.04	10.11	2.52	Significant at 0.05
2.	Female	49	34.69	8.23		

Table 3 reveals that the ‘t’- ratio value of 2.52 is significant at 0.05 level. Thus, it can be concluded that there is significant difference between the male and female senior secondary school teachers towards ICT awareness. Hence, the null hypothesis is rejected. Since the mean value of female senior secondary school teachers (34.69) is higher than the mean value of male senior secondary school teachers (30.04), the female senior secondary school teachers are having more ICT awareness than their counter parts.

Hypothesis-4: There is no significant difference between the married and unmarried senior secondary school teachers towards ICT awareness

Table-4

S. No.	Marital Status	N	Mean	S.D.	t-ratio	Level of significance
1.	Married	74	30.92	9.99	2.92	Significant at 0.01
2.	Unmarried	26	36.11	6.86		

It can be seen from the table 4, that the ‘t’- value of 2.92 is significant at 0.01 level. Hence, we can conclude that there is significant difference between the married and unmarried senior secondary school teachers towards ICT awareness. Thus, the null hypothesis is rejected. Since the mean value of unmarried senior secondary school teachers (36.11) is higher than the mean value of married senior secondary school teachers (30.92), the unmarried senior secondary school teachers are more aware of ICT than married senior secondary school teachers.

6. FINDINGS OF THE STUDY

Following findings have been deciphered from the present study:

- i.) There is significant difference between the graduate and post-graduate senior secondary school teachers towards ICT awareness.

- ii.) There is significant difference between the trained and untrained senior secondary school teachers towards ICT awareness.
- iii.) There is significant difference between the male and female senior secondary school teachers towards ICT awareness.
- iv.) There is significant difference between the married and unmarried senior secondary school teachers towards ICT awareness.

7. SUGGESTIONS FOR FURTHER STUDY

The following are some of the suggestions for further study:

- i.) The same study can be done on teacher educators.
- ii.) The same study can be done on secondary school teachers.
- iii.) The same study can also be done on student teachers or prospective teachers.
- iv.) The same study can also be done on primary school teachers if facilities and resources are there.
- v.) The research can also be done on state level.

8. CONCLUSION

In conclusion, it can be said that there are significant differences between male and female, graduate and post-graduate, trained and untrained, married and unmarried senior secondary school teachers in their ICT awareness. It is also concluded that the senior secondary school teachers of the six schools of the Aligarh district are well aware of the uses of ICT and very effectively using Information and Communication Technology in their teaching learning process, though the level of awareness of the trained senior secondary school teachers is found to be lower than the untrained senior secondary school teachers.

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