

Teachers' Attitude Towards Information and Communication Technology (ICT)

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There is a close relationship between the quality of education and the quality of teachers. The quality of education depends upon the knowledge and attitude of teachers towards the ICT. Teacher educators are the facilitators in any educational reform movement. In order to effectively implement the prescribed curriculum and to achieve its objectives of preparing better future teachers, teacher, educators should themselves be psychologically and academically competent. This research paper discusses the difference between male female, senior junior and art - science teacher redactors in curious dimensions.

Key words:- Information and communication technology, teacher education, Teacher attitude, Pedagogical method, Classroom Envoirement

Teacher is an effective and dominating factor among the ones contributing to educational improvements. The teacher effectiveness depends mainly on the teachers' attitude, characteristics and the classroom phenomena such as environment and climate, organisation and management. Various commissions and committees have recommended methods of bringing about qualitative improvements in education. As a result, the teachers are motivated, inspired and endured to develop better curriculum, text books and teaching aids. But, all the efforts are meaningless unless teachers are not having the positive attitude towards educational technology. The teaching learning process has been greatly influenced by rapid advances in Information and Communication Technology (ICT). Integration of this ICT in classroom helps to create an environment for students' activities that lead to meaningful and sustainable learning experiences. It supports students in their own constructive thinking, allows them to transcend their cognitive limitations. It is possible to bring the process of learning beyond the boundaries of classroom by exploring new possibilities of ICT. One of the basic requirements for education in this era of information explosion is to prepare learners for participation in a networked information society. All over the world, educational institutions are being forced to find better pedagogical methods to cope up with these new challenges. Most of the recent research on qualitative improvement of learning mediated through ICT is more or less explicitly considering technology's possibilities how to facilitate social interaction between teacher and student as well as among students globally. In this perspective, ICT is a meditational tool incorporated within learning environment with authentic goals for both students and teachers. Therefore, it can be considered that Information and Communication Technology Mediated Collaborative Learning (ICML) is one of the most promising innovative pedagogical practices at present to build a classroom culture supportive of active knowledge construction that can transform individual learning to the group level mediated by ICT.

Objectives of the Study

The study was taken up with the following objectives:

- (1) To find out the difference between male and female teacher educators towards their attitudes of teaching ICT.
- (2) To find out the difference between senior and junior teacher educators towards their attitudes of teaching ICT.
- (3) To find out the difference between science and arts teacher educators towards their attitudes of teaching ICT.

Hypotheses of the Study

In the view of the above stated objectives, the following null hypotheses were formulated:

- (1) There is no significant difference between male and female teacher educators towards their attitudes of teaching ICT.
- (2) There is no significant difference between senior and junior teacher educators towards

their attitudes of teaching ICT.

(3) There is no significant difference between science and arts teacher educators towards their attitudes of teaching ICT.

Methodology of the Study

Teachers of the seven teachers' training colleges which are affiliated under Manipur University constituted the whole population of the present study. Out of these seven colleges, only five colleges have been selected as the college sample of the study. From the whole population, only fifty teachers (25 male and 25 female) have been selected as the teacher sample of the present study by employing the stratified random sampling technique. Information and Communication Technology Teaching Attitude Scale (ICTTAS) constructed by the self investigator has been used as a tool for the collection of data from different teachers' training colleges which are affiliated under Manipur University, Manipur. The reliability of the tool was found to be 0.8256 (N=50) by Split-Half method. Then, by applying t-test method, the present investigator analysed the collected information and concluded the result.

Justification of the Study

The rapid advancement in Information and Communication Technology (ICT) has been greatly influenced to the teaching learning process. Integration of ICT in classroom helps to create an environment for students' activities that lead to meaningful and sustainable learning experiences. This integration supports students in their constructive thinking and allows them to transcend their cognitive limitations. It is possible to bring the process of learning beyond the boundaries of classroom by exploring new possibilities of ICT. One of the basic requirements for education in this era of information explosion is to prepare learners for participation in a networked information society. This basic requirements can be available only when teachers aware about ICT very well. All over the world, all types of educational institutions are being forced to find better pedagogical methods to cope up with these new challenges. Most of the recent research on qualitative improvement of learning mediated through ICT is more or less explicitly considering possibilities of technology how to facilitate social interaction between teacher and student and among the students globally. When learning interaction takes place through ICT, it opens new possibilities like interaction free of the limitations of time and place. The asynchronous and distance communication are new features of collaboration which challenge our traditional pedagogical practices is possible only by utilizing the advancements in ICT. Thus, ICT mediated collaborative learning brings the schools of different countries together so that global sharing of interaction takes place. Computer Supported International Learning Environment (CSILE), Collaborator Notebook and Virtual Notebook System Trademark etc. are some of the attempts globally taken place to implement this Information and Communication Technology Mediated Collaborative Learning (ICML) in real classroom situation. On the other hand, when learning interaction takes place through ICT, it opens new possibilities like interaction free of the limitations of time and place. So, this type of present study will be very helpful in realising the ideas and thoughts on ICT of the teachers who are working in the teachers' training colleges of Manipur state, India.

Table 1.1

Significance of Difference in the Mean Attitude Scores of Teachers towards Information and Communication Technology (ICT)

Variables	Category	N	Mean	SD	t-Value	Significance at .05 level
Sex	Male	25	64.48	15.47	2.50	Significant difference at .05 level
	Female	25	54.70	11.87		
Age	Senior	25	56.27	15.81	1.68	No significant difference at .05 level
	Junior	25	63.52	14.69		

Stream	Science	25	64.63	14.20	2.13	Significant difference at .05 level
	Arts	25	55.82	15.04		

Degree of freedom = 48, Tabulated t-value at .05 level of significance = 2.02

Results and Discussions

The above table 1.1 indicates that the calculated t- values of the two categories viz. sex (2.50) and stream (2.13) are less than the tabulate t-value (2.00) at .05 level of significance. Hence, both the first and third hypotheses, that is, there is no significant difference between male and female teacher educators towards their attitudes of teaching ICT and another third hypothesis that there is no significant difference between science and arts teacher educators towards their attitudes of teaching ICT are rejected. The study gets significant differences at 0.05 levels of significance in the two variables for each test. The attitude mean score towards ICT of males (64.48) are higher than the females (54.70), junior teachers (63.50) are also higher than the senior teachers (62.27) and similarly the science teachers (64.63) are higher than the arts teachers (55.82) respectively. But, the second hypothesis, that is, there is no significant difference between senior and junior teacher educators towards their attitudes of teaching ICT has been found accepted because the calculated t-value (1.68) has been found no significant difference between the two variables at .05 level of significance. The mean attitude score for junior teachers (63.52) is greater than the mean attitude score of the senior teachers (56.27). From this analysis of the collected data, the study can be concluded with the following findings as follows:

- (1) There is significant difference between the male and female teachers in their mean attitude scores towards teaching ICT because the total mean score of the male teachers is greater than the female one.
- (b) There is no significant difference between the senior and junior teachers in their mean attitude scores towards teaching ICT but the mean score towards the attitudes of ICT of senior teachers is slightly less than the junior teachers.
- (3) There is significant difference between the arts and science teachers in their mean attitude scores towards teaching ICT because the total mean score of the science teachers is greater than the arts teachers.

Delimitations of the Study:

The present study has been delimited to the following conditions:

- (1) It has been delimited to the teachers of teachers' training colleges of the Manipur State, India.
- (2) Only five teachers' training colleges' viz. D.M. College of Teacher Education, imphal (established in the year 1972), Kanan Devi Memorial College of Education, Pangei (established in the year 1998), Thokchom Ibotombi Institute of Teacher Education and Training, Bishnupur (established in the year of 1998), Trinity Teacher Training College, Koirengei (established in the year 2001) and R.K. Sanatombi Devi College of Education, Imphal (established in the year of 2002) have been selected as the college sample of the study.
- (3) The Hindi Teachers Training Institute, Imphal (established in the year 1953) and IRE , Wangjing (established in the year 2010) have not been included in the college sample of the study because Hindi Teachers Training Institute is something different from the institutional characteristics of the above mentioned colleges and the IRE is the newly established teachers' training college in Manipur.
- (4) The teacher sample has been confined to only fifty teachers from the selected five colleges of Manipur state, India.

Suggestions for Further Study:

- (1) The same study can be done by selecting teachers from other general as well as professional colleges of the state also.
- (2) By increasing the teacher sample size, the same study can be done in the same state also.
- (3) Comparative study can also be applied in the same area for two genders based on the teaching experience of the teachers.

Conclusion:

The present study is concluded that male and female as well as science and arts teachers' training college teachers have significant difference in their attitudes towards Information and Communication Technology (ICT) whereas this attitude of senior teachers has not been found significant difference between the senior and junior teachers' training college teachers. It also has found that the knowledge of ICT will be highly helpful in the development of educational institutions.

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