

## Pupil Teachers' Attitude towards ICT Integrated Teaching Learning: A Study

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**ABSTRACT:** Information and communication technology is used as a tool in the classroom for a variety of tasks, including management of the school, teaching and learning of ICT-related skills to improve the presentation of student work, teaching and learning of receptive tasks, teaching and learning of intellectual thinking and problem-solving skills, and encouraging students' and teachers' imagination and creativity in their research. It is also used as a tool for communication. The goal of the current research was to determine how student teachers felt about ICT-integrated education in relation to factors including gender, academic specialty, and place of residency. Students at a teacher education institution in the Paschim Medinipur area of West Bengal made up the study's population for this reason. There were 130 pupils and instructors in the sample. The attitudes of student teachers about the use of ICT in teaching and learning were assessed using an attitude scale created by Zare-ee, Shekarey, and Fathi Vajargah in 2009. Data acquired on this research were evaluated using Median, Standard Deviation and t-test. The study's findings show that there are no statistically significant differences in the attitudes of male and female student teachers regarding ICT-integrated education, nor are there any between rural and urban student teachers.

**KEYWORD:** Communication, Urban Student, ICT-Integrated Education, Problem-Solving Skills, Teaching and Learning..

**Background of the Study:** ICT is a catalyst for numerous changes, possibilities, and facilities for the growth of students and instructors in the twenty-first century. The integration of ICT in the area of teaching learning-process provides substantial change and improvement in the teacher's competence in the field of education both in developed and developing countries. IT facilitates the development of a friendly atmosphere and offers the chance for information to be transmitted more easily, which benefits both instructors and students in developing their academic horizons. The development of teaching abilities among instructors at all levels is one of the key tenets of ICT-based instruction. The instructors must be appropriately equipped to learn more about the theoretical and practical applications of ICTs, in order to assist them deal with the variety and heterogeneity that are common problems in the classroom. The ICTs play critical part in creating curriculum as per the demands of the students and society; on the other hand, it also assists for meticulous planning, management of resources and constant professional assistance to the instructors in academic viewpoints. Further considerations about the results of educational research—for which ICT also plays a crucial role—are required when developing ICT-based curricula. The purpose of education is to aid students in building knowledge and developing skills that help them improve their prospects in life. It also aims to equip students

with the tools they need to contribute to national growth and development for the welfare and prosperity of society and the nation, where the importance of ICTs should never be understated. Consequently, it can be said that using ICT in the teaching-learning process makes it feasible for individuals to grow as well as for the community and society to develop sustainably. The main goal of higher education institutions and training programmes is to prepare teachers with useful, vivid knowledge and abilities, where ICTs also play an important role. With the fast expansion of information in the 21st century and the simultaneous availability of much of it to both students and instructors online, teaching has emerged as one of the most difficult occupations. The concept of learning has changed in the modern period from the acquisition of knowledge to the creation of knowledge. Teachers now play the role of facilitators and provide their pupils complete freedom to encourage autonomous study. Innovative instruments' usage in technology has opened up new career opportunities for teachers, but it has also increased pressure on them to become proficient in using the right tools to engage and motivate their students. Just having ICT tools in schools or college will not ensure their efficient usage, for this various forms of orientation and refresher training courses are necessary. One of the most effective tools for enhancing the teaching-learning process and raising educational quality is information and communication technology (ICT). ICT makes learning and teaching an active activity that is tied to real life.

**Introduction:** Modern civilization is so permeated by ICT that many nations now consider information and communication technology literacy and numeracy to be key components of basic education. ICT has the potential to be a useful instrument in improving the quality of teaching and learning, therefore it is more than simply another topic for students to study. For instance, the usage of radio programmes in the classroom may provide engaging and pertinent information in a variety of topics, such as social studies and English language, while computer simulations and visualization tools can assist students in learning difficult ideas in more tangible ways. ICT is not being used to its full potential in the Asia-Pacific region for improving the quality of teaching and learning, according to a study of its member nations. There are obstacles to be overcome on the technological and capacity levels. Due to technical obstacles (such as a lack of infrastructure, equipment, and connectivity), many countries in the region do not use ICT in their educational systems at all. However, even in nations where these obstacles have been removed and ICT is used in classrooms, there are still other types of obstacles. ICT is often employed in these nations just as an addition to current instructional methods. Yet, ICT must be completely incorporated into pedagogical processes in order to realize its full potential as a tool for improving teaching and learning. This calls for a mental change on the part of educators, curriculum creators, administrators, and policy makers.

## REVIEW OF LITERATURE

**Gupta. M, (2017)** attempted to look at how potential teachers felt about using ICT by comparing C.C.S. University in Meerut to Kurukshetra University in Kurukshetra. The study's primary goal was to compare male potential instructors at Kurukshetra University and C.C.S. University, Meerut, in terms of their attitudes about using ICT. (2) To assess the differences in attitudes about the usage of ICT between female future teachers at Kurukshetra University and C.C.S. University, Meerut. 80 aspiring teachers from Saharanpur and 80 aspiring teachers from Yamuna Nagar districts made up the study's sample. "ICT Attitude Scale" was designed and standardised by the researcher with the support of his mentor. The study's conclusions show that on the dimensions of "Knowledge," "Presentation," and overall "ICT Attitude Scale," there were no significant differences between prospective male teachers at C.C.S.U. Meerut and prospective male teachers at K.U. Kurukshetra. The attitudes of aspiring female C.C.S.U. instructors about the usage of ICT did not significantly vary from one another. On the "Knowledge" component of the ICT attitude scale, Meerut and prospective female teachers at K.U. Kurukshetra had higher positive attitudes than prospective female teachers at C.C.S. University Meerut, and this difference is significant at the 0.05 and 0.01 level of

significance. On the overall "ICT Attitude Scale," there were no significant variations in the attitudes of potential female teachers at C.C.S.U. Meerut and those at K.U. Kurukshetra.

**Dixit. M. A (2015)** research was done in to determine how teachers-in-training felt about teaching using information and communication technologies. 200 teacher trainees from the Punjabi state's Moga district made up the sample. The data was gathered using the T. Pardeep Kumar (2013) designed and standardised ICT teaching attitude scale (ICTTAS). The mean, standard deviation, and t-value statistical methods were utilised. The findings indicated that attitudes about teaching information and communication technology are influenced by characteristics including location and the gender of teacher candidates.

**Meher. V et al. (2020)** do a descriptive and comparative investigation of the attitudes of instructors at Gangadhar Meher University in Sambalpur about the usage of ICT. In this research, an effort has been made to compare instructors' attitudes according to their sex and academic stream. The descriptive cum causal comparative approach was used for this research, and 60 instructors were selected at random. A standardised attitude scale was utilised to gather the data. The study's results showed that 40% of instructors and close to 60% of teachers had favourable attitudes about the employment of ICTs in the teaching-learning process. The study's results also showed that there were no notable differences in teachers' attitudes on their sex and stream.

**Significance of the Study:** In the teaching-learning process, when instructors' attitudes are generally favourable, the use of information and communication technology (ICT) is crucial. This was demonstrated by an examination of the relevant literature referenced above. Practically speaking, it may be claimed that there is a disconnect between instructors' and students' aspirations and realities of the classroom. As a result, the desire of students and teachers to utilise ICTs in the teaching-learning process is affected, and it is important to focus especially on their learning experiences. The best tools for bringing about improvements and breakthroughs in social justice in the 21st century are various innovative technologies and discoveries. According to studies, using both electronic (such as computers) and written material would enable students to complete their higher education completely online and without physically attending courses on a college or university campus. ICTs play an important role in education, and both instructors and students greatly benefit from them. The purpose of the current research is to ascertain instructors' attitudes on the usage of ICT in the teaching-learning process since it makes teaching more efficient and learning simpler.

**Objectives:** The present study has been carried out with the following objectives-

1. To research the gender-related attitudes of student teachers regarding ICT-integrated education.
2. To research the attitudes of student teachers regarding academic discipline in ICT-integrated education.
3. To determine how student teachers feel about ICT-integrated education with regard to residence.

## Hypothesis:

- There are no discernible gender-based differences in attitudes about the usage of ICT.
- There isn't a big difference in how people feel about using ICT based on academic discipline
- There are no discernible differences in attitudes towards ICT usage based on Habitation.

## Methodology:

**Population and Sample:** Students from a teacher education institution in the Paschim Medinipur area of West Bengal made up the study's population. There were 130 pupils and instructors in the sample.

**Tools:** The attitudes of student teachers about the use of ICT in teaching and learning were assessed using an attitude scale created by Zare-ee, Shekarey, and Fathi Vajargah in 2009. 20 elements make up a Likert scale,

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with 1 denoting strongly disagree and 5 denoting strongly agree for positive ones. In the calculation, the weightings for the negative entries (10th & 11th) were switched.

**Method of data Analysis:** Data collected on this study were analyzed using *Median, Standard Deviation and t-test*.

## DATA ANALYSIS AND INTERPRETATION

**TABLE -1: shows the summary attitude towards the use of ICT on the basis of Gender**

Gender	N	Mean	S.D	t- ratio	level of significance
MALE	39	76.66	7.55	0.64	N.S*
FEMALE	91	77.60	7.78		

For 128 degree of freedom at 5% level of significance, the table value of 't' is 1.98. The calculated value of 't' is 0.64 which is less than the 't' value of the table. Hence the Null hypothesis "*There is no significant difference in attitude towards the use of ICT on the basis of Gender*" is not rejected. There is no significant difference in attitude towards the use of ICT on the basis of Gender.

**TABLE- 2: shows the summary of attitude towards the use of ICT on the basis of Academic Discipline.**

Academic Discipline	N	Mean	S.D	t- ratio	level of significance
ARTS	99	77.15	7.96	0.481	N.S*
SCIENCE	31	77.87	6.87		

The calculated value of t for 128 degrees of freedom at 5% level of significance is 0.48, which is less than the table value of t of 1.98. Hence the Null hypothesis is not rejected. There is no significant difference in attitude towards the use of ICT on the basis of Academic Discipline

**TABLE- 3: shows the summary of attitude towards the use of ICT on the basis of Habitation**

Habitation	N	Mean	S.D	t- ratio	level of significance
URBAN	51	78.42	6.85	1.37	N.S*
RURAL	79	76.58	8.17		

The calculated value of "t" for 128 degrees of freedom at 0.05 level of significance is 1.37 and is less than the table value of "t," which is 1.98. Hence the Null hypothesis is not rejected. There is no significant difference in attitude towards the use of ICT on the basis of Habitation.

## Findings of the Study:

- There are no discernible differences between male and female student instructors in terms of how they feel about ICT integration in the classroom.
- Regarding their attitudes regarding ICT-integrated education, rural and urban student teachers do not significantly vary from one another.

**Conclusion:** According to the investigation, there were no statistically significant differences in the attitudes of instructors towards their sex, stream, or place of residence. Therefore, it can be concluded that teachers have a strong positive attitude towards the use of ICTs in the teaching-learning process. This is due to the fact that ICTs enable teachers to teach more quickly and facilitate student learning, as well as to save valuable time when presenting their ideas on a given subject. ICTs also enable teachers to better meet the diverse needs and demands of their students. ICTs should thus be used in all facets of education.

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