

# Teachers' Perspective on Using ICT in Teaching-Learning Process in School

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## Abstract:

Incorporation of ICT in teaching practice will support teachers for enhancing the learning of students of and also classroom management. Now, ICT has taken the place of swapping traditional teaching approaches by technology-based tools along with facilities. In modern education policy, ICT is viewed as key tools for the development of students understanding, effective transmission of knowledge and promoting creativity of students. For effective implementation and integrating of ICT in classroom, teachers' role is very crucial and considered as a main facilitator. So, this study is aimed to assess and measure the teachers' perception towards ICT use in teaching practice and students' engagement in classroom. Following descriptive survey method, the research was carried out and researcher reached the conclusion after analysing the gathered data of 120 teachers. According to the outcomes, no weighty difference was observed in teachers' perception in respect of gender, locality and school management type. Compared to female teachers and rural teachers, male teachers and urban teachers showed a greater positive perception towards ICT.

**Key words:** Teaching- learning practice, ICT integration, Teachers' Attitude.

## Introduction

Education is the only resource of development of human civilization. One of the common goals of human is knowledge gain and skill development in communication and technology. In a large scale, this aims of human is being fulfilled by Information and communication technology. Off late, ICT is adopted in the classroom for the betterment of teaching learning practice. Both teacher and student may get huge learning opportunities if ICT is used systematically in teaching learning system. Technology-based education may form huge changes in education system. What is required for massive changing is proper planning and taking policy in favour of technology for education. Individual knowledges of technology, social inspirations and societal customs will shape the view of teachers on using ICT. Besides, an individual teacher may form the skill of digital literacy for introducing ICT into classroom. Understanding perception towards computer-based learning and attitude in regards ICT using is major aimed of this study. Every part of our task is influenced by technology. We must deliver our learners to an expressive, current experiences which encourage them to join in learning spontaneously. ICT has upgraded instruction in a such of ways where various task is

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being taught by the teachers easily. ICT has change traditional learning from every point. A large number of schools in developed countries make widespread practice of computer technology and internet-based multimedia to grow the level of their teaching and learning processes. This initiative must be involved into the general system of schooling.

The capacities of (ICT) are established for improving learning, teaching, and developing institutional administration. Today, ICT is adopted as a tool for improving classroom interaction and students' activity. For quick understanding of subject in secondary education system, ICT can perform in education a massive role for the student. In India, the practice of ICT is growing very fast in educational institute. For proper implementation of ICT in teaching learning process, to know the teachers' perception towards ICT is extremely essential. Hence, the current research is aimed to study the teachers' perspective on using ICT and also assess the present scenario of ICT use in schools. A clear portrait of in what way teachers feel about ICT has been given. An overview regarding preparedness of policy making of ICT integration in the context of current educational system have also been highlighted.

### **Objectives of the Study:**

- i. To study teachers' perception towards usage of ICT in teaching-learning process.
- ii. To study teachers' perception towards usage of ICT in teaching-learning process in respect of locality.
- iii. To assess teachers' perception towards usage of ICT in teaching-learning process in respect of school management type.
- iv. To know teachers' perception towards usage of ICT in teaching-learning process in in respect to their subject stream.
- v. To study the function of ICT in teaching learning process in school.

### **Hypothesis:**

H01: The perception of male and female teachers about the usage of ICT do not differ significantly.

H02: The perception of rural and urban teachers about the usage of ICT do not differ significantly.

H03: Teachers' perception on ICT use in public and private school do not differ significantly.

H04: Teachers' perception on usage of ICT do not differ significantly in relation to their subject stream.

### **Define term:**

**Information and Communication Technology:** Information and Communication Technology is referred as an electronic inter connected method for sharing content or subject. ICT works online based. Computer hardware, software, networks, online, telecommunication and others technical means. In school specially classroom, power point, projector, CAI (Computer Assisted Instruction), smartphone, laptop is used as ICT tool in teaching-learning. It also covers LAN, TV, digital cameras, radio broadcasting and educational satellite to connect students.

**Teaching-Learning process:** The interaction of teachers with students in classroom or outside classroom is referred as teaching-learning. Teaching-learning is engagement of teachers and students for sharing knowledge and understanding concept in schools. It is process which enable learners for acquiring knowledge. In this communication process, a teacher is required content knowledge and interaction skill. Assessment, planning, implementation, and evaluation is the four key step of teaching-learning process.

**Attitude-** Attitude is a mental state of readiness. Consistent organization of thoughts and rection which is influenced by a certain type of experience is called attitude. So, an individual's way of thinking, feeling and reacting is defined as attitude.

### **Limitation**

1. 120 school teachers only were taken as respondent for the current research.
2. Only four variables i.e. Gender, location of school, school type and Subject stream was covered for this study.

### **Literature Review:**

Mehra (2007) displayed school teachers' outlook emphasizing on the attitudes in Chandigarh towards usage of computer technology in classroom. This study expressed that the most of teachers intended to use ICT and have positive opinion towards computer-based learning use. The result also depicted that a training programme regarding computer assisted teaching is desired for teachers working in different school in Chandigarh.

Brandenburg. (1998) revealed that students had a positive attitude and outlook towards computer education. Some respondent highlighted that the traditional modes of teaching can be made more exciting and interesting by the computers and other online based device. Here girls felt more comfortable and positive view towards ICT in whole process of learning and education.

Kaur (2019) conducted a study to look into the overall operation of ICT and teachers' perspective towards computer based online teaching in the classroom. There was an overall positive attitude among teachers on the way to the performance of ICT in teaching learning. The study also expressed the major concerns on proper usage and deployment of ICT tools by teachers for preparing lesson plan and study plan.

Birwal (2017) studied on perception of teachers pertaining at secondary school towards positioning of ICT in education institution level class management. 120 teachers at Ghaziabad in Uttar Pradesh was selected through stratified random sampling technique. The data analysis presented that teachers at secondary and higher secondary level had a sense of positive mindset on adopting ICT.

Tyagi and Imrana (2017) researched on secondary school teachers' viewpoint on using ICT in respect to gender and school management type. As per findings, in comparison with male, the female educators presented a more optimistic view on utility of ICT and computer based online learning. This study also showed that the teachers of the government school used ICT in various academic activity compare to teachers at private school.

Pandey and Pandey (2020) emphasized in their study on attitudes of pre-service and in-service teachers toward engaging ICT. As per result, ICT is used more in teacher training institute in urban area than rural areas. This review paper also proposed to conduct more research to study the proper impact of ICT in teaching learning process.

Bhattacharyya A. and Maity N. C. (2013) conducted a comparative study on adoption of computer Technology by teacher educators. The finding depicted that significant variance was looked on functioning ICT tools between male and female teacher educators.

**Research Method:**

Descriptive survey approach was adopted by the researcher for this study.

**Variables of the Study:** In this study the researcher considered two types of variables as Independent and Independent Variable. Independent Variable is gender, subject stream of teachers and location of school. Dependent Variable is teachers’ Attitude towards use of ICT.

**Population:**

The teachers engaged in different schools in West Bengal were considered as population in this present study.

**Sample and Sampling Technique:**

The researcher selected 120 teachers working in different schools as sample through Stratified random sampling. Sample was covered from various schools located in rural, urban and municipal area in Nadia district.

**Table: 1 Sample distribution according to location of school, gender and subject stream.**

Sample		Sample Size	Percentage
Gender	Male	60	50%
	Female	60	50%
Location of School	Rural	60	50%
	Urban	60	50%
Stream of teaching	Language	40	30%
	Social Science	40	30%
	Science	40	30%
Total		120	100%

**Tools Description:**

The following self-developed tools - ‘Teachers’ perception on using ICT in teaching-learning process’ was used by the investigator. This is a five-point Likert scale that contains 25 items.

Each item was consisted with five alternate replies of identifying from "Strongly agree" to "Strongly disagree" and the score was marked from 5 to 1.

**Testing & Analysis of Hypotheses:**

**H01:** The perception of male and female teachers about the usage of ICT do not differ significantly.

**Table No: 2 presenting Mean, SD & ‘t’ Score teachers.**

Locality	Total no of Teacher	Mean	S.D	‘t’ Score	Level of Significant
Male	60	59.97	6.45	0.18	Not Significant
Female	60	58.71	7.65		

Table:2 presented that the critical value is higher than t- value (0.18). Therefore, H01 is accepted. It indicates that the male teachers demonstrated higher attitude towards ICT compared to female teachers.

**H02:** The perception of rural and urban teachers about the usage of ICT do not differ significantly.

**Table No: 3 presenting Mean, SD & ‘t’ Score teachers.**

Locality	Total no of Teacher	Mean	S.D	‘t’-Value	Level of Significant
Rural	60	28.62	3.78	0.46	Not Significant
Urban	60	28.92	3.49		

Table: 3 highlighted that the critical value is higher than t- value (0.46). H02 is accepted. It also demonstrated that Teachers in urban areas presented more favourable attitude towards ICT.

**H03:** Teachers’ perception on ICT in public and private school do not differ significantly.

**Table No: 4 Showing Mean, SD & ‘t’ Score teachers working at public and private school.**

Locality	Total No of Teacher	Mean	S.D	‘t’-Score	Level of Significant
Government School	90	46.07	8.96	1.65	Not Significant
Private School	30	55.12	6.22		

The derived t- value (1.65) is smaller as compared to critical value. So as per study outcome. H03 is permitted. Thus, it is predicted that teachers working at private school have viewed the a more optimistic outlook compared to those pertaining in public schools.

**H04:** Teachers’ perception on usage of ICT do not differ significantly in relation to their subject stream.

**Table No:5 presenting Mean, SD & ‘t’ Score of teachers concerning to their subject stream**

Locality	Total no of Teacher	Mean	S.D	‘t’-Score	Level of Significant
Humanistic	65	99.72	13.61	0.25	Not Significant
Science	55	102.01	12.26		

The estimated t- value (0.25) is smaller as regard to critical value. So, according to study outcome, H03 is allowed. Thus, it can be described that in comparison to Humanistic teachers, science teachers feel more favourable outlook on ICT use in educational institute as teaching tools.

**Major Findings:**

The following findings were revealed: -

1. No noticeable variance was viewed in teachers’ perception towards ICT in connection to their sex. Positive attitudes were becoming more common towards ICT with contrast to female teachers.
2. The research’s summery expressed that urban feel greater confidence on application of ICT than rural teachers.
3. No weighty difference was observed in teachers’ perception engaged in public and private school for the proper function of ICT. Teachers at private school displayed a greater positive outlook on ICT integration than teachers at public school.
4. No significant variance was seen in teachers’ perception towards ICT related to their area of teaching and study. Science teachers demonstrated more favourable attitudes towards ICT than social science teachers.

**Implications of the Study:**

- The educational planners will be assisted to introduce a new policy on ICT in school education programme.
- The teachers, students and others stakeholders will be benefitted for proper implementation of ICT in school.

- In incorporation of ICT in teaching-learning practice in school will also be facilitated by the study outcome.

### Conclusions:

Today, ICT is becoming a key component for most of the educational institutions. Modernization in educational technology creates a huge opportunity to progress education and learning. Information and communication technology incorporates a variety of application with electronic machine, hardware and apps for interacting with others students. ICT refers as the study for making and applying technology to promote communication and data processing. ICT has the possible to meaningfully improve training, teaching, learning and understanding in all study aspect. It empowered a technique to form educational institutions healthier. To extra increasement of teaching-learning practice, the wider education approach must integrate the effective and precise use of ICT. The study is aimed to measure the teachers' perception and attitude to ICT at different schools. Descriptive survey approach displays a significant outcome and outline of this investigation. The conclusion establishes that teachers' attitudes concerning ICT do not suggestively differ on basis of gender, academic field or school area. Teachers' attitudes show a foremost role presenting that how ICT is used. Teachers working at any type of school such as public or private should have optimistic and positive mindset toward the new invention made in technology for expand learning results. The study's conclusions are estimated that significant effect of ICT would enhance the school education planning and classroom management as well as all aspect of education.

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