Attitude of Teachers on ICT: An Empirical Study in Purba Burdwan District of West Bengal

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Abstract:

An attempt has been to analyse the attitude of teachers towards ICT in education in Purba Burdwan district of West Bengal. The study covered the sample of 100 teachers of schools and colleges of this district. A random sampling technique has been used as sampling criteria. Suitable statistical technique has been used (i.e., t-test) for the analysis of data. A self made structured questionnaire has been used for collection of data. The results indicated that no significant differences in attitude among the teachers exist according to gender, age and computer training although little variations exist of the mean values as per social strata of the respondents. Finally, this study revealed that ICT has predominant impact of education with little variation of attitudes among the teachers with respect to age, gender and training.

Keywords: *ICT, Attitude, Teachers, Age, Gender, Training.*

Introduction:

Information technology can also be referred to as information and communications technology, which emphasizes the importance of integrated and unified communications with physical communications. Information access, storing, transmission, and manipulation are made possible for all users by computers, required software, storage, and audio-visual devices. The combination of phone, video, and computer networks via a single cable or connection system is commonly referred to as information and communication technology, or ICT. In the past few decades, information and communication technology (ICT) has grown tremendously and has had a profound impact on everyone, including students. If any technical field has had a greater influence on society during the past 60 years, it is undoubtedly ICT.

Justification of the Study:

Technology for information and communication can help ensure that all students have equal access to education. the provision of excellent instruction, professional growth for educators, and effective government and management of education. The rapid increase of ICT infrastructure has brought about a considerable transformation in the education sector. In order to provide high-quality and beneficial results in education in the upcoming years, its potential must still be investigated. In the hopes that the reader would

have some understanding of the theory and practice of information and communication technology in education, the volume contextualizes the needs of the hour by discussing several elements of this technology. The educational system faces a variety of difficult problems, but there are also many creative and effective solutions that needs to be shared and utilized to curb these challenges and bringing quality in education. The present volume offers the possibility in this direction.

Brief Review of Related Studies:

According to Wastiau et al.'s (2013) study on ICT use in education, the European Commission's Directorate General Communications Networks, Content and Technology commissioned a study in 2011 to benchmark ICT access, use, and attitudes in schools across the EU27, Croatia, Iceland, Norway, and Turkey. It is one of several cross-sector benchmarking initiatives by the EU that compares country advancements toward the EU2020 goals (the EU's growth strategy for the next ten years) and the Digital Agenda for Europe.European Schoolnet and the University of Liège (Department of Education) collaborated to conduct the survey. This is the first online poll in Europe with direct student participation on the subject. Data for the survey was gathered in the fall of 2011 and work on it continued until November 2012. According to a study by Moges (2013), the quality of university education has been seriously threatened by globalization, which has been made worse by ICT (information and communication technology). ICT use in education promotes more student-centered learning environments, which frequently causes conflict between teachers and students. However, as the world quickly transitions to digital media and information, the importance of ICT in education is growing, and it will only increase more in the twenty-first century Selengor et al. (2015) observed that pre-service teachers' ICT adoption is still not as projected despite the expanding amount of technologies, resources, and information communication and technology (ICT) made available through pre-service teacher education courses. Numerous obstacles are preventing pre-service teachers from using ICT, according to research. Numerous criteria have been found by numerous researches to explain why student instructors do not feel prepared to use ICT in their classrooms. According to **Mohammed et al.** (2018) research on ICT use in education, teaching and learning languages is thought to be a complicated process. Modern teaching tools should be accessible to simplify such a complex subject because they are urgently needed. All spheres of our lives have undergone a technological revolution as a result of the Internet's recent and significant growth, and education and learning are no exception.

Statement of the Problem:

Under the above backdrop the problem of the study has been stated as, **"Attitude of Teachers on ICT: An Empirical Study in Purba Burdwan District of West Bengal".**

Objectives:

Broad Objectives of the Study:

1. To assess the attitude among the teachers and students towards the impact of ICT on education;

Specific Objectives

1. To study the difference in attitude on ICT among the teachers according to gender of the respondents;

2. To study the difference in attitude on ICT among the teachers according to age of the respondents;

3. To study the difference in attitude on ICT among the teachers according to computer training of the respondents;

Hypothesis:

$H_0 1$: No significant differences exist in attitude on ICT among the teachers according to gender in Purba Burdwan district in West Bengal;

$H_0 2$: No significant differences exist in attitude on ICT among the teachers according to age in Purba Burdwan district in West Bengal;

$H_0 3$: No significant differences exist in attitude on ICT among the teachers according to computer training in Purba Burdwan district in West Bengal;

Methodology:

The nature of this work is empirical. Teachers in the Purba Burdwan area of West Bengal's Senior Secondary and Undergraduate levels provided primary data for this study using a self-made, structured questionnaire. Data within the sample of 100 teachers was collected using a multistage random sampling procedure.

Analysis and Discussion:

Table No-1: Particulars for calculating Mean, SD, SED, t-value and Level of significance

Purba Burdwan	Gender	N	Mean	SD	SED	t-value	df	Critical Value	Remark
Teacher	Male	70	76.38	21.66	4.79	0.14	98	1.96 (P> .05)	NS
	Female	30	75.7	22.73					

Source: Researcher's calculation based on Field Survey, 2023-24

NS = Not significant

The mean, SD, and SED descriptive statistics are analyzed in Table 1, along with the t value that is calculated for comparison with the crucial value at the 0.05 and 0.01 level of significance. It is evident that female teachers mean values are higher than those of male teachers. Once more, at the significance threshold of 0.05, the computed value of t is less than the crucial value. Therefore, it can be said that $H_0 1$ is confirmed and the alternative theory is disproved. This indicates that there aren't any appreciable gender-based disparities in the Purba Burdwan district of West Bengal teachers' attitudes toward ICT.

Table No-2: Particulars for calculating Mean, SD, SED, t-value and Level of significance

Purba Burdwan	Age	N	Mean	SD	SED	t-value	df	Critical Value	Remark
Teacher	Below 50	70	78.06	21.51	4.91	0.69	98	1.96 (P > 0.05)	NS
	50 & above	30	74.68	24.78					

Source: Researcher's calculation based on Field Survey, 2023-24

NS = Not significant

Table 2 presents the mean, standard deviation, standard error, and t-value for comparison with the crucial value at the 0.05 and 0.01 level of significance. There is little doubt that 50 and above aged teachers have higher mean values than below 50 age level teachers. At the significance level of 0.05, the computed value

of t is once more less than the crucial value. $H_0 2$ is therefore considered acceptable. The findings suggest that there is no notable variations in the attitudes of Purba Burdwan district teachers in West Bengal regarding ICT based on their age.

Table No-3: Particulars for calculating Mean, SD, SED, t-value and Level of significance

PurbaBurdwan	Comp Training	N	Mean	SD	SED	t-value	df	Critical Value	Remark
Teacher	Trained	80	82.15	21.79	5.15	1.57	98	1.96 (P > 0.05)	NS
	Untrained	20	74.08	20.36					

Source: Researcher's calculation based on Field Survey, 2023-24

NS = Not significant

In addition to analyzing the mean, SD, and SED descriptive statistics, Table 3 computes the t value for comparison with the crucial value at the 0.05 and 0.01 level of significance. It is evident that trained teachers have a higher mean value than untrained teachers. Once more, at the 0.05 level of significance, the computed value of t is less than the critical value. Therefore, it can be said that $H_0 3$ is confirmed and the alternative theory is disproved. This indicates that, based on computer training in the Purba Burdwan area of West Bengal, there are no appreciable changes in the attitudes of the instructors toward ICT.

Concluding Remarks:

ICT is essential for creating teaching-learning environments. Additionally, it allows for the diversity of learning opportunities for students, including e-learning, virtual learning, skill and attitude development, and the marketing of educational resources in their entirety. It should be highlighted that instructors' attitudes toward the use of ICT in the classroom vary somewhat, particularly in terms of gender, age, and training. The technological field that has most likely had the biggest influence on society is ICT. With the growth of technology in these modern times, children are more eager to test things out. Therefore, a teacher should take on the role of a facilitator and support a child or student in making technological advancements in the proper directions. ICT can be utilized in the field of education to improve the value and quality of instruction, particularly through integration.

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