A study on attitude towards IT among pupil teachers and teachers' Educators

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Abstract:

The present study aims to study the attitude of pupil teachers and teachers' educators towards IT. For this study, the investigator used a judgmental sampling technique, and she collected 55 samples, of which 14 were males and 41 were females. An independent t-test was used to analyze the data. The "Attitude Scale Towards Information Technology for Teachers," designed by Drs. Nasrin and Fatima Islahi have been employed to collect data. There are 30 items, including four dimensions, in the research tool.The study found that Attitudes towards IT among pupil teachers and teachers› educators did not differ with respect to gender and locality.

Keywords: Attitude, IT, Pupil Teachers and Teachers' Educator.

Introduction:

It is an era of technology. Today, we can hardly imagine a day without using technology. Technology is being used extensively in the teaching and learning process. Therefore, it is critical that educators adopt a positive mindset regarding the use of technology in the classroom. The Covid-19 pandemic showed us why technology is so important in the teaching-learning process. In this study, the investigator tried to find the Attitude towards IT among pupil teachers and teachers' educators. The study aims to study the interest and Attitude of Pupil Teachers and Teachers' Educators towards IT.

Conceptual Framework:

Attitude: Evaluative remarks on individuals, things, and events are commonly employed to characterize attitudes. These remarks may be complimentary or critical. One's attitude conveys one's sentiments about a certain thing, occasion, or person.

IT: Information technology (IT) is the creation, processing, storing, securing, and exchanging of all types of electronic data through the use of computers, networking, storage, and other hardware, infrastructure, and procedures.

Pupil-Teachers: Pupil-teachers: The term "pupil-teacher" was used to refer to a widely used teacher preparation program before the turn of the 20th century. As mass education gained traction at the beginning of the nineteenth century, there was an increased demand for educators. It was clear by 1840 that students were not receiving enough academic preparation in a college system to become teachers. Britain established a structured

student-teacher system in 1846 with the goal of preparing middle-class teachers. Under this system, a senior student who was at least thirteen years old worked as an apprentice for five years, usually to gain experience in the teaching field. During their time as student-teachers, they completed their own education and taught younger students by observation and hands-on experience.

Teachers Educators: Engaging closely with teachers, teacher educators are essential professionals who have significant impacts on the work performance, professional development, and career advancement of teachers. Those who teach students and teachers with the aim of supporting their professional development are known as teacher educators. They participate in a range of professional activities to facilitate educators' development, including serving as role models for good instruction, offering evaluations of educators' work, and openly supporting the teaching profession.

Objectives:

- To study the Attitude of Pupil Teachers and Teachers' Educators towards IT.
- To study the Teachers' interest in and acceptance of IT among pupil teachers and teachers' educators.
- To study the importance of IT in the teaching-learning process.

Hypothesis:

H01: There is no significant difference in Attitude towards IT among Pupil Teachers and Teachers' Educators in relation to their gender.

H02: There is no significant difference in Attitude towards IT among Pupil Teachers and Teachers' Educators in relation to locality.

H03: There is no significant difference in Teacher's Interest and acceptance towards IT among Pupil Teachers and Teachers' Educators in relation to their gender.

Review of Literature:

Ritu Sarkar (2013) discovered that the average attitude scores were somewhat higher, indicating that secondary school students and teachers do have a positive attitude towards technological practices. This means that they are enthusiastic about learning about different technological practices and enjoy teaching and learning about information communication, technologically related content, and various recent trends. As a result, not much effort is made to train student instructors in technology practices, and they will be able to adequately inform their secondary school pupils about the numerous technological practices in the teaching-learning process.

The majority of students and teachers agreed, according to **Bandana Kumari's (2021)**

research, that different information and communication technology devices offer improved access to information for instruction. Information and communication technology is highly beneficial in providing greater access to knowledge, according to 98.5% of pupil teachers who practiced teaching. Of them, 57% strongly agreed, and 41.5% simply agreed.

Methodology:

Research technique can be conceptualised as the study of concentrating on the direction of the investigation. It is basically a technique for methodically resolving a research challenge. The researcher must be familiar with both research methods and methodology, which outline the numerous stages a researcher often takes when examining a research topic in order to guarantee seamless research procedures.

- **Variables:** Anything that changes over time is called a variable. Researchers have used Attitude towards IT, Gender, Locality and Teacher's Interest and acceptance towards IT as variables in this study.
- **Research Method:** The approach the researcher took to carry out the investigation is referred to as the research method. The descriptive survey approach was used to carry out the investigation. Here, the researcher collected data from the sample as they exist. The study was conducted in natural settings.
- **Sampling:** 55 pupil-teachers and teachers' educators were taken as samples, 14 of which were male and 41 female. A judgemental sampling technique was used to collect the data.
- **Data collection tools:** A standard tool for data collection was selected. The "Attitude Scale Towards Information Technology for Teachers," designed by Dr Nasrin and Fatima Islahi have been used to collect the data.

Data analysis techniques: An independent T-test was used to analyse and interpret the collected data.

Results:

$H_0$1: There is no significant difference in Attitude towards IT among Pupil Teachers and Teachers' Educator in relation to their gender.

Table 1: Attitude towards IT among Pupil Teachers and Teachers' Educator in relation to their gender

Category	Sample Size	Mean value	S.D value	Standard error of the mean	T-value	Significant
Male	14	116.64	10.49	2.80	1.81	NS
Female	41	110.76	10.64	1.66		

NS= Not Significant at 5% and 1% level

df= $N_1 + N_2 - 2 = 14+41-2 = 53$

(According to the t table)

t= 2.01 at 5% significant level

t= 2.67 at 1% significant level

Interpretation: Here, the value of the T ratio is 1.50, which is less than 2.01 at a 5% significant level and also less than 2.67 at a 1% significant level. So, the null hypothesis is accepted at 5% as well as 1% significant levels.

$H_0$2: There is no significant difference in Attitude towards IT among Pupil Teachers and Teachers' Educators in relation to locality.

Table 2: Attitude towards IT among Pupil Teachers and Teachers' Educators in relation to locality

Category	Sample Size	Mean value	S.D value	Standard error of the mean	T-value	Significant
Municipality	15	116.07	11.96	3.09	1.50	NS
Panchayat	40	110.83	10.15	1.60		

NS= Not Significant at 5% and 1% level

df= $N_1 + N_2 - 2 = 15+40-2 = 53$

(According to the t table)

t= 2.01 at 5% significant level

t= 2.67 at 1% significant level

Interpretation: Here, the value of the T ratio is 1.81, which is less than 2.01 at a 5% significant level and also less than 2.67 at a 1% significant level. So, the null hypothesis is accepted at 5% as well as 1% significant levels.

$H_0$3: There is no significant difference in Teacher's Interest and acceptance towards IT among Pupil Teachers and Teachers' Educators in relation to their gender.

Table 3: Teacher's Interest and acceptance towards IT among Pupil Teachers and Teachers' Educators in relation to their gender

Category	Sample Size	Mean value	S.D value	Standard error of the mean	T-value	Significant
Male	14	35.5	2.95	0.79	2.42	S
Female	41	33.05	4.08	0.64		

NS= Not Significant at 5% and 1% level

df= $N_1 + N_2 - 2 = 14+41-2 = 53$

(According to the t table)

t= 2.01 at 5% significant level

t= 2.67 at 1% significant level

Interpretation: Here, the value of the T ratio is 2.42, which is greater than 2.01 at a 5% significant level but less than 2.67 at a 1% significant level. So, the null hypothesis is accepted at 5% but rejected at 1% significant levels.

Findings and Discussion:

- It was found in that study that there is no significant difference in attitude towards IT among pupil teachers and teachers' educators in relation to their gender at significant levels of 5% and 1%. 22%, 57%, and 21% of male samples showed Highly Favourable Attitude, Positive Favourable Attitude, and Moderate Favourable Attitude towards IT, respectively. 2%, 5%, 54%, 37%, and 2% of female samples showed Extremely Favourable Attitude, Highly Favourable Attitude, Positively Favourable Attitude, Moderate Favourable Attitude, and Unfavourable Attitude towards IT, respectively.

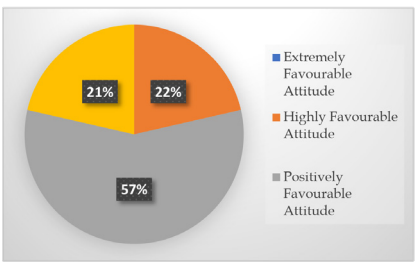

Figure 1: Attitude towards IT among Male Pupil Teachers and Teachers' Educator

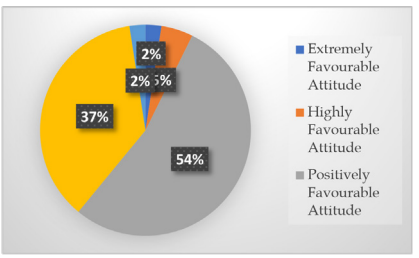

Figure 2: Attitude towards IT among Female Pupil Teachers and Teachers' Educator

It was found in that study that there is no significant difference in attitude towards IT among pupil teachers and teachers' educators in relation to locality. 7%, 13%, 60%, and 20% of samples living in the municipality are shown as having Extremely Favourable Attitudes,

Highly Favourable Attitudes, Positively Favourable Attitudes, and Moderate Favourable

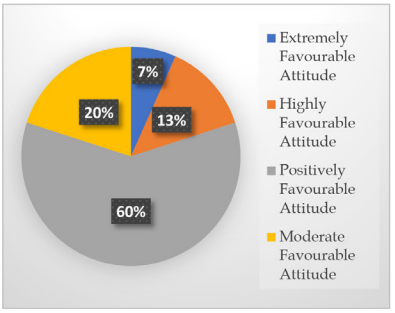

Figure 3: Attitude towards IT among Pupil Teachers and Teachers' Educator living in municipality area

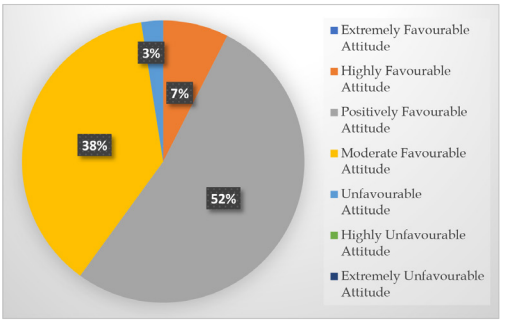

Figure 4: Attitude towards IT among Pupil Teachers and Teachers' Educator living in Panchayet area

Attitudes toward IT, respectively. 7%, 52%, 38%, and 3% of samples living in the panchayet area are shown as having Highly Favourable Attitudes, Positively Favourable Attitudes, Moderate Favourable Attitudes and Unfavourable Attitudes towards IT, respectively.

It was found in that study that there is a significant difference in teachers' interest and acceptance towards IT among pupil teachers and teachers' educators in relation to their gender at the 5% level of significance but not at the 1% level of significance.

Importance of IT in teaching learning:

Students' use of information technology fosters greater creativity: Enhancing knowledge and abilities through the use of IT in the classroom helps students gain the necessary expertise to thrive in today's ever-changing world. People are exposed to new advances through technology, which stimulates their interest in a variety of fields that call for creativity and innovation. They investigate the capabilities and limitations of AI tools in the field of education, learning how accurate Zero GPT and other AI detectors are. When it comes to excessive reliance on technology for creative tasks like paper writing or individual project planning, they adopt a different approach.

Information technology encourages educational diversity. Technology makes a wide range of educational resources possible, such as graphic organisers, reading guides, listening systems, and other assistive learning tools for children with special needs. Because it enables people to attend classes and learn regardless of their financial situation or disability, it improves diversity. Additionally, because they can readily access knowledge whenever they need it, it enables students of all ethnic backgrounds and those who struggle with learning issues like poor focus to learn at their own speed.

Information technology increases students' and teachers' access to knowledge and information: Resources for online learning assist educators and students in broadening their knowledge in a variety of fields. For example, study resources are accessible to anyone

over the internet, regardless of their location or other constraints. Furthermore, discussion boards and remote learning enable students to communicate and exchange knowledge whenever it is convenient for them.

Students can find plenty of educational resources on the internet, which is also a great data source. To make it easier to access research resources and save them, the majority of educational institutions are switching to online libraries.

IT in the classroom to improve students' interaction: By encouraging active learning and engagement among students—particularly those who learn best visually or auditorily—the integration of information technology into the classroom helps pupils develop their interpersonal skills. Voice recorders, web design editors, spreadsheets, word processors, and graphic editing software are examples of technological tools that pique students' attention and foster a positive attitude towards learning, which in turn encourages them to express their thoughts. Moreover, they encourage involvement even from introverts. For example, students can express their thoughts without worrying about criticism when they participate in online discussion boards. These kinds of programs encourage critical thinking and teamwork.

Provides pupils with the necessary skills for the labour market: By teaching students how to use skills like creating PowerPoint presentations and typing with a Microsoft Word processor in a real-world setting, information technology integration in the classroom helps students get ready for the future. Teachers should, therefore, begin introducing students to instructional technology at a young age.

Delimitations of the Study:

- Data has been collected from Cooch Behar, Alipurduar, and Jalpaiguri districts only.
- Only 55 samples are taken to conduct the study.
- Data are collected from students, teachers, and educators at B.Ed. and D.El.Ed. College only.

Conclusion:

- In this study, the investigator pointed out the importance of technology in the teaching-learning process and also tried to find out the Attitude towards IT among pupil teachers and teachers' educators. Given the importance of technology in today's educational process, both educators and learners must approach it with the appropriate mindset. So, it is important that we make students and teachers aware as only 11% of the samples showed Extremely Favourable Attitudes and Highly Favourable Attitudes towards IT. 21% of the males and 39% of the females

are shown below with a positively favourable attitude towards IT. So, there is a space for improvement in the attitude of pupil teachers toward IT.

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