

# An investigation on awareness of B.Ed. trainees to use Information and Communication Technology in West Bengal

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**Abstract:** The world has dramatically altered over the last two years due to the emergence of the deadly new Corona virus COVID-19. This has caused the globe to be significantly different than before. In these challenging times, Information and Communication Technology (ICT) has arisen as a major way to solve problems created by the epidemic and adjust to the new realities of day-to-day life. This research was done to explore ICT awareness level among B.Ed. trainees and investigate the disparities in levels of awareness between male and female, rural and urban, and science and arts-trainees. Questionnaires were developed by the respondents in two districts from West Bengal named Paschim Medinipur and Burdwan. One hundred B.Ed. trainees from Paschim Medinipur B.Ed. Colleges and one hundred B.Ed. trainees from Burdwan B.Ed. Colleges took part in the management of the questionnaire. The questionnaire consisted of 20 questions, three-point scales with three possible answers, "Yes," "To some extent," and "No," and each of the answers is equivalent to a score of two, one, and zero, respectively. As shown by the number of surveys, there were eight categories of 1-5 unsatisfactory, 5-15 poor, 15-20 average, 20-25 Above average, 25-30 Good, 30-35 Very Good, 35-38 Excellent, 38-40 Exceptional. This data was examined by using sample number (N), degrees of freedom (df), Mean (M), Standard Deviation (S.D.), Mean to Mean Standard Error ( $S_{ED}$ ), and the t-test. The data indicates that neither male nor female B.Ed. trainees for both the district demonstrate any significant differences in ICT awareness levels, however in contrast, urban B.Ed. trainees are much less aware compared to rural B.Ed. trainees. Burdwan B.Ed. trainees have the most profound gap in ICT knowledge level between science and arts-trainees, as opposed to Paschim Medinipur B.Ed. trainees.

**Key Word:** ICT, ICT awareness, B.Ed. trainee, degrees of freedom, Mean, Standard Deviation, Mean to Mean Standard Error ( $S_{ED}$ ), 't'-test.

Date of Submission: 16-01-2022

Date of Acceptance: 31-01-2022

## I. Introduction

ICT stands for information technology that includes computers, software, and video and teleconferencing systems that allow everyone to access, store, transfer, and organize information. The great benefit of an integrated telephone system is economies of scale (the reduction in network complexity through the use of a single-hose, unified cable, and signal distribution, as well as centralized management. However, the concepts, methods, and applications in ICT are rapidly changing daily. ICT covers all products that will store, retrieve, transfer, or input information; for example, personal computers, e-mail, modern-day robots, and e-television. In education, there has been considerable progress in ICTs, particularly for students. ICT has significantly changed the course of society in the past half-century. Because computers, smartphones, and intelligent agents are part of our daily lives, it is easy to see the technology at work in every aspect of our activities [1]. Still, it's critical to a broader range of uses, such as healthcare, energy production, and distribution industries. In that case, this progress has allowed us to obtain immediate access to whatever information we need. Nowadays, children want to try things, so teachers should assist and encourage their students to move in the right direction. The information communication technologies in education can increase the quality and value of education, primarily by providing relevant information for students. The important role of communication technology is to make universal access possible to education better and provide high-quality teaching and administration possible. Still, it can also assist in more efficient governance and administration, especially when it comes to enhancing teachers' abilities. UNESCO views ICT in education holistically and comprehensively. The use of digital computers to process and apply information is known as ICT. The concept is designed to hold, convert, transmit, and transmit again [2]. The word "ICT" may be used to refer to all forms of communication, including telephones, faxes, radios, cellular phones, television, e-mails, and other services, such as

videoconferencing [3]. Computers cover all types of information creation, design, storage, transmission, and manipulation methods. Computers, laptops, tablets, mobile phones, and TV are just a few diverse ICT gadgets. When you create and share definitions, you're making information available to others. They also argue that digital/electronic information is required. IT and telecommunications equipment are not commonly described as IT; on the contrary, many other systems, processes, and processes outside of computing have been called creative (mobile phones, printers, scanners, etc.). The United Nations Educational, Scientific, and Cultural Organization (UNESCO) proclaims that ICT is a scientific, engineering, and technical discipline used to manage information for social, economic, and cultural purposes. Using suitable ICT may profoundly affect how students learn, covering topics and ways of learning [4].

## **II. Literature Review**

Garrison and Anderson (2003) proposed that communication and dissemination technologies have a multitude of educational applications. The different features include the option to rethink practice, learn and teach better, and enhance both. ICT helps enhance educational quality by assisting students in interacting and interacting, thinking critically, acquiring new material, and searching for new information, according to Yuen, Law, and Wong (2003) [5]. Conole (2004) discovered that information and communications technology have an actual impact on educational outcomes [6]. Eng (2005) discovered that new technologies positively impact learning, leading to a need for deeper ICT [7]. Yusuf (2005) found that technology profoundly affects teaching and learning in the educational realm [8]. Kay (2006) remarked that ICT had a positive impact on the educator [9]. Price and Oliver (2007) discovered that there might be similarities between his approach and technology and teaching methodologies that necessitate evolution [10]. Plomp, Pelgrum, and Law (2007) discovered that communication obstacles such as distance and time could be overcome using the ICT Teachers must employ the latest technologies to stay ahead of the changes. Higher quality of life and personal enlightenment are both helped by students' betterment of their education. When it comes to education, technology is constantly advancing, and advances in brain research are finding their way into the workplace. Educational technology moves quickly, and teachers must keep up with the changes. ICT as a form of learning is no longer theoretical; it emerged in tandem with other alternative learning theories [11]. In their study, Wang, McPherson, and Tsuei (2008) discovered that teachers must first learn the ropes before they can implement global technology. To improve people's standard of living, the process of human enlightening and empowering plays a vital role in education [12]. The demonstrable effects and efficacy of ICT on students and instructors in their research revealed by Brown, McCormac, and Zimmermann (2009) [13]. Jahani, Azadmanesh, and Vajargah (2010) report that ICTs have the potential to promote education and learning by means of collaborative learning and inquiry [14]. ICT awareness, according to Sasikala (2010), is equivalent among male and female B.Ed. students. Swamy (2010) found that a high school's students and teachers possess sound internet awareness and competence. Gulhane (2011) found that the differences between the theoretical and practical understanding of ICT concepts were insignificant [15]. Jaiswal (2011), ICT-driven infrastructure can give teachers the opportunity to play a significant role in educational excellence, instructional quality, and leading in a knowledge-based society. There are significant consequences for higher education because of the age of omnipresent technology we live in now. By using new technologies, students may become more engaged in constructing their own knowledge. According to Adebawale (2012), only a small percentage of teachers are knowledgeable about ICT [16]. Oye, Shallsuku, and Iahad (2012) This study discovered that using ICT in education enhances the effectiveness of the system for undergraduates. This new approach to education has offered an entirely new perspective on the subject [17]. The findings from Chaman Verma, Sanjay Dahiya's (2016) study concluded that educators in Haryana and Punjab universities need to achieve the ICT crises. The report also proposes several strategies for overcoming ICT vulnerabilities [18]. Khedekar and Magre (2017) found no difference in gender equality between secondary school students' awareness and technology [19]. Biswas (2017) conducted research to determine the state of ICT usage in several tribal teacher training colleges. One hundred eighty-two school district institutes for education and training surveyed questions on 342 education supervisors from 111 district training centers (DIETs). Overall, 80.7% of the printers, laptops, and personal computers that were bought were utilized in DIETs in tribal communities, with 72.1%, 69.5%, and All DIETs were found to have inadequate IT equipment, and these inadequate pieces of equipment were never utilized correctly [20]. Birwal (2017) analyzed attitudes towards using ICT in teaching among secondary school teachers. The survey approach, which is dependent on the researchers describing what they see, was used for the research. Teachers from Ghazipur, Delhi, were sampled randomly with stratified random sampling. Secondary teachers were found to have a neutral attitude towards technology, as revealed in the study. There were no problems in achieving gender and school management, regardless of which model was used [21]. Research about "a critical evaluation of the use of ICT in teachers' training institutions in West Bengal (WB)" was conducted by Sahin (2018). Using the descriptive survey approach, the researcher conducted the study. The study results indicated that both male and female, rural and urban instructors were equally likely to employ

technology [22]. A comparative study on the Thereience teachers about ICT was done by Moudgill, Lakhanpal, and ICT use Sharma (2018) [23]. Dr. Sanghamitra Ghosh (2018) concludes that in most schools in the Howrah district, the necessary ICT infrastructure is not available. Of the five high schools visited, just two urban schools have ICT infrastructure, but three rural schools do not have ICT facilities at their disposal. It has also been noted that ICT laboratories are well organized in two schools but that ICT laboratory teachers are still not appointed. The researcher also found that most schools in the district of Howrah were not adequately intermingled with the use of ICTs [24]. The overall goal of Payal and Vinod Kumar Kanvaria's (2018) research is to look at teachers' attitudes and constraints towards using technology in the classroom. Random sampling was utilized to obtain data from 10 government schools in Delhi's government sector to conduct a qualitative study. As a rule, fewer hours and a lack of teaching abilities have been the primary issues and roadblocks to instructors using ICT tools [25]. Teachers' attitudes towards ICT integration in teacher education were studied by Beri and Sharma (2019). To conduct their research, they selected 50 teacher-educators from institutions of higher education in Haryana and used purposive sampling to ensure their representativeness. The researcher had an unstructured interview to gather qualitative data. This research indicates that numerous instructors and educators neglected ICT use due to a lack of technical assistance, a lack of trust in their computer capabilities, and personal uncertainty over their computing abilities. The difficulty in using technology and the lack of relevant knowledge were other factors [26]. An investigation into teacher attitudes toward using ICT in schools was completed by Debbarma and Das (2019) in Tripura. The researchers conducted a descriptive analysis rather than an experiment to evaluate their hypotheses. After compiling a database of the teachers of the ten Dhalai district government schools, the researchers selected 150 of them for their study. 41.33% of instructors reported having good attitudes towards utilizing ICT in the classroom. the same degree of preference for Information and Communications Technology was seen in both male and female teachers [27]. In an effort to discover how teachers' attitudes and beliefs influence the usage of ICT in Indian classrooms, Kaur (2019) studied this topic. A 't' value for the ICT gender classification indicates that both male and female attitudes are equal in ICT usage [28]. The study of C. Usharani and Dr. K. Nachimuthu (2020) shows that the awareness of theory and application in ICT among teacher trainees is no significant difference. ICTs have the potential to significantly improve poor people's human and social capabilities, as well as their overall well-being [29]. Dr.Taorem Surendra Singh (2020) showed no significant difference in understanding the lesson in a classroom transaction using ICT across B.Ed. colleges [30]. Kabita Roy (2020) reveals students' attitudes, self-confidence, and proficiency for instructional resources that rely on ICT. Qualitative and quantitative methods were utilized to determine how instructors educated in the classroom to become future teachers [31]. Digvijay Pandey et al. (2020) suggest online teaching techniques; however, the research indicates that online education satisfaction is significant inside a model or attitudes of providing online class during the lock-down of a COVID-19 pandemic at a 5% significance level [32]. Dr. Vivek Nath Tripathi et al. (2020) demonstrated that most primary teacher educators in the Government had more value than private elementary teacher educators in presenting lessons, creating a learning atmosphere, exciting interest, and explaining complicated material [33]. Kaushik Das et al. (2020) demonstrate the effect of the epidemic on the Indian education system and provide useful recommendations for teaching throughout the whole pandemic. The importance of instructors and access to online education infrastructure is also highlighted. An approach utilized in this research is the qualitative approach [34].

### **The emergence of the problem**

Teaching has turned into one of India's most difficult occupations in modern times, where knowledge is increasing fast. Students and instructors have easy access to information from anywhere at any time. To a large extent, teacher education programs develop future teachers, influencing the program's overall quality. ICT had also been an essential part of schooling for the National Curriculum Framework (NCF) in 2005. It also said that "ICT, if used for linking children and instructors with scientists and university professors who operate in laboratories, can assist demystify scientists and their job." Teachers have to be flexible and make concessions to the world around them if they are to remain relevant in the future. Otherwise, their work will become obsolete, which will result in a lower quality of education. When it comes to people's faith in technology's capacity to empower educators and learners, ICT has seen a universal belief in its capability to stimulate new ways of thinking, such as being able to help with critical thinking, problem-solving, learning to communicate and learning to express ideas. ICT is a critical tool for enhancing student learning, and educators must be proficient with it to guarantee that students can fully use the benefits of educational technology. Technology may be used to teach a class in an entirely different way than doing it via the traditional method. Training teachers in these methods is a must. It necessitates an educational methodology with an emphasis on approach. Geer and Sweeney (2012) advise instructors to be taught and schooled in utilizing technology in order to be successful with it. Both instructors who are getting ready to enter the classroom and those who are teaching their first courses must have the ability to use technology well and integrate it well. Teacher educators thus need to develop new knowledge of ICT to respond to the needs and difficulties of the 21st century.

### **Statement of the problem**

To find out how ICT awareness, in terms of gender (male and female), educational background (science and arts), and geographic location (urban and rural), all connect to one another. The problem is thus stated as “An investigation on awareness of B.Ed. trainees to use Information and Communication Technology in West Bengal.”

### **Assumption of the problem**

The main aim of this investigation was to examine the relationship between the variables like ICT awareness in gender (male and female), educational field (science and arts), and area (rural and urban). Significantly, the study sought to:

- i) Investigate the ICT awareness among B.Ed. trainees.
- ii) Investigate the relationship between male and female B.Ed. trainees regarding ICT awareness.
- iii) Investigate the relationship between rural and urban B.Ed. trainees regarding ICT awareness.
- iv) Investigate the relationship between science and arts B.Ed. trainees regarding ICT awareness.

### **Study delimitation**

The study was defined under the following sub-headings:

- a) Sample: In view of certain constraints under which this investigation has to be complicated, the sample could not be extended to include a cross-section of pupils of different corners of West Bengal. Therefore, the researcher has selected samples from five rural and five urban colleges from Paschim Medinipur and Burdwan districts.
  - b) Class: 4<sup>th</sup> Sem B.Ed. Class.
  - c) Number of colleges: Five rural and five urban colleges from Paschim Medinipur and Burdwan districts.
  - d) Number of trainees: One hundred trainees from Paschim Medinipur and Burdwan districts.
  - e) Area: Five B.Ed. colleges located at rural and five B.Ed. colleges located at urban places in Paschim Medinipur and Burdwan districts.
  - f) Variables: Three variables are brought into consideration.
  - g) Tools used: A self-made standardised questionnaire was utilised to carry out the current study.
- In view of the short time available for this investigation to complete, the researcher has applied three tools,
- i) ICT awareness scale test, ii) ICT attitude scale test iii) ICT internet utilization scale test.

### **Objectives of the Study**

- Comparative analysis of ICT awareness level among B.Ed. trainees.
- Comparative analysis of ICT awareness level among B.Ed. trainees concerning gender (male and female).
- Comparative analysis of ICT awareness level among B.Ed. trainees concerning area (rural and urban).
- Comparative analysis of ICT awareness level among B.Ed. trainees concerning stream (Arts & Science).

### **Hypothesis (H)**

- H<sub>01</sub>: B.Ed. trainees would have a significant difference in using ICT.
- H<sub>02</sub>: Male and female B.Ed. trainees would have a significant difference in using ICT.
- H<sub>03</sub>: Rural and urban B.Ed. trainees would have a significant difference in using ICT.
- H<sub>04</sub>: Science and arts B.Ed. trainees would have a significant difference in using ICT.

### **Significance of the study**

Teacher is influential because they shape the way of thinking of the nation. Teachers have always had a leading role in helping to discover new frontiers, supporting the advancement of societies, and progressing towards new levels of progress. Teachers and teacher educators face an array of individualized needs that cannot be met by the job description alone. Teachers must face an inexhaustible variety of problems in their daily jobs. They have the most up-to-date and comprehensive studies on teaching technology; this furthers their abilities. To conclude, effective use of educational technology and teaching strategies can help solve the country's issues.

One of the most significant problems confronting teachers is dealing with the need to keep pace with the changing landscape of learning. Teacher trainees are essential to the teaching of any teacher training program. Teacher education cannot be expected to result in any qualitative change. ICT is excellent for handling problems, developing theories, and enabling students to exercise their reasoning and imagination as a result. Effective ICT serves as a solution to many everyday classroom problems. A particular study set out to discover the understanding of information and communication technology among teachers with additional

training was conducted. Several studies have already been undertaken on ICT. An investigation will be shown to discover whether or not trainees are aware of the ICT available in Paschim Medinipur and Burdwan districts.

**Data collection procedure**

After creating the questionnaire form, the researcher filled up all forms with varied responses from the Paschim Medinipur and Burdwan districts B.Ed. students. The researcher used both offline forms or hard copies or online forms (google form).

**Table no 1: Samples distribution in two districts.**

District name	Rural B.Ed. college	No. of B.Ed. trainees per college	Total B.Ed. trainees in rural colleges	Urban B.Ed. college	No. of B.Ed. trainees per college	Total B.Ed. trainees in urban colleges	Total B.Ed. colleges	Total B.Ed. trainees
Paschim Medinipur	5	10	50	5	10	50	10	100
Burdwan	5	10	50	5	10	50	10	100

**The symbols that were used in the statistical table**

N = Samples number

M = Mean,  $\sigma$  = Standard Deviation (S.D)

$S_{ED}$  = Mean-to-Mean Standard Error

t = Critical ratio

df = degree of freedom

NS/S = Not significant or significant

**Statistical methods and formulas**

Data has been analyzed by the methods of Mean, Standard deviation, and t-test. The systematic representation of different approaches with their formulas has been given below.

$$M = \sum X/N$$

$$S.D = \sigma = \sqrt{\{N \sum X^2 - (\sum X)^2\} / N}$$

**Critical ratio test (t):**

$$t = (M_1 - M_2) / S_{ED}$$

$$S_{ED} = \sqrt{\left(\frac{\sigma_1^2}{N_1} + \frac{\sigma_2^2}{N_2}\right)}$$

**III. Result and Discussion**

**Testing of  $H_{01}$ :**

The first objective was to study ICT awareness level among B.Ed. trainees. The outcome was displayed in the table below.

**Table no 2: ICT awareness level among the Paschim Medinipur B.Ed. trainees.**

Serial number	ICT awareness level	Frequency	Percentage (%)
1	unsatisfactory	8	8
2	poor	12	12
3	average	11	11
4	Above average	18	18
5	Good	13	13
6	Very Good	10	10
7	excellent	25	25
8	exceptional	3	3
Total		100	100

Table no 2 shows that 8% of Paschim Medinipur B.Ed. trainees are unsatisfactory, 12% are poor, 11% are average, 18% are above average, 13% are good, 10% are very good, 25% are excellent, and 3% are exceptional level of awareness of ICT. Overall, the ICT awareness level among trainees is excellent.

**Table no 3: ICT awareness level among the Burdwan B.Ed. trainees.**

Serial number	ICT awareness level	Frequency	Percentage (%)
1	unsatisfactory	13	13
2	poor	9	9
3	average	15	15
4	Above average	21	21
5	Good	17	17
6	Very Good	9	9
7	excellent	14	14

8	exceptional	2	2
Total		100	100

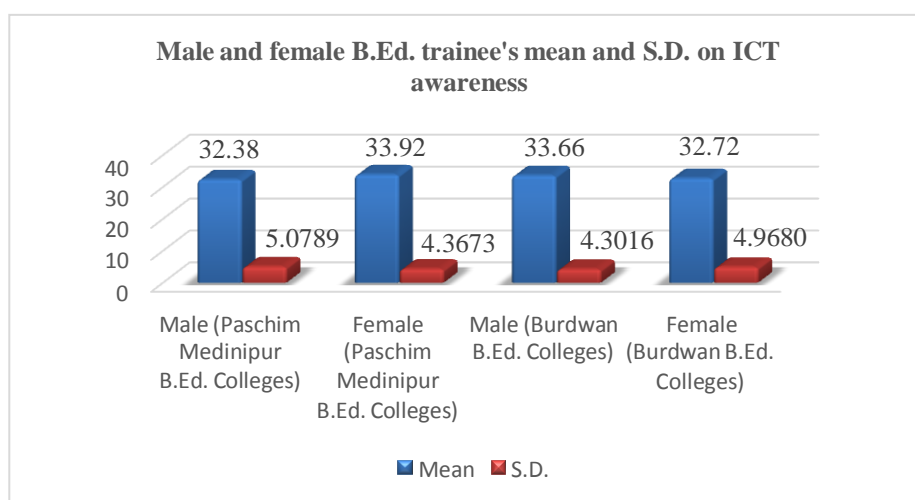
Table no 3 shows that out of 100% Burdwan B.Ed. trainees; 13% are unsatisfactory, 9% are poor, 15% are average, 21% are above average, 17% are good, 9% are very good, 14% are excellent, and 2% are exceptional level of awareness of ICT. Overall, the ICT awareness level is above average among the trainees.

**Testing of H<sub>02</sub>:**

The second objective was to compare the ICT awareness level among male and female B.Ed. trainees. The outcome was displayed in the table below.

**Table no 4: ICT awareness level among male and female B.Ed. trainees.**

District name	Institution	Male trainees			Female trainees			degrees of freedom (df)	't'-value
		M <sub>1</sub>	N <sub>1</sub>	σ <sub>1</sub>	M <sub>2</sub>	N <sub>2</sub>	σ <sub>2</sub>		
Paschim Medinipur	Paschim Medinipur B.Ed. Colleges	32.38	50	5.0789	33.92	50	4.3673	100	1.6256
Burdwan	Burdwan B.Ed. Colleges	33.66	50	4.3016	32.72	50	4.9680	100	1.0114



**Fig. 1: Male and female B.Ed. trainee's mean and S.D. on ICT awareness**

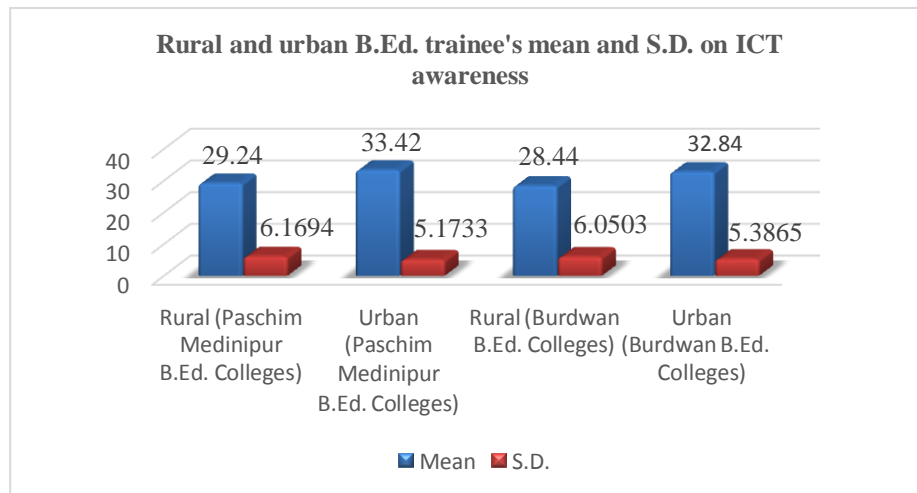
Table no 4 demonstrates that for Paschim Medinipur B.Ed. Colleges, female B.Ed. trainees have a mean value that is more than male B.Ed. trainees, whereas for Burdwan B.Ed. colleges, male B.Ed. trainees have a mean value that is more than that of female B.Ed. trainees. The 't' value for 100 degrees of freedom at 5% and 1% significance level is 1.984 and 2.626. Table no 4 shows that the obtained value of 't' for Paschim Medinipur B.Ed. trainees and Burdwan B.Ed. trainees are 1.6256 and 1.0114, respectively, which is smaller than the t value at 5% and 1% significance level. Thus, the significance level is not between 5% and 1%. Consequently, the ICT awareness level among male and female B.Ed. trainees is insignificant.

**Testing of H<sub>03</sub>:**

The third objective was to compare the ICT awareness level among rural and urban B.Ed. trainees. The outcome was displayed in the table below.

**Table no 5: ICT awareness level among rural and urban B.Ed. trainees.**

District name	Institution	Rural trainees			Urban trainees			degrees of freedom (df)	't'-value
		M <sub>1</sub>	N <sub>1</sub>	σ <sub>1</sub>	M <sub>2</sub>	N <sub>2</sub>	σ <sub>2</sub>		
Paschim Medinipur	Paschim Medinipur B.Ed. Colleges	29.24	50	6.1694	33.42	50	5.1733	100	3.6710
Burdwan	Burdwan B.Ed. Colleges	28.44	50	6.0503	32.84	50	5.3865	100	3.8411



**Fig. 2:** Rural and urban B.Ed. trainee's mean and S.D. on ICT awareness

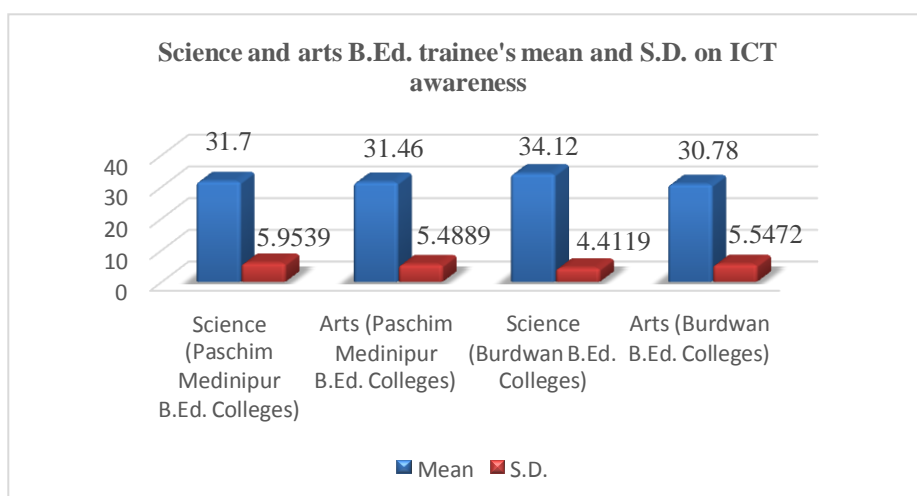
Table no 5 shows that urban B.Ed. trainees have a higher mean value than rural B.Ed. trainees for both institutions. The mean value of ICT awareness level among Paschim Medinipur urban B.Ed. trainees is greater than Burdwan urban B.Ed. trainees. The 't' value for 100 degrees of freedom at 5% and 1% significance level is 1.984 and 2.626. Table no 5 shows that the obtained value of 't' for Paschim Medinipur and Burdwan B.Ed. trainees are 3.6710 and 3.8411, respectively, which are both greater than the 't' value at 5% and 1% significance level. Hence it is significant up to both 5% and 1% significance level. Consequently, ICT awareness level for both the institution among rural and urban trainees has a significant difference. This finding suggests that urban B.Ed. trainees are less aware than rural B.Ed. trainees. In this scenario, it's very fair that the acquired value is, since urban B.Ed. trainees who can utilize ICT do so in one of two ways: officially or informally.

**Testing of H<sub>04</sub>:**

The fourth goal was to find out how far apart Science and Arts B.Ed. trainees are in terms of ICT knowledge. The results are as follows.

**Table no 6:** ICT awareness level among science and arts B.Ed. trainees.

District name	Institution	Science trainees			Arts trainees			degrees of freedom (df)	't'-value
		M <sub>1</sub>	N <sub>1</sub>	σ <sub>1</sub>	M <sub>2</sub>	N <sub>2</sub>	σ <sub>2</sub>		
Paschim Medinipur	Paschim Medinipur B.Ed. Colleges	31.70	50	5.9539	31.46	50	5.4889	100	0.2095
Burdwan	Burdwan B.Ed. Colleges	34.12	50	4.4119	30.78	50	5.5472	100	3.3320

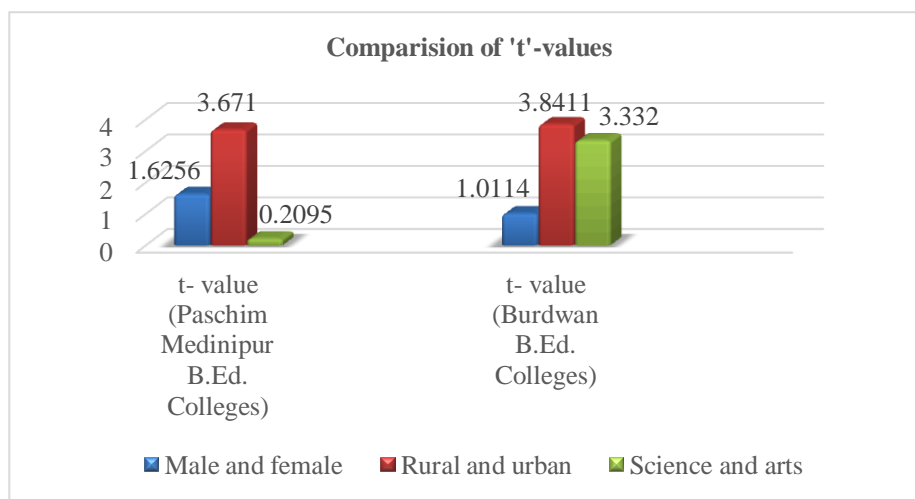


**Fig. 3:** Science and arts B.Ed. trainee's mean and S.D. on ICT awareness

Table no 6 indicates that science B.Ed. trainees tend to have higher levels of ICT awareness than arts B.Ed. trainees, but the mean value of ICT awareness level among Burdwan science B.Ed. trainees are greater than Paschim Medinipur B.Ed. trainees. The 't' value for 100 degrees of freedom at 5% and 1% significance level is 1.984 and 2.626. Table no 6 shows that the obtained value of 't' for Paschim Medinipur B.Ed. trainees and Burdwan B.Ed. trainees are 0.2095 and 3.3320, respectively. The 't' value for Paschim Medinipur B.Ed. trainees and Burdwan B.Ed. trainees are smaller and greater than the t value at 5% and 1% significance level, respectively. Therefore, the significance level is not up to 5% and 1% for Paschim Medinipur B.Ed. trainees but up to 5% and 1% significance levels for Burdwan B.Ed. trainees are significant.

**Comparison of 't' values:**

The below graph shows the comparison of critical ratio 't' values among male and female, rural and urban, and science and arts for both the institutions.



**Fig. 4** Comparison of "t" values

The 't' value indicates no significant difference in the ICT awareness level among the male and female trainees, but the urban trainees are little aware of the rural trainees for the B.Ed. colleges in both districts. Likewise, there is no significant difference in ICT awareness among the science and arts trainees for Paschim Medinipur B.Ed. Colleges, but there is a significant difference among science and arts trainees for Burdwan B.Ed. colleges.

**IV. Conclusion**

In this research work, there has been no significant difference in the ICT awareness level among the male and female trainees in both districts because both male and female trainees are more conscious about ICT equipment. The urban trainees are little aware of the rural trainees for the B.Ed. colleges in both districts because urban trainees get more facilities than rural trainees. There is no significant difference in ICT awareness among the science and arts trainees for Paschim Medinipur B.Ed. Colleges, but there is a significant difference among science and arts trainees for Burdwan B.Ed. colleges because more of the arts trainees for Burdwan B.Ed colleges are from rural areas and cannot get the appropriate facilities. However, teacher training institutes and programs must assist B.Ed. trainees in using new technology in an appropriate manner for the specific nation, socioeconomic status, and requirements. If we want to build B.Ed. trainees capability to utilize ICT for education, we must promote continuing B.Ed trainees development, mutual knowledge sharing, partnerships, and cooperation.

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