An Assessment of Attitude towards ICT among the Student-Teachers

Yengkhom David Meitei
Research Scholar(NET)
Department of Education
Manipur University
Imphal, Manipur

Prof. Keisham Shitaljit Singh
Head
Department of Education
Manipur University
Imphal, Manipur
Email: jackeisham@gmail.com

Abstract

Student teachers should possess a favourable perception towards ICT to bring forward the future students on the global stage. The researcher in the present study aimed to investigate the attitudes towards ICT among the student teachers of teacher education institutes. This study seeks to address the level of attitudes towards ICT and their significant differences between male and female, rural and urban among the student-teachers of teacher education institutes of Imphal East district of Manipur. This study also highlighted the importance of collaboration between ICT and teaching in the teaching-learning process among the teacher education institutes. Teaching with ICT tools inside the classroom is the greatest way of imparting knowledge as students can easily understand and find out the related areas of the study during the teaching process. Application of ICT in learning is very necessary as it improves the quality of education in this modern day. In the present study, Student-teachers who are the future educator has high impact on attitude towards ICT and it is clear that students of the future will gain the opportunities of the utilization of technology skills in their academic field. In the present study, it is found that there are no significant differences between the male and female, rural and urban student-teachers of teacher education institutes of Imphal East district towards the attitudes of ICT.

Keywords

ICT integration, Attitude, Student-teachers.

Reference to this paper should be made as follows:

Received: 23.05.26
Approved: 15.06.26

Yengkhom David Meitei
Prof. Keisham Shitaljit Singh

An Assessment of Attitude towards ICT among the Student-Teachers

RJPSSs 2026, Vol. LII, No. 1, Pg. 314-322
Article No.34

Similarity Check: 08%

Online available at:
https://anubooks.com/journal-volume/rjpsss-vol-lii-no1-june-2026

DOI: *https://doi.org/10.31995/rjpsss.2026v52i01.034*

https://doi.org/10.31995/rjpsss.2026v52i01.034

Introduction

The traditional education system was teacher centre that is teacher impart knowledge through demonstration or lecture to the students inside the classroom. This type of learning process is called passive learning where the teachers deliver information regarding subject matter and other useful ideas to the students without giving any cooperation between the teacher and students. Newly developed technology has transformed the academic system across the world. In the context of India, there are a lot of challenges while adapting ICT to both teachers and students inside and outside the classroom. Lack of ICT tools for academic purposes in the education sector is the main issue in our country. Learning about technology integration is ongoing instead of applying it in the teaching process. But today, our system of learning is transformed day by day with the advancement of technology. The old educational system is not fit for the present, students have to possess different kinds of skills during the teaching-learning process. In order to promote self-learning, self-actualization and critical thinking skills, students should be able to use ICT tools during their learning period. The whole world is now competing in different sector, country which have the most advanced technology try to dominate other countries that have less power in modern technology. So, in the 21st century, the teachers of our country have to gain the ability to utilize ICT utilization while imparting knowledge to the students. Learning about ICT tools is essential for the acquisition of knowledge by the teachers as they are the educators who provide different skills to the pupils of our future generations. Without ICT it will be very difficult for all of us as every task in schools, colleges, institutions and other fields of human life operates with the help of ICT. Students also faced difficulties in achieving their desired goals if they have less idea to utilize ICT tools in this modern day. Today's student teachers are the future educators they will play a vital role in shaping our future generation. It is clear that in order to achieve productive outcomes for the utilization of modern technologies by the student-teachers there should be a positive attitude towards ICT among the student-teachers. So, there is a need to reconstruct a new education system to integrate ICT in all stages of teaching-learning. New teaching styles and innovative approaches to teaching have created more demands for the current students and parents of our society. ICT resources and their application should be able to be employed by the future educators during the teaching and learning process. Utilization of ICT tools and its applicable areas in the field of education has become a vital responsibility of the student-teachers of our country.

Review of Related Literature:

Victor, S.R. (2017) conducted a study on 'Teacher-Trainees Attitude towards

ICT'. The tools used in the study include a Personal data sheet prepared by the investigator and the Attitude towards ICT Scale developed by the investigator. The objective of the study was to examine how teacher-trainees show attitude towards ICT in their teaching-learning process and the attitudinal differences in the attitude towards ICT among B.Ed. teacher trainees with respect to gender and locality. The result found that B.Ed. Teacher trainees do have a favourable attitude towards ICT and it is clearly shows that the majority of the trainees showed uncertainty in their attitude towards ICT. Moreover, it is also found that there is no significant difference in the attitude towards ICT with respect to gender and locality.

Potsangbam, A. (2022) conducted a study on 'Effectiveness of ICT on teaching learning process among CBSE affiliated secondary schools in Manipur' The aim of the study includes finding out the students' attitude towards the use of ICT in the teaching-learning process and to measure the perception of usability of ICT among the students. The result found that the students had an average attitude towards ICT and it is observed that the students had an excellent perception of usability of ICT among the students. Students' Information Sheet developed by investigator herself, Computer Attitude Scale, a standardized questionnaire developed by Dr. Tahira Khatoon and Manika Sharma, System Usability Scale, a standardized questionnaire developed by John Brooke, Computer Assisted Instruction Scale, a standardized questionnaire developed by Dr. Uzma Siddiqui, Attitude Scale towards Information Technology for Teachers, a standardized questionnaire developed by Dr. Nasrin and Fatima Islahi were the tools used for the study.

Significance of the Study

Students have more interest in learning while using ICT resources inside the classroom. By using ICT tools learning becomes easier as it can show a distinct view to the students beside explanation of the doubt area of the particular subject. ICT has become an essential part of the teaching and learning process as it reduces the complexity of the students' ideas. For a brighter future for our younger generation, the integration of ICT in learning is a major requirement of the present day. In this regard, student-teachers who are the future educators of our society need to understand the application of ICT tools especially for academic purposes. Modern technological tools which are made for teaching purposes are developed day by day. Teachers need to be aware of the newly developed tools for enhancing a better outcome in the field of teaching and learning processes. Teachers' confidence while incorporating ICT tools during teaching is very essential for the students to have more focus in their learning. Thus, the future educators of our country are required to know the important and major issues that are currently faced in teaching to the

https://doi.org/10.31995/rjpsss.2026v52i01.034

students. There is a need to know that every teaching method should be performed with the new technology for a successful outcome. A positive perception should be held towards ICT among student teachers. Furthermore, educators need to improve their teaching by using ICT.

Objectives of the Study

I. To find out the student-teachers' attitudes towards ICT of Imphal East district.
II. To determine the difference of student-teachers' attitudes towards ICT between the male and female of Imphal East district.
III. To examine the difference of attitudes towards ICT between the rural and urban student-teachers' of Imphal East district.

Hypotheses of the Study

I. There exists high level of attitudes towards ICT among the student-teachers of Imphal East district.
II. There exists significant difference in student-teachers' attitudes towards ICT between the male and female of Imphal East district.
III. There exists a significant difference in attitudes towards ICT between the rural and urban student-teachers' of Imphal East district.

Methodology

Method: For the present study, the researcher adopted the descriptive survey method of research.

Population of the Study

All the student-teachers of the teacher education institutes of Imphal East District, Manipur under Manipur University comprised the population of the study.

Sample: The sample of the present study comprised of 120 student-teachers from three teacher education institutes of Imphal West district, Manipur viz., Trinity Teacher Training College, Korangi; Kanan Devi Memorial College of Education, Pangei and The Ideal Teachers' Training Academy, Sajiwa. 40 student-teachers were selected from each institute as a sample for the present study. The total sample of student–teachers was 120.

Tools used

In the present study the following tool was used:

I. Information and Communication Technology: Attitude Scale (ICTAS) 2012 was developed and standardized by Manmohan Gupta.

Statistical Techniques Used

The researcher adopts Descriptive viz., mean, median and mode and Inferential statistics viz., t-test for analysing the collected information of the present study.

Analysis and Interpretation of Objective No.1

To find out the student-teachers' attitudes towards ICT in Imphal East district.

Table No. 1: Level of the student-teachers' attitudes towards ICT in Imphal East district.

Information Communication Technology Attitude Level	N	%age
Extremely High	18	14.2%
High	50	39.4%
Above Average	44	34.6%
Average	12	9.4%
Below Average	1	0.8%
Low	2	1.6%
Total	**127**	**100%**

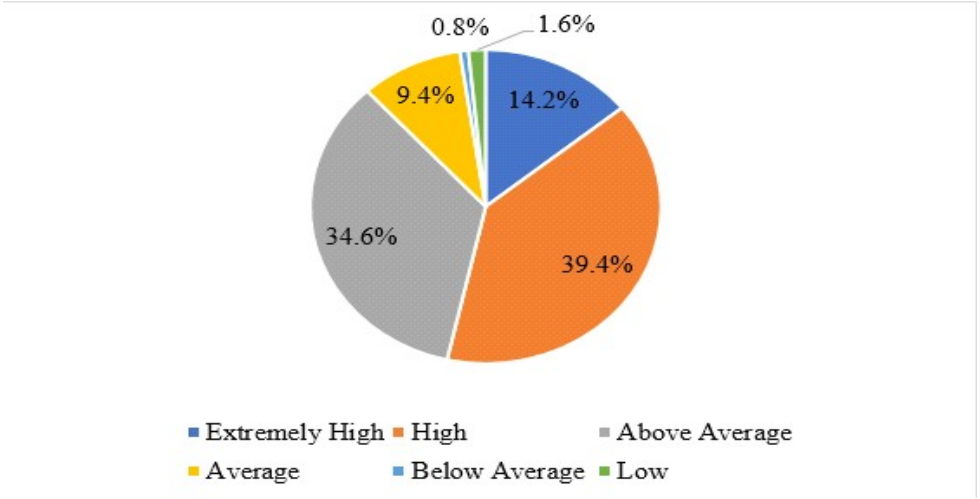


Fig. No. 1: Graphical representation of the Level of the student-teachers' attitudes towards ICT of Imphal East district.

Discussion:

Table No.1 and Figure No.1 indicate that 14.2% have an extremely high level of attitude towards ICT, 39.4% have a high level of attitude towards ICT, 34.6% have an above average attitude towards ICT, 9.4% have an average level of attitude towards ICT, 0.8% have a below average attitude towards ICT whereas only 2% have a low level of attitude towards ICT. So, it can be concluded that the selected student–teachers from the three different teacher education institutes have found a high ICT attitude level.

https://doi.org/10.31995/rjpsss.2026v52i01.034

Analysis and Interpretation of Objective No.2

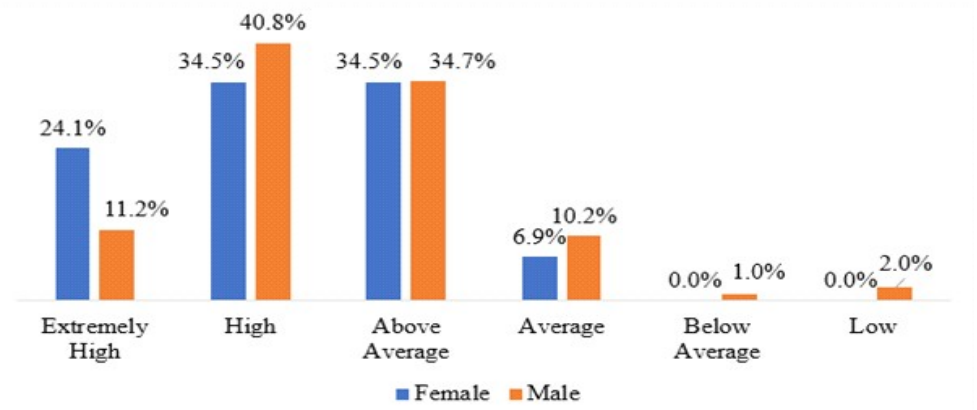
To determine the difference in student-teachers' attitudes towards ICT between the male and female students of Imphal East district.

Information Communication Technology Attitude	Gender				Total	
	Female		Male			
	N	%	N	%	N	%
Extremely High	7	24.1%	11	11.2%	18	14.2%
High	10	34.5%	40	40.8%	50	39.4%
Above Average	10	34.5%	34	34.7%	44	34.6%
Average	2	6.9%	10	10.2%	12	9.4%
Below Average	0	0.0%	1	1.0%	1	0.8%
Low	0	0.0%	2	2.0%	2	1.6%
Total	**29**	**100.0%**	**98**	**100.0%**	**127**	**100.0%**

Test of significance difference of student-teachers' attitudes towards ICT between the male and female students of Imphal East district.

Information Communication Technology Attitude	Gender	N	Mean	Std. Deviation	Std. Error Mean	t	Level of Significance
	Female	29	118.66	10.210	1.896	1.571	Not Significant
	Male	98	114.71	12.301	1.243		

Graphical representation of the Level of the student-teachers' attitudes towards ICT between the male and female of Imphal East district.



Discussion

From the above table it is inferred that females are extremely higher in this category at 24.1%, compared to 11.2% for males. Males show higher representation

here at 40.8%, while females are at 34.5%. Average: Male representation is higher (10.2%) than female (6.9%) in this category. In both of these categories viz.; above average and below average, male representation is higher than female. Therefore, it can be concluded that there are no significant differences between the male and female student-teachers towards the attitudes towards ICT.

Analysis and Interpretation of Objective No.3

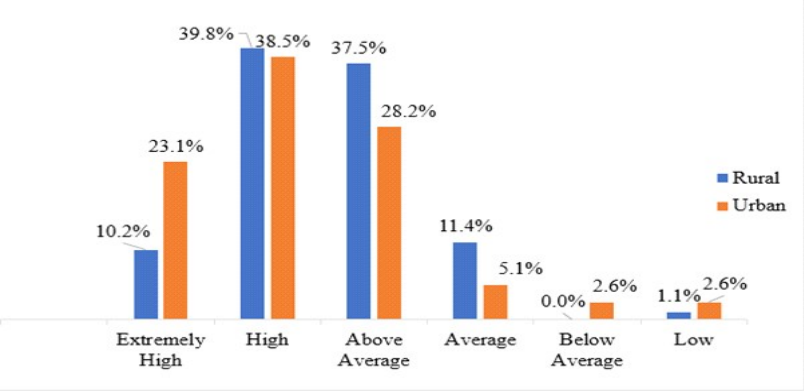
To examine the difference of attitudes towards ICT between the rural and urban student-teachers' of Imphal East district.

Information Communication Technology Attitude	Residential Area				Total	
	Rural		Urban			
	N	%	N	%	N	%
Extremely High	9	10.2%	9	23.1%	18	14.2%
High	35	39.8%	15	38.5%	50	39.4%
Above Average	33	37.5%	11	28.2%	44	34.6%
Average	10	11.4%	2	5.1%	12	9.4%
Below Average	0	0.0%	1	2.6%	1	0.8%
Low	1	1.1%	1	2.6%	2	1.6%
Total	**88**	**100.0%**	**39**	**100.0%**	**127**	**100.0%**

Test of significance difference of attitudes towards ICT between the rural and urban student-teachers' of Imphal East district.

Information Communication Technology Attitude	Gender	N	Mean	Std. Deviation	Std. Error Mean	t	Level of Significance
	Rural	88	114.84	10.693	1.140	-1.098	Not Significant
	Urban	39	117.36	14.350	2.298		

Graphical representation of the Level of the student-teachers' attitudes towards ICT between the male and female of Imphal East district.



Discussion

A significant majority of the total sample exhibited positive dispositions. Specifically, 39.4% demonstrated a "High" attitude, and 14.2% showed an "Extremely High" attitude. Within the strata, a higher percentage of urban dwellers 23.1% reported an "Extremely High" attitude compared to their rural counterparts 10.2%.Average Attitudes: "Above Average" attitudes were prominent among rural participants 37.5% compared to urban participants 28.2%. "Average" attitudes accounted for 11.4% of rural and 5.1% of urban respondents. Low Attitudes: Negative or low attitudes toward ICT were minimal across the entire sample, representing only 2.4% total ("Below Average" at 0.8% and "Low" at 1.6%.). Therefore, it can be concluded that there is no significant differences between the urban and rural student-teachers towards the attitudes of ICT.

Main Findings of the Study

1. The selected 120 student–teachers from the three different teacher education institutes have found a high ICT attitude level
2. The level of male representation is higher (10.2%) than female (6.9%) in this category. In both of these categories viz.; above average and below average, male representation is higher than female.
3. There is no significant differences between the male and female student-teachers towards the attitudes of ICT.
4. There is no significant differences between the urban and rural student-teachers towards the attitudes of ICT.
5. The overall information shows the positive attitude towards ICT among the student – teachers of the selected three institutes.

Educational Implications

I. To achieve a high level of attitude towards ICT, programs should be organized in different institutions for ICT tools and their application in the field of education.

II. Instead of learning ICT tools, learning with the use of ICT tools should be performed in the educational institution.

References

1. Al-Fudail, M., & Mellar, H. (2008). Investigating teacher stress when using technology. *Computers & Education*, *51*(3), Pg. **1103–1110**. https://doi.org/10.1016/j.compedu.2007.11.004
2. Beri, N., & Sharma, L. (n.d.). *Teachers' Attitudes Towards Integrating ICT in Teacher Education*. Ijitee.Org. Retrieved February 21, 2025, from https://www.ijitee.org/wp-content/uploads/papers/v8i8/H6335068819.pdf.

3. Campos, D. G., & Scherer, R. (2024). Digital gender gaps in Students' knowledge, attitudes and skills: an integrative data analysis across 32 Countries. *Education and Information Technologies*, *29*(1), Pg. **655–693.** https://doi.org/10.1007/s10639-023-12272-9
4. Dela Cruz, G. B., & Rajan, V. (2022). Factors predicting attitudes of teachers towards the use of "ICT in teaching and learning." *Technology Transactions on Application of Information and Communication Technology (ICT) in Education*. https://doi.org/10.36647/ttaicte/01.02.a002
5. Dwivedi, Y. K., et al. (2020). Impact of COVID-19 pandemic on information management research and practice: Transforming education, work and life. *International Journal of Information Management*, *55*(102211), 102211. https://doi.org/10.1016/j.ijinfomgt.2020.102211