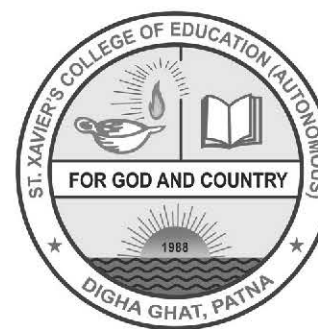


Journal of Research in Education

(A Peer Reviewed and Refereed Bi-annual Journal)
(SJIF Impact Factor 5.196)



St. Xavier's College of Education
(Autonomous)
Digha Ghat, Patna, Bihar - 800011

VOL.12, No.2 | DECEMBER, 2024

Dr. Mehwish Siddiqui

Assistant Professor, School of Education
Babu Banarasi Das University, Lucknow
E-mail:- mehwishsiddiqui.2509@gmail.com

6

A Study on Attitude of Teachers towards the Use of ICT in Higher Education Institutions

Abstract

The term Information and Communication Technology is now familiar to each and everyone. It has made an innovative resolution on the planet. Now, Communication from one place to another place has become so feasible that just with a single click we can share information, can communicate when needed. It saves time as well as energy. This has been made possible by the invention of machines and technology that we have become so hi-tech. it is interesting to observe that day by day the number of users of internet and social media are increasing. The whole population of the world has now become dependent on these tools and technology, mobile, computers etc. along with urban areas it has widespread so rapidly in rural and tribal areas too. Even in Education sector too, use of ICT has been infused and also it has been practiced in teaching-learning process. With the inclusion of ICT tools in classrooms, it has changed into Smart classes. Students can learn easily and knowledge that they gain is long-lasting. It has also lowered the burden of teachers too as they have to prepare lot of study materials and have to do rigorous evaluation along with maintaining all kind of records of students. With the use of

ICT everything has become so convenient and easy. The paper further discusses the attitude of teachers towards the use of ICT and its benefits and challenges which are faced by the teachers.

Keywords: Information and Communication Technology, Attitude, Teachers, Higher Institutes, Students.

Introduction

This is an era, where the scenario of Education as well as teaching-learning has been changing so rapidly, transforming the dreams into realities and bringing challenges to teachers through the upliftment and innovations in using Internet, Computers, Digital Technologies and in its implications. The use of these tools and technologies have transformed the process of Education so quickly that now every teachers must possess basic knowledge about computers, digital screens, and all software's and applications which is used in teaching learning process. No matter whatever technology get evolved in the coming time, it cannot replace the presence of teacher in the classroom, so it is the responsibility of teachers to use these electronic devices and techniques in most possible and effective way in the process of teaching and learning. These new information and communication technology is almost used in every form of education whether it is Formal, Informal or Non-Formal. People of any age group whether they are adult or youngsters feel very easy and comfy in using it. Everyone has now become habitual of it. Gone are the days where institutions and teachers have to maintain the heap of bundles of registers and school records to maintain it and that were a hectic work too. Technology has made it now so easy that it can be saved in computers, mobile, laptops and their storage devices for lifetime and can access whenever they want. It's a high time now that every educational institutions irrespective of their boards or their level as primary, secondary or higher. Every teacher who is teaching in any schools, colleges and universities must have the knowledge of ICT and its use in teaching learning process.

Review of Related Literature

- Timothy Ntorukin & Chun Xiong (2022) – the researcher studied the ICT implementation in classroom by university teachers. The study have adopted a descriptive survey design and have opted quantitative data collection procedure. The method of sampling was used in the study was stratified random sampling and 475 teachers in Kenyan universities through structured questionnaires. The data collected was calculated with the help of appropriate statistics and results revealed that teachers have positive attitude towards the use of ICT.

- Venkateshwar Meher & Rajashree Baral (2020) – the following study investigated about the attitude of university teachers in relation to their usage of Information and Communication technology in both comparative and descriptive form. A comparison was done between teachers according to their subject streams and also with gender. A standardized scale of attitude was selected for study and applied on sixty sample teachers by choosing random sampling method. Majority of the teachers expressed a very strong attitude towards the use of ICT and the remaining teachers showed positive attitude. Findings of the study also shows that there is no significant difference between teachers of different streams as well as gender.
- Mehmet Kemal Aydin & Ali Semerci (2016) – the study was conducted in order to construct a scale to measure the attitude of teachers towards the use of ICT in the process of teaching and learning. The study was done on 173 teachers following a cross – sectional survey design. A total of 21 items were pooled based on review of related literature. On the basis of expert opinion, item analysis and calculation of reliability, it was found that the scale developed has a high reliability and a valid questionnaire was framed which was named as Teacher's ICT Attitude Scale.
- Dr. Mohit Dixit & Manpreet Kaur (2015) – the study was done to examine the interest and viewpoint of teacher trainees to approach their attitude in using ICT and how teacher-trainees are using these technologies in teaching. To measure the attitude standardized tool was selected which was developed by T. Pradeep Kumar and applied on 200 sample teachers. Inferential Statistics was used to calculate the data. The findings of the study stated that factors like gender and locality influence the attitude of teachers towards teaching learning process.
- Ana-Belen Sanchez & Maria Gonzalez (2012) – the aim of this study was to analyze the teachers attitude towards using of technology and ICT in classroom who are in-service. For this 154 statements were structured to collect the data from the sample using survey method. The method selected for the study was quasi-experimental and with the help of pre and post test data was collected from sample before and after training. An interview was also structured for sample and the findings reveal that there is a positive attitude of teachers but somewhere its utility in classroom is lacking and also there is a need to introduce ICT in classroom and give proper training.

Objectives of the Study

- To study the attitude of higher education teachers towards the use of ICT.
- To compare the attitude of higher education teachers towards the use of ICT with relation to gender.
- To compare the attitude of higher education teachers towards the use of ICT with relation to their demographic area.

Hypothesis of the Study

- There is no significant difference in the attitude of male and female teachers towards the use of ICT.
- There is no significant difference in the attitude of rural and urban teachers towards the use of ICT.

Research Methodology

The present study was aimed to find out the attitude of higher education teachers towards the use of ICT tools and technology in the field of education. to conduct the study descriptive survey method was used to collect the data from the sample.

Population – The term population was defined as the attribute or characteristics which are common and also are interest of the researcher. In the study teachers who teach in college and universities of Lucknow district were selected as population.

Sample – Convenience sampling method was used and a total of 100 samples of teachers of higher education institutions were included in the study.

Tool Used– A standardized tool developed by Dr. Mrs. Fatima Islahi and Dr. Mrs. Nasreen which is titled as 'Attitude Scale towards Information Technology for Teachers' was used in the study.

Statistics Used - Mean, Standard Deviation, Percentage, t- test was sued for further analysis of the score or data which was collected with the help of questionnaire.

Data Analysis and Interpretation

Objective 1 - To study the attitude of higher education teachers towards the use of ICT.

Table 1 – Showing the attitude of higher education teachers towards the use of ICT.

S.No	Level of attitude for IT	Grade	Total Perspective teachers (N)	Percentage
1	Extremely Favourable	A	16	16%
2	Highly Favourable	B	51	51%
3	Positively Favourable	C	29	29%
4	Moderate Favourable	D	04	4%
5	Unfavourable	E	00	00
		Total	100	100

From table 1 it can be observed that 51% of teachers show a highly favourable attitude towards the use of ICT, where 29% of teachers were in positively favourable attitude towards the use of Information and communication technology. 16% showed extremely favourable and 4% possess moderate favourable attitude towards the use of ICT. It shows that all teachers have the knowledge of ICT and they are using it in their teaching practices and all have a positive attitude towards these technologies.

Fig 1: Attitude of teachers towards ICT

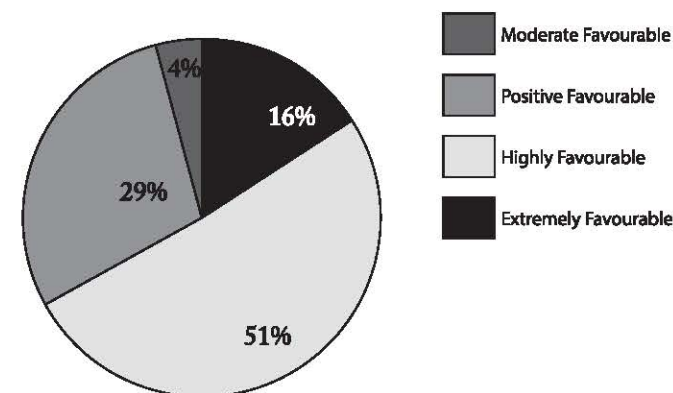


Fig 1 Showing level of Attitude for ICT among Higher Education teachers

From the figure it is very clear that now teachers who teach in colleges and universities are using these technologies in their classrooms to make the teaching learning process effective and interesting. The data obtained from the sample states that majority of the teachers possess highly favourable attitude towards the use of ICT. Teachers find these technology easy to use and they feel comfortable to use it and it also lowers the burden of teachers.

Hypothesis 1 – There is no significant difference in the attitude of male and female teachers towards the use of ICT in teaching.

Table 2:- Showing significant difference between the level of attitude towards use of ICT among Male and Female Higher Education Teachers

S.No.	Category	N	Mean	SD	df	t	Level of Significance at 0.05
1	Male	50	129.6	12.33	98	0.01	Not Significant
2	Female	50	129.64	9.79			

The value of t is 0.02 is found to be not significant at 0.05 level of significance, so the null hypothesis is accepted. Thus, it is concluded that there is no significant difference between the level of ICT use among male and female higher education teachers. The findings inferred that both male and female teachers have positive attitude and both of them use ICT in education field and they are ready to face the challenges and excited to adopt it. Use of ICT for both male and female make their teaching effective, Interesting and Interactive.

Hypothesis 2 – There is no significant difference in the attitude of teachers towards the use of ICT in teaching in rural and urban areas.

Table 3:- Showing significant difference between the level of attitude towards use of ICT among teacher teaching in rural and urban areas.

S.No.	Category	N	Mean	SD	df	t	Level of Significance at 0.05
1	Rural teachers	50	131.25	12.07	98	1.58	NS
2	Urban teachers	50	127.64	10.79			

The value of t 1.58 is found to be not significant at 0.05 level of significance, so the null hypothesis is accepted. Thus, it is concluded that there is a no significant difference between the attitude for ICT among teachers teaching in rural and urban areas. Both teachers of rural and urban areas teaching in colleges have same attitude.

Findings of the Study

On the basis of the obtained data and its results of the study, the researcher have concluded with the following findings.

- The results obtained from the sample teacher's states that majority of the teachers possess highly favourable attitude towards the use of ICT in teaching practices.
- There is no significant difference between the level of ICT use among male and female higher education teachers. Gender has no impact neither it creates any difference while using ICT in classrooms nor it has prove helpful for both male and female.
- There is no significant difference between the attitude for ICT among teachers teaching in rural and urban areas. It means that locality and area where the schools and colleges are situated and types of students studying in them has no impact on the attitude of teachers use towards ICT.

Educational Implications

The study suggests following educational implications which are as follows –

- The use of ICT in classrooms has brought a lot of change and advancement in teaching and it is the need of hour that teachers and students should update themselves.
- The inclusion of digital technologies in classrooms has changed the mindset of everyone and now everyone finds it very useful and it aids them and make their work easier and faster.
- Dissemination of technology in education has a positive impact on the students, educators as well on the whole education system. Teachers from any corner of the world can exchange their ideas and can improve the process of teaching.
- There is a need to remove obstacles which the teacher face in implementing technology in teaching and necessary steps should be taken so that everyone could take advantage from it.

References

- Aydin Kemal Mehmet, Semerci Ali & Gurol, Mehmet. (2016). *Teachers attitude towards ICT use in Secondary Schools: A Scale Development Study. 13th International Conference on Cognition and Exploratory learning in digital age. (CELDA 2016).*
- Bariu, Ntorukin Timothy & Chun, Xiong. (2022). *Influence of teachers attitude on ICT implementation in Kenyan Universities. Cogent Education. Volume 9, 2022. Issue-1.*
- Dixit, Dr. Mohit & Kaur Manpreet. (2015). *Attitude of Teachers trainees towards ICT teaching. International Journal of Pure and Applied Researches. Vol. 1 (1) 2015. Pp-169-174.*
- Krishnaveni & Meenakumari, (2010). *Educational Technology. Vinod Pustak Mandir Pvt. Ltd. Agra.*
- Meher, Venkateshwar, Baral Rajashree & Suna Gopikanta. (2020). *Attitude of Teachers about the use of Information and Communication Technology in Teaching-learning process. Conference. Education for Social Inclusion, Sustainable Development and Empowerment. At School of Education, Ravenshaw University, Cuttack Odisha.*
- Rana, Nishta. (2014). *A study to assess Teacher Educators attitude towards Technology Integration in Classrooms. Journal of Computer Assisted Learning. Vol. 5 Issue -2.*
- Sancher Belen-Ana & Gonzalez Maria. (2012). *In service Teachers Attitude towards the use of ICT in Classroom. Procedia-Social and Behavioural Sciences. Vol. 46 2012. Pp- 1358-1364. <https://doi.org/10.1016/j.sbspro.2012.05.302>*

