

CONFIDENCE LEVEL ON USING ICT IN EDUCATION

Abstract

We are consistently witnessing a shift in patterns across various sectors, including education. This evolution has a major impact on students' perspectives on education and their learning outcomes. It is influenced by various factors such as available resources, societal needs, and the changing demands of the current generation of students. Education trends are constantly changing and it is evident that technology will play a crucial role in shaping the future of education. The recent teaching tools that have emerged due to the pandemic have been proven to be effective for the new generation of students and teachers. With education now accessible on handheld devices, the key challenge is to capture students' attention and ensure effective retention of information. Interesting trends have emerged in the months following the sudden shift to digital education. It is crucial for the education sector to adapt to this shift and recognize that the skills in demand for the future will be drastically different from what has been traditionally taught. Not only the content but also the method of teaching needs to change to keep up with the rapid digitization that is occurring in all industries, not just education. During the investigator's college days, they noticed that students from rural areas lacked exposure to the latest trends in education, yet they successfully completed their courses. However, during their B.Ed. teaching practice in urban colleges, the investigator observed that even urban students were not well-versed in the latest education trends. This prompted the investigator to assess the confidence level of ICT in education among B.Ed. students, who will be the future teachers responsible for imparting important values to their students. The importance of this research is evident, as it aims to bridge

Author

N.Vivekananda
Assistant Professor in English / Psychology
Shiva College of Education,
Trichy
narenvivek14@gmail.com

the gap between the traditional and modern methods of education and help prepare future teachers to keep up with the changing trends in education.

Key words: ICT in Education, New Trends in Education, Digital literacy curriculum, Differential, Concept analysis, Educational Implications.

I. SCOPE OF THE STUDY

The aim of this research is to examine the level of confidence among student teachers in utilizing ICT in education. The study will be carried out among student teachers in a teacher education institution located in Trichy District, Tamil Nadu. A sample size of 360 student teachers will be chosen to participate in the study. Data will be collected through a Scale questionnaire and analyzed using descriptive statistics. The results of this study will offer valuable understanding into the confidence level of student teachers when using ICT in education.

II. INTRODUCTION

The experts and society have turned away from traditional methods and have adapted to the ever-evolving innovations of Fourth Revival. This shift has greatly impacted the educational landscape, resulting in the emergence of new trends in teaching and learning. To effectively engage and educate their students, it is crucial for educators to keep abreast of these changes and factors that influence learning in the classroom. This will enable them to create a more dynamic and engaging learning environment. With a proactive approach towards integrating these modern innovations in education, teachers must also be aware of how these trends affect their students' learning. Staying in tune with the changes in education involves constantly asking pertinent questions and engaging in discussions, seeking professional development opportunities, engaging in independent reading, and mentoring a student teacher in the classroom. Keeping up-to-date with the latest educational methods guides teachers in effectively educating their students. While some research trends may be short-lived fads, teachers must choose their methods wisely based on what is currently known to be the most effective in educating students. Just because one trend may quickly fade away does not mean that all teaching methods will change rapidly. Ultimately, teachers must carefully evaluate for themselves which research trends work best for them, as with any passing trend or field.

III. INFORMATION AND COMMUNICATION TECHNOLOGY (ICT) IN EDUCATION

ICT in education refers to the integration of information and communications technology into the teaching and learning process to improve the distribution of knowledge. Numerous studies have demonstrated the positive impact of ICT on student achievement and teaching methods. According to a report by the Japanese Ministry of Education, incorporating ICT into the curriculum has significantly improved student performance. The study highlighted that students who are consistently exposed to technology in their education possess better knowledge, skills, and creativity, and are more motivated to strive for further advancements compared to their peers.

- 1. New Trends in Education:** Integrating Information and Communication Technology (ICT) into your training curriculum is the ultimate answer for those seeking to increase the number of students enrolled in your program. The undeniable appeal of online learning, fuelled by its ability to provide instantaneous access to information anytime and anywhere, has contributed to its explosive growth in popularity. As a result, educational institutions that offer top-notch digital resources are becoming increasingly prevalent.

2. **Digital Literacy Curriculum:** Integrating Information and Communication Technology (ICT) into your training curriculum is the ultimate answer for those seeking to increase the number of students enrolled in your program. The undeniable appeal of online learning, fueled by its ability to provide instantaneous access to information anytime and anywhere, has contributed to its explosive growth in popularity. As a result, educational institutions that offer top-notch digital resources are becoming increasingly prevalent.

IV. OBJECTIVES OF THE PRESENT STUDY

1. To find out the awareness on Confidence Level on Using ICT in Education among the B.Ed. students.
2. To measure the level of awareness on Confidence Level on Using ICT in Education among the B.Ed. students

V. HYPOTHESIS

- Student Teachers possess average level of Confidence level on using ICT in Education.

VI. METHODOLOGY IN BRIEF

Design : Descriptive
Method : Normative
Technique : Survey

The present investigation was basically a normative method of research with survey as the technique of research employed. The details of procedure followed in the study are presented under relevant headings.

VII. TOOLS USED

The instruments used in the current study were

1. 'Scale on Confidence Level on Using ICT in Education' constructed and standardized by Vivekananda, N.
2. General Information Sheet structured by the investigators.

VIII. SCALE ON

1. **Preparation of Items:** In this section is dealt with the details of the tool used by the investigator for collecting the required data from the B.Ed. students. The instrument used in the current study was 'Scale on Confidence Level on Using ICT in Education' Structured and standardized by the investigators.

Twenty items which represent Confidence Level on Using ICT in Education were prepared with three alternative responses viz. High, Low and Neutral to the Confidence Level on Using ICT in Education. A weightage of 2, 1, 0 were given to the alternative responses High, Low and Neutral respectively for an item.

- 2. Sample:** A stratified representative sample of 360 students from 10 B.Ed. colleges situated in Trichy District, Tamil Nadu with due representation given to the variables viz. Gender, Nativity, Reading habit, Complete any computer course & Subject.

IX. SAMPLE OF THE STUDY

The sample of the present study is the B.Ed. students in Trichy District, Tamil Nadu. The following factors were taken into account in constituting the sample of the study:

1. The sample size should be small enough to facilitate the successful collection of data accessible.
2. The possibility of cooperation for data collection.

A stratified representative sample of 360 students was constituted from the B.Ed colleges from Trichy district, Tamil Nadu.

Table:1

S. No.	Variables	Sub-Variables	Number Of Sample	Total
1.	Gender	Male	292	360
		Female	68	
2.	Nativity	Rural	231	360
		Urban	129	
3.	Reading habits	Regularly	250	360
		Rarely	110	
4.	Computer course	Completed	239	360
		Not completed	121	
5.	Subject	Arts	203	360
		Science	157	

X. ANALYSIS AND INTERPRETATIONS

The data collected were edited, processed and subjected to analysis in terms of objectives of the study. The details of analysis and results emerged out the investigation are presented under relevant headings. The empirical average of awareness on latest trends in education in this study is found to be 28.186 while the theoretical average is 32. This indicates the student teachers have below average level of Confidence Level on Using ICT in Education. This shows that the B.Ed. students have lower level of Confidence Level on Using ICT in Education. In other words Confidence Level on Using ICT in Education is found lower among B.Ed. students.

XI. DIFFERENTIAL STUDIES IN CONFIDENCE LEVEL ON USING ICT IN EDUCATION

- 1. Confidence Level on Using Ict in Education and Gender:** The statistical measures and the result of test of significance of difference between the mean scores of awareness on

confidence level of ICT in education among B.Ed. students in terms of Gender is presented in Table 2.

Table 2: Statistical Measures and Results of Test of Significance of Difference between the Means of Confidence Level On Using Ict in Education: Gender– Wise

VARIABLE	SUB-VARIABLES	N	MEAN	SD	't' - VALUE	SIGNIFICANCE AT 0.05 LEVEL
Gender	Male	292	29.76	11.386	4.468	Significant
	Female	68	21.41	14.403		

It is evident from the above table that the obtained 't' value 4.468 is greater than the table value 1.96 at 0.05 level of significance.

This shows that there is a significant difference in awareness on confidence level of ICT in education between the male and female students. It is further noted that the male students having more awareness on confidence level of ICT in education than the female students.

- Confidence Level on Using Ict in Education asnd Nativity:** The statistical measures and the results of test of significance of difference between the mean scores of awareness on confidence level of ICT in education B.Ed. students in terms of nativity presented in Table 3.

Table 3: Statistical Measures and Results of Test of Significance of Difference between the Means of Confidence Level on Using Ict in Education: Nativity– Wise

VARIABLE	SUB-VARIABLES	N	MEAN	SD	't' - VALUE	SIGNIFICANCE AT 0.05 LEVEL
Nativity	Rural	231	29.04	12.395	1.747	Not Significant
	Urban	129	26.66	12.397		

It is evident from the above table that the obtained 't' value 1.747 is lesser than the table value 1.96 at 0.05 level of significance.

This shows that there is no significant difference in Confidence Level on Using ICT in Education between the rural and urban students.

- Confidence Level on Using Ict in Education and Reading Habits:** The statistical measures and the result of test of significance of difference between the mean scores of Confidence Level On Using ICT In Education among B.Ed. students in terms of reading habits is presented in Table 4.

Table 4: Statistical Measures and Results of Test of Significance of Difference between the Means of Confidence Level on Using Ict in Education: Reading Habits – Wise

VARIABLE	SUB-VARIABLES	N	MEAN	SD	't' - VALUE	SIGNIFICANCE AT 0.05 LEVEL
Reading habits	Regularly	250	26.30	12.086	-4.438	Significant
	Rarely	110	32.47	12.187		

It is evident from the above table that the obtained 't' value -4.438 is greater than the table value 1.96 at 0.05 level of significance.

This shows that there is a significant difference in Confidence level on Using ICT in education between those who have Reading habits regularly and rarely. It is further noted that those who have Reading habits regularly have more Confidence Level On Using ICT In Education than the those who have Reading habits rarely.

4. **Confidence Level on Using Ict in Education and Computer Course:** The statistical measures and the result of test of significance of difference between the mean scores of Confidence Level On Using ICT In Education among B.Ed. students in terms of Computer course is presented in Table 5.

Table 5: Statistical Measures and Results of Test of Significance of Difference between the Means of Confidence Level in Using Ict in Education: Computer Course – Wise

VARIABLE	SUB-VARIABLES	N	MEAN	SD	't' - VALUE	SIGNIFICANCE AT 0.05 LEVEL
Computer Course	Completed	239	26.07	12.497	-4.833	Significant
	Not Completed	121	32.36	11.226		

It is evident from the above table that the obtained 't' value -4.833 is greater than the table value 1.96 at 0.05 level of significance.

This shows that there is a significant difference in Confidence Level on Using ICT in Education between the students Completed any computer course and the students not completed. It is further noted that the students completed any computer course having more Confidence Level on Using ICT in Education than the students not completed any computer course.

5. **Confidence Level on Using Ict in Education and Subject:** The statistical measures and the result of test of significance of difference between the mean scores of Confidence Level On Using ICT In Education among B.Ed. students in terms of Subject in Table 6.

Table 6: Statistical Measures and Results of Test of Significance of Difference between the Means of Confidence Level on Using Ict in Education: Subject – Wise

VARIABLE	SUB-VARIABLES	N	MEAN	SD	't' - VALUE	SIGNIFICANCE AT 0.05 LEVEL
Major subject	Arts	203	27.80	12.506	-.666	Not Significant
	Science	157	28.68	12.355		

It is evident from the above table that the obtained 't' value -.666 is lesser than the table value 1.96 at 0.05 level of significance.

This shows that there is no significant difference in Confidence Level on Using ICT in Education between the arts and science subject students.

XII. HYPOTHESIS VERIFICATION

- Student Teachers possess average level of Confidence level on using ICT in Education.

XIII. EDUCATIONAL IMPLICATIONS

1. Emerging technologies and ICT are changing learning models. This can be seen in Active Learning classrooms, Flipped classrooms, Problem-Based learning, and Project-Based Learning.
2. In this participatory research study we want to find out how virtual learning environments can improve global competency skills for students.
3. Classroom applications of ICT have included up integrating both online and face-to-face platforms for lessons in Schools or colleges.
4. There have been many advances in educational technologies over the past decade thanks to the revolutions in ICT and communication from the 21st century that has led to new innovations in various group settings such as Schools or college campuses."
5. The best example of these advances is how education programs now use digital tools to enhance student engagement and extend student learning beyond the classroom."

XIV. CONCLUSION

The study showed that student teachers have a high confidence level in using ICT in education. This is a positive finding, suggesting that student teachers are comfortable using ICT in their future classrooms. ICT in education is very important. It helps teachers to teach and helps students to learn. It also helps to keep track of what is being taught and what is being learned. This is an important skill for teachers, as ICT is increasingly being used in educational settings. The study also found that student teachers who had more experience using ICT had higher confidence levels. This suggests that experience is an important factor in using ICT confidently.

REFERENCES

- [1] Almekhlafi, A. G. and Almeqdadi, F. A., 2010. Teachers' perceptions of technology integration in the United Arab Emirates school classrooms. *Educational Technology and Society*, vol. 12, pp.165-175.
- [2] Birch, A. and Irvine, V., 2009. Preservice teachers' acceptance of ICT integration in the classroom: Applying the UTAUT model, *Educational Media International*, vol. 46, pp.295- 315.
- [3] Brush, T., Glazewski, K. D. and Hew, K. F., 2008. Development of an instrument to measure preservice teachers' technology skills, technology beliefs, and technology barriers. *Computers in the Schools*, vol. 25, pp.112-125.
- [4] Castro Sánchez, J. J. and Alemán, E. C., 2011. Teachers' opinion survey on the use of ICT tools to support attendance-based teaching. *Journal Computers and Education*, vol. 56, pp.911-915.
- [5] Chai, C. S., Hong, H. Y. and Teo, T., 2009. Singaporean and Taiwanese pre-service teachers' beliefs and their attitude towards ICT : A Comparative Study, *The Asia-Pacific Education Researcher*, vol. 18, pp.117-128.
- [6] Chai, C. S., Koh, J. H. L. and Tsai, C.-C., 2010. Facilitating preservice teachers' development of technological, pedagogical, and content knowledge (TPACK). *Educational Technology and Society*, vol. 13, pp.63-73.
- [7] Chen, C. H., 2008. Why do teachers not practice what they believe regarding technology integration? *Journal of Educational Research*, vol. 102, pp.65-75.
- [8] Choy, D., Wong, F. L. and Gao, P., 2009. Student teachers' intentions and actions on integrating technology into their classrooms during student teaching: A Singapore study, *Journal of Research on Technology in Education*, vol. 42, pp.175-195.
- [9] Doering, A., Hughes, J. and Huffman, D., 2003. Preservice teachers: Are we thinking with technology? *Journal of Research on Technology in Education*, vol. 35, pp.342-361.

