
ATTITUDES OF ICT TEACHERS IN GOVERNMENT AND PRIVATE SCHOOL SYSTEM

Sumant Kumar Pandey

_sumant176179@gmail.com

Dr. Kamlesh Chandra Prasad

_dr.kcprasad2004@gmail.com

ABSTRACT

In this information age, it is crucial to know how educators feel about using ICT in the classroom. Using ICT in the classroom is crucial because it gives students the tools, they need to succeed in the information age. Researchers in the Pondicherry area sought to learn how public and private high school educators felt about their students' usage of ICT in the arts and sciences via this survey. The Pondicherry region's 150 high school teachers from both public and private institutions make up the sample. Participants' responses are gathered via a questionnaire. Teachers in secondary schools were found to have a generally favorable outlook on the use of ICT in the classroom, with no discernible differences between public and private school educators in the arts and sciences.

KEYWORDS: Attitude, Information and Communication Technology (ICT), High School Teachers, Arts and Science Stream, Government and Private Schools.

INTRODUCTION

Information technology has matured through its formative years and into adulthood. The merging of many forms of digital communication has produced an exciting new information superhighway. Our globe has undergone a rapid transition from the "Industrial Age" to the "Information Age" in only a few short decades. A "Knowledge Society" has evolved in the new millennium, and the most important thing is not only to consume information capsules but to develop a mindset that can effectively use them.

The very foundations of our civilization are changing. There has been a major paradigm change in the world we now inhabit. The Agricultural Revolution initiated the first phase of change, the Industrial Revolution the second, and the Information and Communication Technology Revolution the third.

Schools and school systems have used ICT for more than two decades to accomplish a variety of goals, including teaching students to code, increasing enrollment in online courses, and facilitating language learning in very young children. Hardware, software, and networking developments during this time period have substantially expanded the possibilities of ICT in



public and private schools. Student results and student expectations have been influenced by systemic elements such as curriculum, teacher skill, infrastructure, and assessment.

Technology is here to stay, and being able to use it effectively is a prerequisite for full engagement in the knowledge economy and society. This is thanks to advancements in information and communication technology (ICT) and new ways of organizing and managing work. The shift from an industrial to an information society has been suggested by some experts as a result of globalization and the widespread use of information and communication technologies. Economic and social changes, as well as a rise in employment in knowledge-intensive professions, were seen to be the primary causes of this trend in the 1980s and 1990s. The contemporary information society may be characterized by knowledge-driven employees working in horizontal structures. That's why some people say this shift marks the start of "fluid careers." Communication, inspiration, and the development of new products and services are just a few of the ways in which academics have found that the widespread use of information and communication technologies (ICT) has altered business as usual.

Both federal and state governments in India are pushing hard for schools to adopt cutting-edge information and communication technologies (ICTs) including computers and the internet. There seems to be a missing link between ICT users and the genuine agents of change in the classroom. Teachers who have a positive outlook on ICT are more likely to use it successfully in the classroom. Perceived capacity to use IT, availability of resources, and satisfaction with using ICT in education are all motivational elements that influence ICT utilization. The biggest problem was inefficient utilization of technology. Teachers cited a wide variety of intrinsic factors as contributing to ICT's positive effects on student learning, including making lessons more interesting for the teacher and increasing student motivation, improving the presentation of materials, making teaching more enjoyable, and making lessons more fun for students.

REVIEW OF LITERATURE

Deep Kumar (2021)Information and communication technology (ICT) has had a worldwide influence unlike any in recent memory, with both positive and negative consequences. The widespread use of information and communication technologies (ICT) has had a revolutionary effect on the classroom. Teachers of future teachers need to embrace and make efficient use of ICT (information and communication technology) tools and devices in the classroom. The primary purpose of this study is to investigate how well-versed and often used ICT tools and gadgets are among pre-service teachers at various educational institutions. The findings of this research tended to support the hypothesis that teacher-educators viewed the integration of ICT into teacher education with optimism. The current results indicate that teachers and educators are under-trained and have inadequate access to technological support. The findings of this survey suggest that many instructors and professors are hesitant to use cutting-edge technology in the classroom. Teachers often lack interest in and motivation for using ICT equipment and gadgets. We discovered that incorporating ICT into teacher education is more likely to succeed when educators and teachers have access to information about available resources, training, technical assistance, and managerial support.



Yaser Hasan Salem Al-Mamary (2020) Due to the rapid pace at which technological progress is being made, it is essential to be abreast of and take advantage of all the latest developments. Several governments have made large expenditures in ICT with the goal of bettering education. Even However, Yemen has fallen behind because of several challenges in using ICT in the classroom. This study will thus investigate the factors that affect the integration of ICT into academic programs in Yemen. Additionally, a model taking into consideration key factors that may affect instructional technology use is provided by this study. Primary data is collected by questionnaire, and SmartPLS is utilized for statistical analysis. More than 120 educators in Yemen took part in the study, representing both public and private institutions. The results show that factors including easy access to ICT infrastructure, readily available technical help, free time, and training for technology use all played a role in the adoption of technology by Yemeni educators. By using a tried-and-true paradigm, our study adds to the existing literature. The government may be able to take action to reduce or eliminate the challenges teachers encounter when adopting new technology in the classroom by using the model created in this study to better understand the factors that impact ICT usage. There is a lack of research on the most important factors for successful ICT implementation in Yemeni classrooms. This study discusses the critical factors to consider while using ICT in education in Yemen.

OjoPhoebanOpeyemi (2020) This study used a descriptive survey approach and a self-structured questionnaire to collect data from a convenience sample of teachers at seven secondary schools in the Ijero Local Government Area of Ekiti State that are run by the government, the private sector, and a Christian mission. The population of this research consists of all secondary school teachers in the Ijero Local Government Area of Ekiti State, Nigeria. A total of 140 educators were included as a statistically significant sample for the study. Descriptive statistics, such as frequency counts and percentages, were used to assemble results from a survey sent to teachers in the study area about their thoughts on introducing computer science to secondary school students. instructors surveyed for the research agreed that providing students and instructors in low-income rural communities with exposure to computer science would be beneficial.

Dr. Blessing Wey-Amaewhule (2010) All the secondary school teachers (both men and women) in the Rivers East Senatorial District took part in the research. A total of 240 participants were selected at random from the study population. Investigators made use of a survey they developed themselves and had two experts in business education from Rivers State University's College of Education review. The reliability of the instrument was calculated with the use of the Pearson product-moment correlation (PPMC), which gave a value of 0.75. Mean ratings and standard deviation were used to collect data, and a t-test with a 0.05 significance level was used to test the null hypothesis. According to studies, instructors' problems have a detrimental impact on students' access to ICT instruction in public secondary schools. The research also indicated that problems with guidance and counseling, instructional facilities, and administration had a detrimental impact on the teaching of ICT in Government secondary schools in the Rivers East Senatorial District. The study's findings mostly revolved on the need for more qualified ICT instructors in the Government secondary school system. In order to better comprehend and teach



ICT, educators in the field should have access to relevant textbooks and participate in relevant professional conferences.

Luis E. Alvarado's (2020) This essay explores the perspectives of Ecuadorian educators on the implementation of ICT. While the positive effects of ICT on learning have been well-documented, educators' perspectives on the topic remain less so. The opinions of Ecuadorian educators on a range of issues were gathered via a survey. Material and resource shortages, high organizational and social pressures experienced by teachers, competition driven by younger instructors and students, and career and future anxiety are among issues that teachers face today. Finally, this article suggests elements to consider and actions to take in order to lessen these undesirable traits.

RESEARCH METHODOLOGY

A research design is a strategy for choosing research participants, collecting data, and analyzing that data in light of the study's aims. This research uses a normative survey approach by administering a questionnaire to public and private high school teachers in the Pondicherry area. There were 150 total samples taken. The investigator went to a number of public and private high schools in the Pondicherry area and gave out questionnaires in person. The researcher has employed a method developed and established by Dr. S. Rajasekar to explore the perspective of high school educators on the implementation of ICT.

DATA ANALYSIS

Table.1. A study of Mean, Median Mode and Standard Deviation of Attitude Scores of High School Teachers in Pondicherry region.

Variable	N	Mean	Median	Mode	Standard Deviation
Attitude	150	104.17	104.00	103.66	11.84

The mean and standard deviation of high school teachers' attitudes (N=150) are shown in Table 1.0 as 104.17 and 11.84, respectively. The calculated median value is 104.000. Seventy high school teachers have salaries below the median, while 73 have salaries above it. We calculate a mode of 103.66.

High school educators' perspectives (N=150) fall in the range of 78 to 134 on a scale that runs from 30 to 150. Compared to the midpoint of the scale (scale mean=60), the mean attitude score of high school teachers (M=104.17) is much higher.

Therefore, it is determined that high school instructors have a generally positive outlook on the use of ICT.

Table.2. A study of Mean, Standard Deviation, Mean Difference and t-value of Attitude towards use of ICT of High School Teachers in relation to their Type of School in Pondicherry region.

Variable	Sub -Group	N	Mean	S. D	M.D	't' value	df.	Level of Significance
Type of school	Private	80	103.34	12.11	1.79	0.92	148	NS*
	Government	70	105.13	11.55				

In a survey of 80 high school teachers employed by private schools, we found that their average attitude toward using ICT was 103.34, with a standard deviation of 12.11. Attitudes regarding ICT use among high school teachers in government schools (N=70) were found to have a mean of 105.13 and a standard deviation of 11.55. The t-test was developed to examine the alternative to the null hypothesis. At the 5% significance level and with 148 degrees of freedom, the mean difference in high school teachers' attitudes toward adopting ICT due to the variable, type of school, is 1.79. The null hypothesis is accepted since the computed value, 0.92, is smaller than the tabulated value, 1.96. With a 95% level of confidence, we can say that there is no substantial difference in the attitudes of high school teachers working in public vs private schools about the use of ICT.

Table.3. 0 A study of Mean, Standard Deviation, Mean Difference and t-value of Attitude towards use of ICT of High School Teachers in relation to their Subjects in Pondicherry region.

Variable	Sub Group	N	Mean	S. D	M.D	't' value	df.	Level of Significance
Subject Specialization	Arts	63	103.16	10.75	1.75	0.89	148	NS*
	Science	87	104.91	12.59				

The average attitude of high school art instructors (N=63) toward using ICT yielded a mean of 103.16 and a standard deviation of 10.75. The average attitude of high school science instructors (N=87) toward using ICT yielded a mean of 104.91 and a standard deviation of 12.59. The t-test was developed to examine the alternative to the null hypothesis. At the 5% significance level, the mean difference in high school teachers' attitudes about adopting ICT due to topic specialty is 1.75, and the corresponding's value of 0.89 is not significant. The null hypothesis is accepted since the computed value 0.89 is smaller than the tabulated value 1.96. With a 95% level of confidence, we can say that high school instructors in the arts and science do not have substantially different perspectives on the use of ICT.

Factor Analysis



In order to gauge how scientific educators, feel about ICT, a 31-item scale was developed. A five-point scale (strongly agree, agree, neutral, disagree, and strongly disagree) was provided to the respondents. The choice "strongly disagree" was represented by a score of 1, while "strongly agree" was represented by a score of 5. Only one thing was phrased favorably, while eleven were unfavorable. For the data analysis, all questions with negative wording were switched around such that a higher score on the Likert scale would indicate a more favorable answer.

SPSS's principal component analysis (PCA) technique was used to examine the 31 attitude scale items. The data were checked for factor analysis viability before doing PCA. Many coefficients at the 0.3 level and higher were seen in the correlation matrix. Barlett's Test of Sphericity was statistically significant, and the Kaiser-Meyer-Olkin value was 0.95, both of which lend credence to the idea that the correlation matrix is factorable. The scree plan had a distinct split after the second part, as was easily seen. Catell's (1966) scree test was used to narrow down the variables to focus on. Quart Imax rotation was used to help make sense of these two halves. Total variation explained by the two-factor model was 39.7%, with Factor 1 accounting for 29.0% and Factor 2 for 10.7%.

Based on the findings, it seems that Turkish science educators have a positive outlook on ICT (M=4.04). Twenty assertions concerning the impact of ICT on teaching and learning were met with unanimous agreement from the educators polled. These statements ranged from "I believe that the students will be more interested in the courses that are implemented with ICT" to "I believe that audio-visual tools enhance the learning permanence" They did not agree with any of the eleven "negative" value statements (such as "I think that the use of ICT restricts the creativity of the students" or "The use of ICT in the courses brings too much overload") on the benefits of technology in education. The Effect of ICT on Teaching and Learning component had the highest mean score (M=4.20) among science educators, while the Obstacles to Implementing ICT factor received relatively high mean scores (M=3.73). Table 4 summarizes the findings in further detail. All in all, the results point to an optimistic view of the role of ICT in the classroom.

Table 4. Descriptive Statistics, Factor Loadings and Item-Total Correlations of STATICTE Scale

Factors	Items	Mean	SD	Factor Loadings	Correlations
	1.	4.4439	.6460	.548	.4607
	3.	4.2653	.7558	.674	.5664
	4.	4.3988	.7193	.676	.5833
	8.	4.2560	.6940	.692	.6179
	9.	4.4243	.6787	.664	.5568
	10.	4.3546	.6911	.783	.6697
	11.	4.2032	.7906	.722	.6409
	12.	4.2968	.6636	.776	.6500
F1	13.	4.3112	.7392	.653	.5930



	15.	4.2015	.7637	.655	.5812
	18.	4.4260	.7273	.594	.5172
	19.	3.7806	.9540	.458	.3683
	20.	4.2679	.7030	.595	.5284
	23.	4.0306	.7293	.658	.6091
	24.	4.2764	.6724	.726	.6510
	25.	4.0009	.7790	.647	.6022
	27.	4.0867	.7212	.666	.5983
	28.	3.7764	1.0503	.452	.3284
	29.	4.1488	.7246	.686	.6082
	30.	4.0808	.7986	.516	.4445
	2. *	3.4490	1.0896	475	.3551
	5. *	3.7959	1.0376	493	.3518
	6. *	3.4592	1.0232	604	.3458
	7. *	3.7696	1.0316	613	.4541
F2	14. *	3.9549	.9740	521	.4848
	16. *	3.9014	1.0049	557	.2971
	17. *	3.7160	1.0102	503	.4647
	21. *	4.0153	.9325	537	.4658
	22. *	3.7364	1.1864	414	.2537
	26. *	3.7509	.9580	565	.4545
	31. *	3.5111	.9614	553	.4738

CONCLUSION

According to this research, high school educators have a positive outlook on using ICT into their curricula. It has been argued, and properly so, that the preparation and positive disposition of instructors ultimately define how they are utilized in the classroom, and not the quality or complexity of the technology. The most important component in the success of technology integration is teachers' optimistic views. It was shown that students pay better attention in classes when the professors have a favorable outlook on the use of information and communication technologies. Students will get engaged in and enthusiastic about learning when ICT is used in the classroom. People recall 20% of what they see, 40% of what they see and hear, and roughly 75% of what they see, hear, and do concurrently, therefore incorporating ICT into the educational process leads to increased productivity and retention rates. Because of this, ICT may be a powerful instructional medium for transmitting knowledge and contribute to the development of a conducive learning environment. It also provides novel opportunities for representing information and knowledge, and sheds fresh light on the learning process.



REFERENCE

1. Deep Kumar (2021) on “Prospective Teachers' Attitudes Towards ICT Awareness and ELearning: A Review of Related Literature”, International Research Journal of Engineering and Technology (IRJET), Volume: 08 Issue: 09
2. [Yaser Hasan Salem Al-Mamary](#) (2020) on “Examining the factors affecting the use of ICT in teaching in Yemeni schools”, [Journal of Government Affairs](#), vol. 4, No. 5
3. OjoPhoebeanOpeyemi (2020) on “Teachers’ perception towards importance and acceptability of computer science education in the secondary school curriculum in Ijero Local Government, Ekiti-State, Nigeria.”, Global Journal of Engineering and Technology Advances CrossRef DOI: 10.30574/gjeta Journal homepage: <http://www.gjeta.com>
4. Dr. Blessing Wey-Amaewhule (2010) on “Problems Associated With Teaching Of Information And Communication Technology In Secondary Schools In Rivers East Senatorial District”, International Journal of Innovative Information Systems & Technology Research 8(1):63-67
5. Luis E. Alvarado (2020) on “Teachers’ Attitudes Towards the Introduction of ICT in Ecuadorian Government Schools”, TechTrends, 64. DOI: 10.1007/s11528-020-00483-7.
6. Nimisha Beri, Lalit Sharma (2019) on “Teachers’ Attitude towards Integrating ICT in Teacher Education”, International Journal of Innovative Technology and Exploring Engineering (IJITEE) ISSN: 2278-3075, Volume-8 Issue-8
7. Dr. Seema Sareen (2019) on “ATTITUDE OF SCHOOL TEACHERS TOWARDS ICT concerning THEIR PERCEIVED SELF EFFICACY IN ICT”, www.sxcejournal.com, Research and Reflections on Education, Vol.17 No.4
8. Manpreet Kaur (2019) on “Role of Teachers’ Attitude and Beliefs regarding use of ICT in Indian Classrooms”, NAAS Journal Score, Online Contents Available at <http://www.bbrc.in/> DOI: 10.21786/bbrc/12.3/22
9. Iniobong F. Akpan (2018) on “Computer Anxiety, Computer Self-Efficacy and Attitude towards Internet among Secondary School Students in Akwa Ibom State, Nigeria”, American Journal of Educational Research, Vol. 6, No. 11, 1455-1459
10. HamdzunHaron (2018) on “THE REASONS CONCERNING TEACHERS’ ATTITUDE TOWARD COMPUTER IN EDUCATION AT PRIMARY LEVEL”, International Journal of Civil Engineering and Technology (IJCIET) Volume 9, Issue 5, Available online at <http://iaeme.com/Home/issue/IJCIET?Volume=9&Issue=5> ISSN Print: 0976-6308 and ISSN Online: 0976-6316