IMPACT OF INFORMATION AND COMMUNICATION TECHNOLOGY TOOLS IN TEACHING AMONG THE PRIVATE SCHOOL TEACHERS IN CHENNAI

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ABSTRACT

Teachers are multi-talented at handling the syllabus, emotions, and guidance to introduce various fields to the students for future selection. The study aimed to find out whether these teachers are familiar with technology to adopt for online classes during a pandemic situation and also the researcher aimed to find out whether they are interested in continuing the use of ICTs after coming back to offline classes. The study was conducted among the 73 selected private school teachers in and around Chennai. The responses of the teachers were collected through a structured questionnaire in both direct and Google forms. From this study, the researcher identified that both the teachers and students are interested in continuing ICTs for their teaching and learning process. The result of the acceptance at a 5% significant level is that the IC tools are more effective in the teaching and learning process during and after covid situations. Thus, it reduces their effort to maintain records of work, and materials stored in ICTs are more useful for recollecting and revision

Keywords: Communication tools, materials, technology, E-Library, Revision

1.0 INTRODUCTION

Teaching is a dynamic profession, a role of a teacher to reach young minds with a lot of information, which helps them to mold their minds as well as their lifestyle. An inspirational teacher gives wider knowledge about the subject and also beyond the subject. The interaction between a teacher and the students has a greater impact on the students' lives.

Teaching is the origin of all professions. A teacher is a person who is a motivator, a master in subjects, a good guide, and also a caretaker. During the pandemic period, this sort of bonding was reduced a bit. But it has given a larger space for the education field to use ICTs than ever before.

Day by day, the IT field is getting richer in development. The best part of it was the utilization of ICT tools in the education field. Education is a fundamental aspect of society. Better

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education practices enhance society in a better way. The future generation's developments are determined by their school tenure itself.

Using ICT, the teacher can easily communicate the lessons in an interesting manner with reduced time. The recommended curriculum can be taught to the students with interesting pictures, graphs, videos, etc., which will help the students to understand the concepts and remember the lessons for a long time.

The material, once prepared, can be used as a knowledge asset for the teachers. The recorded materials provided to the students can be used as an e-library to revise and refer to often. Thus, the study aimed at analyzing whether ICTs are very useful for teachers to teach students and also to increase their own knowledge of subjects and various topics.

2.0 REVIEW OF LITERATURE

Purva Chhabra, E-learning tools are helpful to teach the English language in a productive, creative, and constructive way which in turn tunes the four language skills of the learners. In the present day, technological transformation provides the path to learning the language easily.

Meenakshi, (2013)in education with the use of ICTs, shifting pedagogies, redesigning curriculum, and assessment tools, and providing autonomy to select their technology utilization to integrate teaching as an interactive and powerful, even if ICT can be used as information but not a part of the core learning process.

Rawatee Maharaj-Sharma, Aditi Sharma (2017), modern ICT approaches in the science classroom makes the students feel for some processes and phenomena which are absent in traditional teaching and learning methods. The environment transforms the science classroom demonstrations briefly. The students enjoy the awe and novelty of occasional ICT infusion, but don't want to be victims of ICT overload.

Alkamel, M.A.A. & Chouthaiwale, S. S. (2018), ICT tools make teaching and learning easy by producing, preparing, storing, and retrieving the study materials for learning. All over the world, ICT provides authenticity for the learner to interact with others. ICT Tools are freely available on the internet for fruitful teaching.

Manisha Mohite, 2020, is the usage of ICT tools is much easier to understand the subjects by the students, and it's comfortable for the teacher to explain the subject matter in various ways. The pandemic situation routed the learner and the teacher to an interactive way of utilizing the various ICT Tools.

Kılıç, M. Y., & Kılıç, M. E. (2022), Teachers' lifelong learning tendencies and their attitude towards the usage of technology in the field of education had a significant effect. And the technological environment supported by education enables students as well as teachers to develop their creativity, to be open to innovation, and give individual learning opportunities (orhan et.al., 2014).

Bismala, L., Manurung, Y. H., Sirager, G. & Andriany, D. (2022), the satisfaction of e-learning users consists of self-efficacy and the quality of e-learning itself. The study proved that self-

efficacy variables and the quality of e-learning variables can improve the students' satisfaction with using e-learning, learning styles, and the platform.

Zengin, E. (2023). The students are used to technology at an early age. It has given them many opportunities to develop their skills, like listening, speaking, reading, and writing. Teachers who have self-confidence in using information technologies, with the help of others, overcome their problems and difficulties with technical issues in their teaching with an ICT-enabled platform. Parents and teachers must be aware that technological devices should not create a negative impact on their children.

2.1 Research Gap

From previous studies, the researcher identified that researchers gained self-confidence by using technology for their teaching process during pandemic situations. The students manage to cooperate with the teachers and teaching aids through online classes at home. But studies are conducted to find out the impact of the use of ICT during a pandemic situation. It does not only identify whether the continuation of ICTs is useful during regular offline classes. Thus, the researcher conducted research to find out the impact of ICT before and after the covid period.

2.2 Research questions

During the pandemic situations, education in India shifted to online mode using various information and communication tools. Now the country has turned to regular offline classes. Thus, the researcher raised questions.

1. Whether the teachers and students continue ICTs for their teaching and learning process?
2. Whether it is useful for them?

2.3 The objective of the study

The study aimed to analyze the use of ICTs among school teachers in their performance of teaching-learning process.

To identify that the use of ICTs in education will promote the knowledge and performance of the teachers during the pandemic period.

To know whether the teachers and students are interested in continuing the use of ICT tools during offline classes for their communication process.

2.4 Study period

The study period included in this paper is June 2021 to December 2022. Because of this period, half of the year fully engaged in online classes slowly it was regularized

3.0 RESEARCH METHODOLOGY

The study was conducted among private school teachers located in and around Chennai. Because private schools provided more opportunities to learn through online platforms during the pandemic period rather than government schools. Though government schools adopt many ICTs, it is not successful due to non-co-operation by the students.

Sample size - 100 questionnaires were issued to the teachers of the top 15 schools in and around Chennai out of which 73 filled questionnaires were received and included in the study.

3.1 Sampling method

Purposive sampling is used to collect the primary data from the respondents. Teachers from selected schools in selected areas are included for the study.

3.2 Data used

Both Primary and Secondary data were used for this study.

3.3 Tools Applied

The results are obtained through the usage of Simple percentage analysis, Multiple Regression.

3.4 Study area

Chennai is the most populated area with a number of both private and government schools. The students in Chennai are easily accessible to the network. Private schools are financially strong enough to adopt the changes from classroom to online facilities immediately and the students in private schools are ready to adopt the instructions and guidelines imposed by the schools without any hesitation. Thus, the study was conducted among private school teachers and students who used ICTs during pandemic situations and also continued the method because of its convenience in the teaching and learning process.

3.5 Limitations of the Study

The study was conducted in and around Chennai only because of time and cost constraints.

The results of the study are based on responses given by the respondents. Thus, it was subject to human bias.

3.6 Popular ICT use started in a pandemic situation

Various tools of Google Classroom, Microsoft Teams, YouTube, Power Point Presentation, etc., are used to communicate with students to teach the lessons and also used by the teachers to attend a number of Webinars, Faculty Development Programmes, Refresher Courses, Online Courses, and of Quiz Completion in various subjects and topics helps the teachers to widen their knowledge in various topics and expertise in relevant subjects

3.7 Google Classroom

Google Classroom is a virtual classroom that makes learning easy and fun. Google Classroom allows virtual meetings, and the creation of separate drive folders for assignments, grade sheets, attendance sheets, etc. Teachers can include a slideshow, a small game, or an entertaining YouTube video that is full of information. Thus, Google Classroom offers a complete solution for online teaching.

3.8 Microsoft Teams

Microsoft Teams is a Microsoft Office 365 product. It is simple to host meetings, chat, share files, and use Microsoft Office Teams. One of the best features available in Teams is the Class Notebooks. Teachers can assign individual notebooks to students and provide them with real-time feedback. Teachers can easily distribute exams, handouts, quizzes, and homework instantly to their students.

3.9 YouTube

YouTube videos are useful for explaining complex topics which will create a real class room atmosphere with audio and video. We can find historical videos related to our topics for remembrance.

3.10 Microsoft PowerPoint

We can create slideshows with minimal details, images, and charts to explain the lessons. It will help the students to learn facts easily and for longer durations.

3.11 Analysis and Interpretations

The demographic profiles of the respondents were analyzed with the usage of Percentage Analysis.

DEMOGRAPHIC PROFILE			
Demographic Profile (N = 73)	Description	Frequency	Percentage
Gender	Male	22	30
	Female	51	70
Age	Below 30 years	16	21.9
	31 – 40 years	37	50.7
	41 – 50 years	12	16.4
	Above 50 years	8	11
Educational Qualification	D.Ed.	12	16.4
	B.Ed.	48	65.8
	Post Graduate	13	17.8

Experience	Below 5 years	22	30.1
	6 – 10 years	31	42.5
	11 – 20 years	12	16.4
	Above 20 years	8	11
Monthly Income	Less than 20,000	14	19.2
	20,000 - 40,000	19	26.0
	40,000 - 60,000	32	43.8
	More than 60,000	8	11.0
Years of using ICT	Below 1 Year	26	35.6
	1 - 3 Years	28	38.4
	3 - 5 Years	12	16.4
	Above 5 Years	7	9.6
Handling classes	Primary level	9	12.3
	Middle level	11	15.1
	High school	29	39.7
	Higher Secondary level	24	32.9

The percentage analysis shows that 70% of the teachers are Female. Most of the teachers belong to the age category of 31-40 years of age. The majority of the teachers educated in the B.Ed. colleges are around 65.8%. The highest experience is 6-10 years of 42.5%. The highest earning group belongs to the category of 40,000-60,000 per month 43.8%. 1-3 years of ICT usage is about higher 38.4%. High school teachers are more in our survey of 39.7% among the teaching society.

3.12 Integration Information and Communication Technologies Variables

Q.No.	Requirements IT Items	SA	A	N	DA	SDA
1	Technological Equipment	68.5	31.5	0	0	0
2	Networks speed	52.5	28.5	19	0	0
3	Training for Learners and Teachers	32.5	40	0	27.5	0
4	Curriculum Redesign	32.5	43.5	10	14	0
5	Optimum utilization ICT facilities	30	62.5	7.5	0	0

The respondents strongly agreed that technological equipment and network speed are available. On the other hand, adequate training was provided for the Learners and Teachers, the curriculum was redesigned and ICT facilities are utilized in an optimum manner.

3.13 Multiple Regression Analysis on ICT Integration in Teaching

Dimension	Unstandardized Coefficients		Standardized Coefficients	T	p-value
	B	Std. Error			
Constant	.331	.105			0.000**
Technological Equipment (X1)	-.068	.115	-.072	-.589	0.001**
Networks speed (X2)	-.053	.125	-.044	-.428	0.000**
Training for Learners and Teachers (X3)	-.101	.105	-.082	-.959	0.000**
Curriculum Redesign (X4)	.504	.133	.509	3.785	0.000**
Optimum utilization ICT Facilities (X5)	.509	.110	.615	4.610	0.001**
Multiple R-value	0.950				
R square value	0.903				
F- value	117.527**				
p-value	0.000**				

Note:*Denotes significance at 5% level.

The co-efficient of Determination of R-Square measures shows the goodness of fit of the estimated regression in terms of the proportion of the variation in the dependent variables explained by the fitted sample regression equation in above table 2.5.

Thus, the value of R square is 0.903. It simply means that about 90% of the variation in' satisfaction which is explained by the estimated value uses (X1), (X2), (X3), (X4) and (X5) as the independent variables taken for the analysis and R-square value is significant at 5% level. (F=117.527;p<0.01).

4.0 CONCLUSION & SUGGESTION

The study was conducted among private school teachers in and around Chennai. The results obtained from the study concludes that the majority of the private schools management provided various technological equipment like personal computers, laptops, headsets, web cameras with high speed networks to ease the communication process of teachers through effective technology.

The majority of female teachers who participated in the research revealed their opinion that they were educated to use ICT through expertise both in online and offline mode, which increased the teacher's technical knowledge. The teachers of all subjects were well known to

operate ICTs; the technically updated knowledge increased their confidence level among youngsters.

The relationship test result R Square value = 0.903 shows that the IC tools are more effectively correlated with the teaching and learning process. Thus, the study concludes that the use of ICTs helps teachers to teach lessons in a more attractive manner and the time saved from preparing materials can be used in a productive way. They can update their own knowledge by attending various knowledge-sharing programs and, with the use of increased technical knowledge, teachers can attract young smart students with confidence.

5.0 SUGGESTIONS

The study recommended that both the government and private schools can install various ICT tools in their schools which can be used by students of all classes to make their learning process interesting for a number of years.

The materials and videos prepared by experienced teachers can be stored as an e-library, used for giving revision to slow leaner's and also a reference to the fresher's

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