



A STUDY ON ICT ENABLED TEACHING WITH SPECIAL REFERENCE TO HIGH SCHOOLS AND HIGHER SECONDARY SCHOOLS IN MALA GRAMA PANCHAYATH'

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ABSTRACT

This study will focus on the ICT enabled teaching with special reference to High schools and higher secondary schools of Mala Panchayath in Thrissur district. It studies the elements used in ICT enabled classrooms such as laptop, tablets, interactive white boards, E readers and flipped classrooms. The area of study is limited to Mala. The respondents constitute 50 teachers in commerce, science, ICT subjects, local language, and mathematics. The population of the study consists of teachers working in HS and HSS in Mala. From among various schools in the Panchayath, six schools were selected at random using lottery method. 50 samples are selected from the sample schools teachers using convenience sampling method. The study makes use of simple tools like Percentage analysis, averages, one sample t test and Independent t test. Improving school ICT infrastructure and access is a need of the hour. Government should focus on providing quality computers, printers, projectors etc. along with software and fast internet connectivity. Teachers need to be empowered and motivated through training, to use ICT for curriculum. Such programs should be organized on a continuous basis. The present study was about ICT enabled teaching with special reference to HS and HSS in Mala Panchayath. The study provides some insights on status of ICT in HS and HSS. It is also found from the study that lack of time, syllabus pressure, infrastructure unavailability etc... are the major hindrances of the teachers in ICT Enabled teaching. It studies not only the teachers ability to use the ICT tools and but also the order of preference of the ICT tools. Individually teachers can strive to use this technology as its best to enhance the teaching process. Most of the teachers were more familiar in the ICT devices but the utility of those devices were somewhat in a question mark. So they have to use it and to empower their teaching process. ICT has provided valuable help in improving the task of the technology and empowering teaching, and learning in Schools and Higher secondary Schools.

KEYWORDS: ICT Teaching, Mala Grama Panchayat.

INTRODUCTION

Education is a powerful instrument that unlocks the door to prosperity of a Nation. It is one of the main keys to the development and the improvement of Mankind. Since education is regarded as the bedrock for nation building. Its quality management is necessary. It is the most prominent factor that affects the overall Development and prosperity of any nation. During the recent past, the teaching and learning process as dependent upon the Chalk and Talk method but now it has Undergone a radical change and Smart Classrooms (fully equipped electronic Web) have been developed. The Eleventh Five Year Plan 2007-2012 places the highest priority on education as a central instrument for achieving rapid and inclusive growth (Planning Commission, 2008).

Education plays a major role in keeping young aspirants of the society aware and up-to-date with the new developments. Introducing ICTs in the educational setting is a major endeavor. Education through Information and Communication Technology (ICT) has become effective, useful and interesting way of

proceeding teaching practice now a days. Across the globe, countries have recognized ICT as an effective tool in catalyzing the teaching learning process. Information Technologies together with Communication Technologies have brought about unprecedented changes in the way people communicate and interact with the society. Our challenging and competitive world demands technology based education which is becoming one of the most challenging professions in our society where knowledge is expanding rapidly and modern technologies are demanding teachers and students to learn how to use these technologies in their Learning and learning process. While new technologies augment, the need of innovative teacher training arises. ICT can not only provide more flexible and effective ways for professional development of teachers and students but it also improves pre- and in-service teacher training and Connects teachers to the worldwide teacher community.

ICT ENABLED TEACHING

ICT in education is a mode of education that

uses information and communication technology to support, enhance, and optimize the delivery of information to students by teachers. ICT helps to facilitate the transaction between producers and users by keeping the students updated and enhancing teachers capacity and ability fostering a live contact between the teacher and the student through email, chalk session, e-learning, web based learning including internet, intranet, extranet, CD-ROM, TV audio-videotape. Edusat technology has become very powerful media for interactive participation of experts and learners and it reaches the unreachable.

STATEMENT OF THE PROBLEM

The school faces a greater challenge today to keep pace with the continued progress in information resources. Changes are inevitable and therefore a school can provide effective education if it can adapt the changing scenario. ICT if used properly has the potential to radically alter the manner in which students learn and teachers teach. No amount of technological up gradation of educational institutions will change the performance of our students unless the teachers themselves know the proper usage and application of ICT in the teaching and learning process. The findings of this research were assumed to throw light on the status and usage of ICT in schools. The result of the study could help schools to prepare and provide the direction for the usage of ICT for teachers.

SCOPE OF THE STUDY

This study will focus on the ICT enabled teaching with special reference to High schools and higher secondary schools of Mala Panchayath in Thrissur district. It studies the elements used in ICT enabled classrooms such as laptop, tablets, interactive white boards, E readers and flipped classrooms. The area of study is limited to Mala. The respondents constitute 50 teachers in commerce, science, ICT subjects, local language, and mathematics.

OBJECTIVES OF THE STUDY

The study is conducted with the following specific objectives.

- To identify the status of ICT in HS and HSS
- To identify equipment's used in ICT enabled classrooms
- To find main hindrances for integration of ICT in teaching learning process.

SIGNIFICANCE OF THE STUDY

Teachers are gaining access to ICT, online tutorials, are available and digital curriculum resources are accessible and are continually being developed the digital classroom is a reality. However, teacher's ability to use these digital tools in their classrooms, that is, practicing the digital pedagogies required for the effective implementation of ICT, is not yet in evidence amongst the majority. In addition, success with regard to technology integration has been based on how extensive

or prominent the use of it has been in schools rather than whether the teacher has been able to utilize it for new better or more relevant learning outcomes.

The scenario of the classroom is changing. There is a technological gap between the progress of the society and instructional activities of the teachers in the classroom. If we see in our society on the one hand technology has revolutionized one society and on the other hand the teaching activities at school level have remained so far away from technology. In our classroom the knowledge is imparted by the teacher in an ancient way, a teacher centric mode which is most of the time boring and not to gain interest to the student. But present 21st century's education is student centric education. Students learn from multi sources and for this reason use of ICT and multimedia are very much essential in educational field and simultaneously teacher's knowledge of ICT and multimedia also required. The present study has great need and significance because this study shows roles of ICT in education.

RESEARCH DESIGN

Research design constitutes the blueprint for collection and analysis of data. The study is descriptive and mainly based on both primary and secondary data. The study is based on the primary data collected from respondents through structured questionnaire and secondary data from books, journals, articles, websites etc. Teachers from the schools in Mala area is selected for sample collection, 50 samples were collected from the Mala Panchayath. The samples selected as per the convenient sample method for data collection. The data collected from the selected respondents through a pre-structured questionnaire. The collected data analyzed with percentage, mean, frequency analysis and other statistical tools.

SOURCE OF DATA

The study makes use of both primary and secondary data. Primary data is collected from the respondents using structured questionnaires. Secondary data has been collected from various books, journals, websites and articles.

POPULATION AND THE SAMPLE

The population of the study consists of teachers working in HS and HSS in Mala. From among various schools in the Panchayath, six schools were selected at random using lottery method. 50 samples are selected from the sample schools teachers using convenience sampling method.

STATISTICAL TOOLS USED

The study makes use of simple tools like Percentage analysis, averages, one sample t test and Independent t test.

HYPOTHESIS OF THE STUDY

HO 1: There is no existence of hindrance in using ICT

Enabled teaching

HO 2:There is no difference between Government and Aided teachers with respect to hindrance in handling ICT enabled classrooms.

ANALYSIS

- 1) **Demographic Profile of respondents:** The respondents consist of 48% males and 52% females. 28% of them are below 40 years of age, 54% are in the age group of 40 to 50. 18% of the respondents are above 50 age group. 70% of them are having PG Degree and 30% are graduates. Amongst the sample selected 14% are having less than 10 years of experience, 44% are having 10 to 20 years of experience and 22% are having above 20 years of experience. An adequate representation of teachers is across various disciplines. 44% of the teachers are from High School sector and 46% are from Higher Secondary Sector.
- 2) **Use of ICT in class rooms:** It is found that 20% of the respondents regularly use ICT in class rooms. 40% of the respondents used ICT occasionally. 25% do not know the application of ICT in class rooms. 15% are ICT adverse teachers.

- 3) **History of ICT in Class Rooms:** It is learnt that 6% of the respondents started using ICT in class room recently only. 38% of the respondents were using it over the last two to five years. 56% of the respondents are much used to the system and are using it for more than five years.
- 4) **ICT Training:** 52% of the teachers have undergone training on ICT. 48% did not receive any training on ICT.
- 5) **Tools used in ICT Education:** It is learnt that Teachers uses Desk Top mostly in class rooms. Lap tops rank second. Digital Projector stands at the third position. Scanner, Online resources and CD stands at fourth, fifth and sixth positions. It is worth noting that Desk top and Lap tops are the most preferred tools used in class rooms.

Tools used in ICT Class Rooms

ICT Resources	N	Mean	Std. Deviation	Rank
Desktop	50	1.40	.495	1
Laptop	50	1.34	.717	2
Digital projector	50	1.34	.717	3
Scanner	50	2.76	1.153	4
Online resources	50	1.98	1.059	5
CD-DVD	50	3.40	1.629	6

(Source: Primary Data)

- 6) **Barriers in ICT transition:** There are several problems reported by teachers in their transition to ICT enabled Class Room. The most important hindrance of respondent towards ICT enabled teaching is the lack of time. The second in the row is the pressure of the syllabus. Third comes lack of

infrastructure facility. Other barriers are lack of computer skills, non-recognition by governments, administrative workload, poor bandwidth, poor reliability of online contents etc. The responses are tabulated in the appending table.

BARRIERS IN THE INTEGRATION OF ICT IN CLASS ROOMS

Reasons	N	Mean	Std. Deviation	Rank
Lack of time	50	3.94	0.935	1
Syllabus pressure	50	3.72	0.927	2
Infrastructure unavailability	50	3.70	0.974	3
Lack of computer skill	50	3.14	1.069	4
Not recognized foreffective usage of ICT	50	3.00	1.030	5
Administrative workload	50	2.96	1.245	6
Lack of computer and lower bandwidth	50	2.82	1.063	7
Non-reliability of online content	50	2.80	1.143	8
Valid N (list wise)	50			

(Source: Primary Data)

One sample t test: One sample t test has been conducted on hindrances of teachers in using ICT enabled class. The hypothesis has been formulated. one sample t test is

preferred.

H_0 : There is no hindrance in using ICT enabled teaching

TABLE SHOWING THE HINDRANCE OF TEACHERS USING ICT ENABLED CLASS ONE-SAMPLE STATISTICS

Construct	N	Mean	Std. Deviation	t value	sig
Hindrance	50	3.2600	.68318	2.691	0.010

(Source: Primary Data)

It is clear that mean value and standard deviation is registered 3.2600 and 0.68318 respectively. Here the t value is 2.691. So, null hypothesis is rejected at

5% level of significance and it is inferred that teachers agree the existence of hindrance in using ICT enabled class.

7) Independent ‘t’ test:

HO: there is no difference between Government and aided teachers with respect to hindrance in handling ICT enabled classrooms.

Table showing the hindrance of using ICT enabled class between Government and Aided teachers

Group Statistics						
	Type of school	N	Mean	Std. Deviation	t value	sig
Hindrance	Government	18	3.4375	.67553	1.392	0.173
	Aided	32	3.1602	.67743		

(Source: Primary data)

The hindrances of using ICT enabled class between government and aided teachers are compared here. The mean and standard deviation of government school teachers are 3.4375 and 0.67553 respectively. The mean and standard deviation of aided school teachers are 3.1602 and 0.67743 respectively. The t value obtained is 1.392. Null hypothesis is accepted and it is inferred that there is no difference between Government and aided teachers with respect to hindrance in handling ICT enabled class rooms.

CONCLUSION

Improving school ICT infrastructure and access is a need of the hour. Government should focus on providing quality computers, printers, projectors etc. along with software and fast internet connectivity. Teachers need to be empowered and motivated through training, to use ICT for curriculum. Such programs should be organized on a continuous basis.

The present study was about ICT enabled teaching with special reference to HS and HSS in Mala

Panchayath. The study provides some insights on status of ICT in HS and HSS. It is also found from the study that lack of time, syllabus pressure, infrastructure unavailability etc... are the major hindrances of the teachers in ICT Enabled teaching. It studies not only the teachers ability to use the ICT tools and but also the order of preference of the ICT tools. Individually teachers can strive to use this technology as its best to enhance the teaching process. Most of the teachers were more familiar in the ICT devices but the utility of those devices were somewhat in a question mark. So they have to use it and to empower their teaching process. ICT has provided valuable help in improving the task of the technology and empowering teaching, and learning in Schools and Higher secondary Schools.