

ICT Enabled Teaching in Tribal Classical Domestic School

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ABSTRACT

ICTs are making dynamic changes in society. They are influencing all aspects of life. The influences are felt more and more at schools. Because ICTs provide both students and teachers with more opportunities in adapting learning and teaching to individual needs, society is, forcing schools aptly respond to this technical innovation. Tinio (2002), states the potentials of ICTs in increasing access and improving relevance and quality of education in developing countries. In Watson's (2001) description, ICTs have revolutionized the way people work today and are now transforming education systems. As a result, if schools train children in yesterday's skills and technologies they may not be effective and fit in tomorrow's world. This is a sufficient reason for ICTs to win global recognition and attention.

INTRODUCTION

Teacher is the medium of knowledge for the students. As new generation wants innovative & creative techniques of learning. For this, ICT skills Like MS word, MS Excess, Power point presentation, Internet, Web 2.0, Social networking skills are essential for teachers. It is a need of 21st century that every teacher should be technology enabled. Effective transaction of content is possible with the help of technology. For this teacher should possess various ICT skills. He should be able to use different applications effectively. Moreover roles of the teachers have been changed in many ways we see that teachers are required for e- content development & for writing scripts for the Virtual learning Programme.

Tribal model residential schools are started for the educational development of scheduled tribes. Scheduled tribes are socially disadvantaged groups. The use of ICT can improve performance , teaching, administration and develop relevant skills in the disadvantaged community. The present paper discusses the Level of use of ICT and the Perspective on ICT Use of Tribal Residential School Teachers.

2. OBJECTIVES

The present study aims at analyzing the following two objectives:

- To identify the level of tribal schools with regards to ICT enabled teaching
- To analyse the Perspectives of Tribal Residential School Teachers on ICT enabled learning.

METHODOLOGY IN BRIEF

Methodology of the present study briefly discussed below under relevant heading

METHOD USED

In this study, *survey* method was used to determine Use of ICT and tribal residential school Teacher Perspectives on ICT.

SAMPLE OF THE STUDY

The sample for the present study consists of tribal model residential school teachers. 70 teachers from five tribal model residential schools in Wayanad district of Kerala state were taken as sample.

TOOL

The investigator has developed **questionnaire on use of ICT in tribal school** for tribal model residential school teachers.

STATISTICAL TECHNIQUES USED

The following statistical techniques are used for statistical analysis

- Mean
- Percentage analysis

RESULTS AND DISCUSSIONS

The level of ICT use among teachers was identified (high, medium, low) based on the following equation.

$$\frac{\text{The scales highest value} - \text{The scales lowest value}}{\text{Number of levels}} = \frac{5-1}{3} = 1.33$$

This equation is used to organise and summarise data to provide a simple indication of the level of the means associated with each response. Eid Alharbi (2014) used a similar equation to group his results. Using these intervals of 1.33, we can define 3.67 to 5.00 as a 'high' response, 2.34 to 3.67 as a 'medium' response and any value below 2.34 as a 'low' response. In the analysis,

LEVEL OF USE OF ICT IN SCHOOL

Teachers were also asked to describe the frequency of their use of ICT and its applications in the teaching process at school. This is an indicator of their proficiency in ICT, and how likely they are to embed it in teaching practice. In order to determine this, the arithmetic means, frequencies and percentages for skills in using ICT and its application are calculated.

DATA OBTAINED FROM ANALYSIS ARE TABULATED IN TABLE.1**TEACHERS USE OF ICT AT SCHOOL**

How often do you use any of the following ICT tools and activities for teaching practices and school-related work at school?		Never	Occasionally	Monthly	Weekly	Daily	Mean	Level of use
Create a document using a word processor	N	7	12	29	18	4	3	Medium
	%	10	17.1	41.4	25.7	5.7		
Manipulate graphics or images using graphics software	N	21	31	11	4	3	2.1	Low
	%	30	44.2	15.7	5.7	4.2		
Look up information on a hard disc drive or compact disc	N	5	34	19	9	3	2.58	Medium
	%	7.1	48.5	27.1	12.8	4.2		
Use the Internet to obtain teaching resources	N	8	13	28	16	5	2.95	Medium
	%	11.4	18.5	40	22.8	7.1		
Create lessons that incorporate simulation software	N	30	29	8	3	0	1.77	Low
	%	42.8	41.4	11.4	4.2	0		
Create lessons that use presentation software	N	33	24	6	4	3	1.85	Low
	%	47.1	34.2	8.5	5.7	4.2		
Use educational videos and documentaries	N	30	30	6	3	1	1.78	Low
	%	42.8	42.8	8.5	4.2	1.4		
Use subject-specific software	N	36	25	7	2	0	1.64	Low
	%	51.4	35.7	10	2.8	0		
Create your own digital learning material for students	N	41	24	5	0	0	1.48	Low
	%	58.5	34.2	7.1	0	0		
Look for online professional development opportunities	N	45	25	0	0	0	1.36	Low
	%	64.2	35.7	0	0	0		
Use curriculum relevant online resources to support teaching and learning (e.g., website, blogs and wikis)	N	24	17	16	7	6	2.34	Medium
	%	34.2	24.2	22.8	10	8.5		
Use interactive whiteboards	N	70	0	0	0	0	1	Low
	%	100	0	0	0	0		
Total							1.99	Low

TABLE NO 1

Notable from table .1 that the level of using ICT by teachers in the teaching process at school was low, with an overall arithmetic mean of 1.99.

The results also show that the highest rated skill or application of teachers in the usage of ICT in the teaching process at school was “Use the Internet to obtain teaching resources” where the arithmetic mean was 2.95. Second was the “Look up information on a hard disc drive or compact disc” with an arithmetic mean of 2.79. The lowest rated skill or application was “Use interactive whiteboards” with an arithmetic mean of 1.79. Second lowest was the “Look for online professional development opportunities” with an arithmetic mean of 1.36

THE PERSPECTIVE OF TEACHERS ON ICT USE

Advantages and disadvantages related to implementing ICT in teaching process from the perspectives of teachers were identified as well as their opinions on the effect of using technology on the teaching process in the classroom.

ADVANTAGES AND DISADVANTAGES OF USING ICT IN TEACHING

Here advantages and disadvantages of ICT in teaching were determined. For that teachers were invited to agree or disagree with a series of positive (advantageous) or negative (disadvantageous) statements. Data obtained from analysis are tabulated in table.2

ADVANTAGES AND DISADVANTAGES OF USING ICT IN TEACHING (N=70)

Advantages and disadvantages of using computer in your teaching method		Strongly Disagree	Disagree	Neither agree nor disagree	Agree	Strongly Agree	Mean	Level of agreement
ICT makes teaching more interesting for me	N	0	6	12	30	22	3.97	High
	%	0	8.5	17.1	42.8	31.4		
ICT makes teaching more difficult	N	18	30	15	7	0	2.15	Low
	%	25.7	42.8	21.4	10	0		
My own low level of ICT skill make difficult to use ICT	N	4	24	26	13	3	2.81	Medium
	%	5.7	34.2	37.1	18.5	4.2		
Lack of content in regional language make difficulty to use ICT	N	7	17	20	20	6	3.01	Medium
	%	10	24.2	28.5	28.5	8.5		
ICT makes my lessons more diverse	N	3	6	10	31	20	3.84	High
	%	4.2	8.5	14.2	44.2	28.5		
ICT support the development of higher order thinking in students	N	2	9	22	25	12	3.51	Medium
	%	2.8	12.8	31.4	35.7	17.1		
ICT Increases students motivation	N	3	5	16	28	18	3.78	High
	%	4.2	7.14	22.8	40	25.7		
Lack of adequate content/ material for teaching make difficulty to use ICT	N	0	16	30	21	3	3.15	Medium
	%	0	22.8	42.8	30	4.2		
ICT support the learning of students with special educational needs	N	2	10	14	22	22	3.79	High
	%	2.8	14.2	20	31.4	31.4		
ICT improves the presentation of material in my lessons	N	0	6	9	40	15	3.91	High
	%	0	8.5	12.8	57.1	21.4		
School time organisation (fixed lesson time, time tabling etc.) make difficulty to use ICT	N	0	7	12	26	25	3.98	High
	%	0	10	17.1	37.1	35.7		
ICT makes preparing lessons quicker	N	0	27	18	20	5	3.04	Medium
	%	0	38.5	25.7	28.5	7.1		
ICT limits the content of my lessons	N	0	10	33	24	3	3.28	Medium
	%	0	14.2	47.1	34.2	4.28		
Insufficient levels of technical support makes inability to use ICT	N	1	4	18	32	15	3.8	High
	%	1.4	5.7	25.7	45.7	21.4		
ICT makes preparing lessons more difficult	N	7	24	18	17	4	2.81	Medium
	%	10	34.2	25.7	24.2	5.7		
ICT makes the lessons more fun for the students	N	0	8	12	29	21	3.9	High
	%	0	11.4	17.1	41.4	30		
ICT makes it more difficult to control the class	N	8	26	11	19	6	2.84	Medium
	%	11.4	37.1	15.7	27.1	8.5		
ICT often prevent teaching because of interruption in work or in software	N	0	5	11	34	20	3.98	High
	%	0	7.1	15.7	48.5	28.5		
School space organisation (classroom size and furniture, etc) make difficulty to use ICT	N	7	19	23	15	6	2.91	Medium
	%	10	27.1	32.8	21.4	8.5		
ICT has given me more confidence to extend my use of computer to other topics	N	3	10	28	20	9	3.31	Medium
	%	4.2	14.2	40	28.5	12.8		

TABLE NO 2

The results from Table 2. Indicate that the highest advantage for implementing ICT in the teaching process was “ICT makes teaching more interesting for me” where the arithmetic mean is 3.97. In

which the highest response was “Agree” with a percentage response rate of 42.8%. Secondly, “ICT improves the presentation of material in my lessons” was the next advantage, with a mean of 3.91. In which the highest response was “Agree” with a percentage response rate of 57.1%.

The most significant disadvantage given by respondents that can arise as a result for using ICT in the teaching process was “ICT often prevent teaching because of interruption in work or in software” where the arithmetic mean was 3.98. In which the highest response rate was “Agree”, with a percentage response rate of 48.5%. The next most significant disadvantage shown in the results was “School time organisation (fixed lesson time, time tabling etc.) make difficulty to use ICT” with a mean of 3.98. In which the highest response rate was “Agree”, with a percentage response rate of 48.5%.

THE EFFECT OF ICT USE IN TEACHING ON TEACHER

The use of ICT in teaching can impact a teacher in a variety of different ways, and can contribute to their development and skills. Data obtained from analysis are tabulated in table.3

THE IMPACT OF USING ICT IN TEACHING ON TEACHERS (N=70)

When you use ICT in teaching, in what ways does this affect you as a teacher?		Strongly Disagree	Disagree	Neither agree nor disagree	Agree	Strongly Agree	Mean	Level of agreement
ICT enhances my role as a teacher	N	2	3	25	22	18	3.72	High
	%	2.8	4.2	35.7	31.4	25.7		
ICT makes me feel more professional	N	3	9	7	20	31	3.95	High
	%	4.2	12.8	10	28.5	44.2		
ICT positively changes the learning climate in my classroom	N	3	5	12	29	21	3.85	High
	%	4.2	7.1	17.1	41.4	30		
ICT positively changes the relationship between me and my students	N	3	8	28			16	15
	%	4.28	11.4	40	22.8	21.4		
ICT positively changes the usual relationship between students in my classroom	N	2	11	28	19	10	3.44	Medium
	%	2.85	15.7	40	27.1	14.2		
Total							3.68	High

TABLE NO 3

It is clear from Table 3 that there is a significant impact from the use of ICT and its applications on teachers. The arithmetic average reached 3.68 which indicate significant impact. The results also show that the statement “ICT makes me feel more professional” was most strongly agreed by respondents, where the arithmetic mean was 3.95, the highest response rate was “strongly Agree” with a percentage response rate of 44.2%. Second was the statement “ICT positively changes the learning climate in my classroom” where the arithmetic mean was 3.85, the highest response was “Agree” with a percentage response rate of 41.4%.

The least significant impact regarding the use of ICT in the teaching process was that “ICT positively changes the usual relationship between students in my classroom” where arithmetic

mean was 3.44, the highest response was “Neither agree nor disagree”, with a percentage response rate of 40%.

3. MAJOR FINDINGS

- Level of using ICT by tribal residential school teachers in the teaching process at school was low.
- The highest rated skill or application of teachers in the usage of ICT in the teaching process at school was “Use the Internet to obtain teaching resources”.
- lowest rated skills or applications were “Use interactive whiteboards” and Look up information on a hard disc drive or compact disc
- Highest advantage for implementing ICT in the teaching process was ICT makes teaching more interesting to teachers.
- The most significant disadvantage given by respondents that can arise as a result for using ICT in the teaching process was ICT often prevent teaching because of interruption in work or in software.
- There is a significant impact from the use of ICT and its applications on teachers

4. CONCLUSION

The use of ICT is changing teaching in several ways. With ICT, teachers are able to create their own material and thus have more control over the material used in the classroom than they have had in the past. Rather than deskilling teachers as some scholars claim, it seems that technology is requiring teachers to be more creative in customizing their own material. But the results of the study shows that teachers have high level of perspective on ICT use but the level of use of ICT in school is low. Teachers themselves should take action to improve the use of ICT in teaching process and government should provide required facilities for them.

5. REFERENCES

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