

## A Study of Teachers Experience with ICT Based Teaching

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### Abstract

The teaching and learning process is expected to be an active, interactive and may process where a teacher plays a role of facilitator, technologists and co-learner instead of merely an instructor. With an aim of making our students the global citizens, UGC and NAAC are also pushing teachers to integrate ICT in their teaching. More and more grants are provided for the purpose. Though nearly 45% of the teachers use ICT in their teaching, to address the above more infrastructure and training is needed. This is the micro-level case study of a rural based college. It is related to ICT using habits and experience of the senior college taught and student response to ICT teaching. It shows that the share of ICT teaching is about 20 to 30% in total teaching. Availability of Equipment and Power supply are the major difficulties in using of ICT. But this new teaching method is now well introduced in undergraduate level and even students from rural background also have began to use it.

### INTRODUCTION

In past three decades, there has been a very significant progress in our understanding of how humans learn. The key learning principle is that each learner must construct his/her own understanding of concepts, relationships, and procedures. While peers and teachers can assist a learner in learning, the construction of meanings and understandings, often together with skills and positive feelings, is fundamentally an idiosyncratic process that only each learner can choose to achieve (Novak, 1998). Traditional method is Teacher centric, teacher being the controller of the teaching environment. Power and responsibility are held by the teacher and they play the role of instructor (in the form of Lectures) and decision maker. In short the traditional teacher that causes learning to occur (Novak, 1998) whereas as in ICT based teaching students' understanding is important. ICT is a powerful tool for problem solving, conceptual development and critical thinking that helps to make the learning process

process easier.<sup>1</sup> As a result of the increasing application of ICTs in education a number of new learning approaches have emerged.<sup>2</sup> The use of ICT based teaching has spread in a major speed due to the technological advances and increasing availability of these tools. It is bringing new sophistication in teaching and learning process. The process becomes proactive and appealing with these aids. Also in this era of globalisation it has become very necessary to be updated and to be more resourceful. With an aim of making our students the global citizens, UGC and NAAC are pushing teachers to integrate ICT in their teaching. More and more grants are provided for the purpose. The teaching and learning process is expected to be an active, interactive two way process where a teacher plays a role of facilitator, technologian and co-learner instead of merely an instructor. As the author of this research article is a senior college teacher, he has tried to understand the views and experiences of college teachers on ICT based teaching process.

## STUDY AREA

The scope of this study is limited to the senior college teachers of M. V. P. Samaj's Arts, Commerce and Science College, Ouar (Mig). The college is of rural background. It offers the undergraduate courses of Arts, Science and Commerce faculty as well as Post Graduation in Hindi.

## OBJECTIVES

- \* To know how effectively teachers use ICT tools in their teaching
- \* To understand the challenges teachers face while using ICT tools
- \* To know which method of teaching is preferred amongst ICT based and traditional teaching method and to understand the reasons behind the choice.
- \* To find out the students response to ICT based teaching method.

## LIMITATION OF THE STUDY

The study focuses only on the views and experiences of the senior college teachers at Undergraduate level of M. V. P. Samaj's Arts, Science and Commerce College, Ouar (Mig) so cautions should be taken while generalizing.

**METHOD AND DATA**

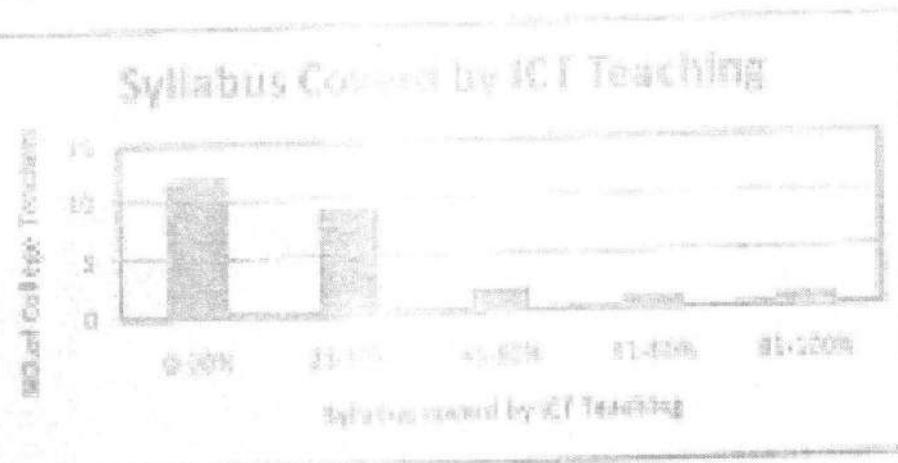
The tool of data collection used in this study is survey for which 25 senior college teachers of M. A. B.Ed Arts, Commerce and Science College, Ooty (Mys) having minimum five years of teaching experience are interviewed. A sample is drawn using method of convenient sampling and a sample size is 62.5% of the targeted population. The recording of responses is followed by quantitative as well as qualitative analysis. A structured interview covered 9 close-end questions and 1 open-end question which are mentioned below:

1. Since when you have started using ICT tools? Please mention the year.
2. Which ICT tools you use in teaching?
  - (a) Television (b) Tape recorder (c) PPT (d) Internet
3. How much satisfied you are with the availability of ICT tools? Please mention the percentage.
4. In a period of one month how many times do you use ICT in teaching?
5. Please mention the percentage of chapters you cover with ICT?
6. Do you suggest web links for each chapter of syllabus? Yes/No
7. Do students go through those web links? Yes/No
8. Do you ask your students to prepare PPT of any topic? Yes/No
9. Which type of problems you face for using ICT?
  - (a) availability of tools (b) skill to use (c) interest of students (d) load shading (e) other
10. Which method of teaching you prefer, traditional or ICT based? Why?

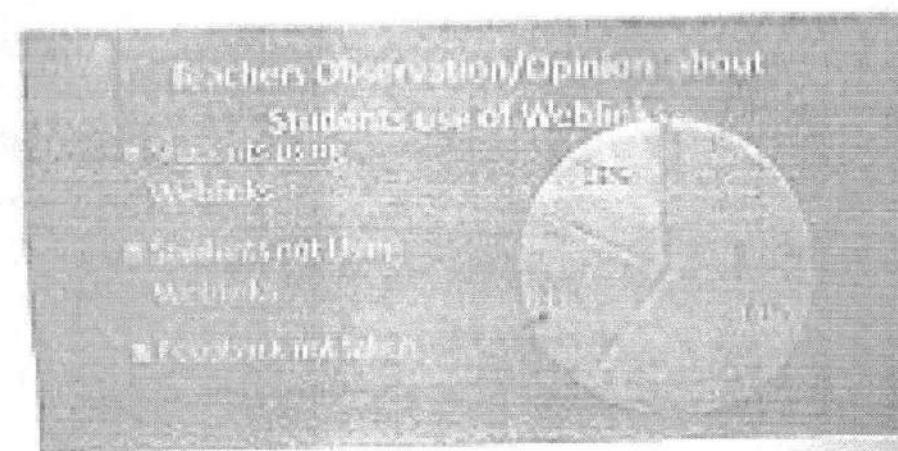
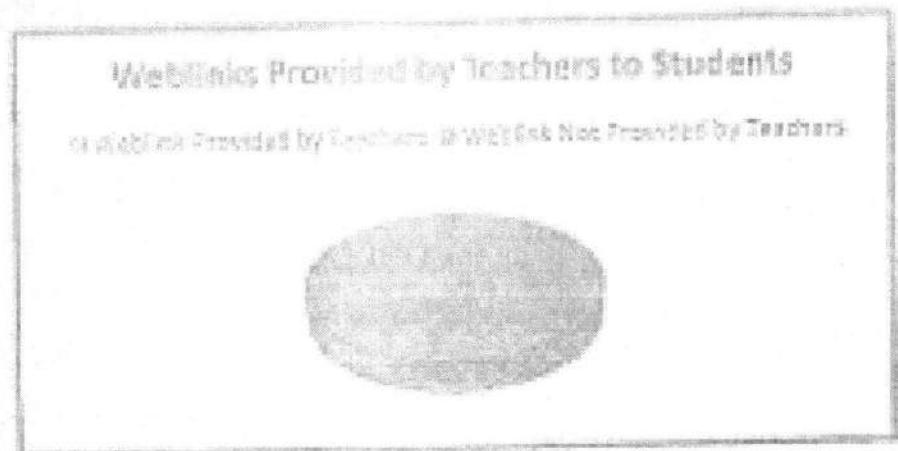
Answers are analyzed with the help of MS office Excel software. Simple statistical tools like percentage and average also apply. Results are represented by the diagram like pie chart and Bar graph.

**RESULTS AND DISCUSSION**

The data analysis clearly shows that total 43% of the teachers use ICT in teaching methods. 57% of the teachers prefer ICT based teaching over traditional methods and 30% of the teachers prefer traditional methods of teaching and 20% of the teachers do not prefer either.

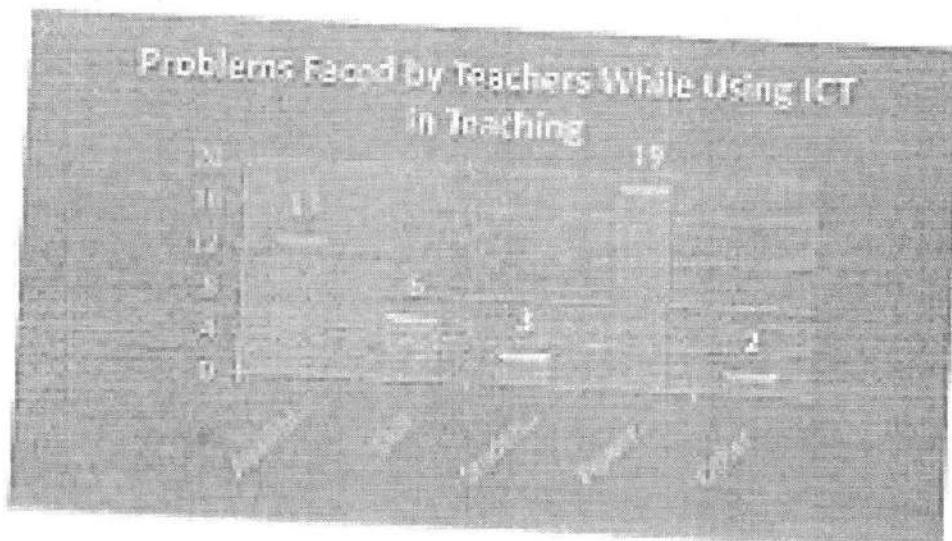


The 75% teachers suggest web links for syllabus related topics to students. Every class has specific students who frequently use these web links.



Students are not interested in preparation of PPT because they have to present educational system, they students make ppt and present it at the seminars. Few of them frequently use computers to collect information about their topics.

Availability of equipments and power failure are the major barrier in using ICT in teaching. Few teachers don't have the skill of using ICT (24%) so they are not interested in it and 50% students like the ICT based teaching method.



The analysis of answers to question no. 10 suggests that large number of teachers prefers ICT enabled teaching as it becomes easier to understand, memorable, interesting and more effective due to the live audio-visual input. Students learn more in less time. One of the teachers feels that fewer efforts are required to teach more effectively. Also it reduces physical exertions. Many teachers mentioned that some teaching material like charts, tables, maps, videos, rare photographs, numerical analysis or data analysis can be explained and understood well with PPTs or web. Students also can carry and store the material well. One of the teachers even has created special blog and email account to help the students.

Some teachers prefer traditional method over ICT due to lack of skill to use the latter. 16% of the teachers feels that overwhelmingly large amount of information gets covered with ICT tools and that is too in a short period of time that leads to lesser understanding. In traditional teaching some control can be exerted on content, time and speed. One of the senior teachers mentions the phobia of new technology and so compromises on traditional method of teaching.

The combination of traditional and ICT based teaching is preferred due to the unique advantages of both the methods.

## CONCLUSIONS

1. The teachers are increasingly engaged with ICT based teaching. Though nearly 45% of the teachers use ICT in their teaching more infrastructures and training is needed.
2. Availability of equipments and power failure are the major barrier in using ICT in teaching.
3. Major part of the syllabus is covered by ICT teaching and there is a need of increasing this as it is more effective and interesting for students.
4. Teachers believe that ICT based teaching is more effective than the traditional methods.
5. Students response to ICT based teaching is more positive than the traditional method.
6. Teachers also believe that ICT based teaching reduces their physical efforts (less talking, less black board writing, no efforts for drawing complicated diagrams and equations, no need to write down lengthy mathematical or sucking problems and study material can be use again and again).

## **REFERENCES**

1. Joseph D. Novak (1998). "The Promise of New Ideas and New Technology for Improving Teaching and Learning". Cell Biology Education Vol. 2, 122-132, Summer 2003 pg. 122
2. Gubrium GL."Integrating ICT in Teacher Education" pg.197 ([www.miljus.info/index.php/mjatp/article/viewFile/634/31](http://www.miljus.info/index.php/mjatp/article/viewFile/634/31))
3. <http://www.qualitycelllibrary.education/caducum-and-instruction/educational-technology/ict-in-education>

## **ANNEXURE -II**