

Case Study on need of ICT in Teaching Learning Process

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Abstract: ICT has become integral part of life, the initiation of Information and communication technology has made tremendous changes in 21st century. All the fields of the life are influenced by these digital phenomena. The advent of ICT in teaching and learning helped to improve the quality of education, where teaching and learning eventually became an engaging active process related to real life. ICT is helping everybody to fulfill all kind of needs, As a result ICT learning is not limited to four walls of the classroom, information transmission takes place even outside the classroom.

This paper will highlight the impact of ICT on teaching learning process. Also an attempt to check the likings of the students to make learner centric approach. Traditional method is compared with the ICT based learning. Analysis is carried out for the class strength of 60. It gives an idea of interest of the students towards the ICT in the teaching learning process. It is concluded that involvement of ICT is required in the process to enhance the knowledge dissemination and also it will help for the creativity and application.

Key Words: Teaching learning, ICT, Traditional learning, Active learning

1. Introduction

Conventional method of teaching learning process is followed from many centuries. As time passed there is more emphasis on learners. It has become learner Centric. Understanding level of student and attainment of the disseminated knowledge is evaluated. During the process teaching methodology and teaching aids are required to be changed for making students to learn in a better way. Students are having more access of information through ICT. It will help them to understand in a proper way. ICT is an usage of digital technology, communication tools required to access, manage, and to enhance the knowledge. ICT in a broader sense include Computer, Internet, Multimedia, E Books, E Notes, Virtual class room, Presentations, Videos, Animations and Demonstrations Etc. Which makes students to enhance their learning skills.

The rapid growth of ICT and the emergence of the internet has a tremendous impact on teaching learning process, as said "information is key to success" every aspect of globe requires current, updated information on single click. ICT is helping the researchers to get the same, use of ICT in Teaching & learning increase the efficiency of students to understand the topics. Nature of teaching becomes easier, improvement in

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output quality, range of services and wide access to different kind of information and pedagogies.

Everybody is experiencing the effects of ICT, which are more in the field of education since it has the potential for teachers to transform the teaching methodology to meet individual needs. ICT is providing good opportunities to develop country to enrich the educational system since it can help in acquiring and disseminating knowledge. ICT change the way teacher delivers the knowledge to aspirant, institutes that are following old methodology of teaching are not meeting the needs of tomorrow's world, such students will not be able to survive / fight the tomorrow's professional requirements. Hence ICT becomes the essential tool in giving quality education [1].

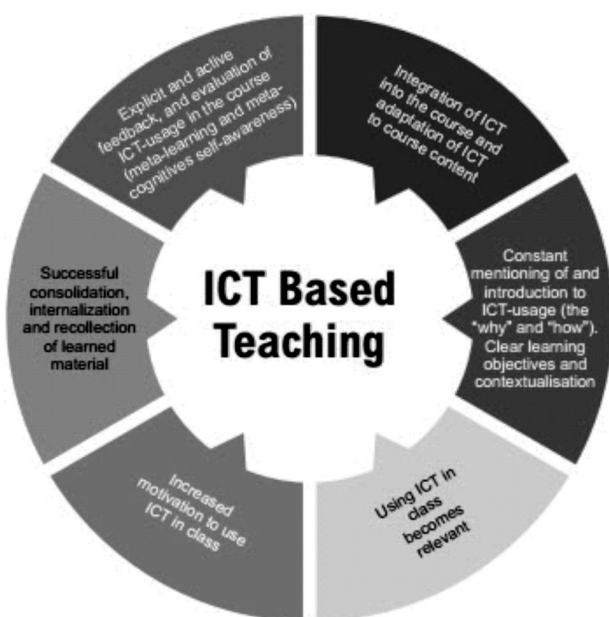


Figure 1. [4]

2. Objectives: The objectives of the paper are

- a. To understand the likings of the students.
- b. To help students to acquire skills to assist them in their life.
- c. To make teaching learning process more effective.
- d. To prepare students to sustain in the tomorrow's world.

The Researcher tried to achieve the objectives by conducting the survey in order to identify the student's mindset towards the use of different ICT tools in the process of Teaching and Learning. With same intention, 60 students of Second year, third year and Final year engineering having average performance were selected. Questionnaires were distributed and they were told to submit the questionnaires at the end of the day. Analysis of the same is mentioned in the paper.

2.1 Following are the responses of the students to various questions asked to them:

1. Which of the following methods of teaching do you think gives you more effective learning experience?

- ☐ Traditional teaching using blackboard
- ☐ ICT based Learning
- ☐ Combination of both

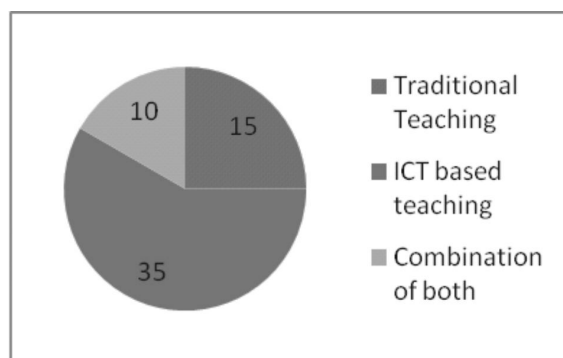


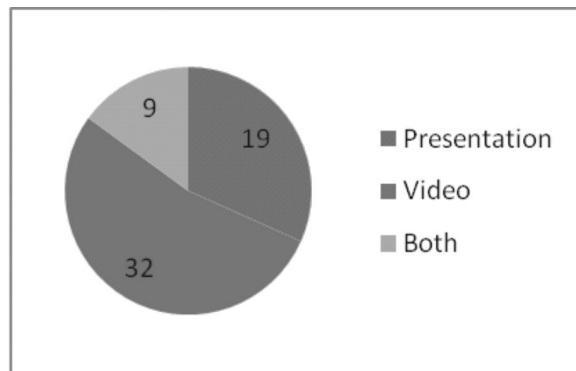
Figure 2.

From the above chart it is clear that 15 students expects traditional way of teaching using blackboard, around 10 expects combinations of both Traditional & ICT base teaching and most of the students i.e. 35 students are expecting only ICT base teaching learning.

2. Which one of the following ICT tool gives you

more understanding of the subject matter.

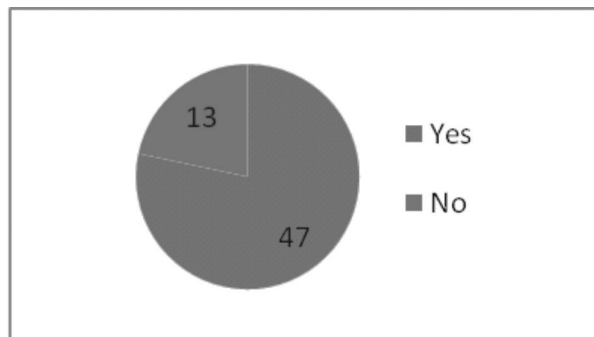
- a. Presentation
- b. Videos
- c. Both of the above

**Figure 3.**

From the above data it is clear that 19 students say presentation is good for understanding subject matter, where as 32 students are towards the video and remaining 9 are happy with both.

3. Do you think technology based learning enriches quality of teaching and learning?

- a. Yes
- b. No

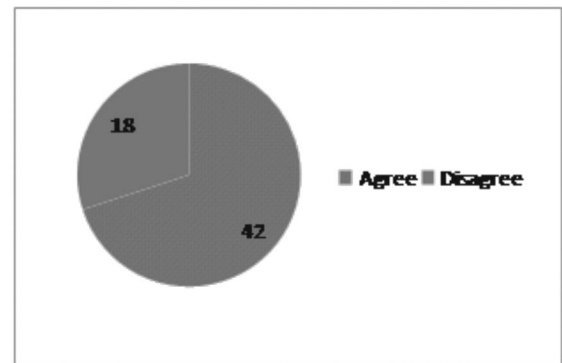
**Figure 4.**

It is very much clear that more than 78% students believe that the use of technology in teaching learning process to enhance the quality of the learning process.

4. Quality of Teaching depends upon Teaching Resources

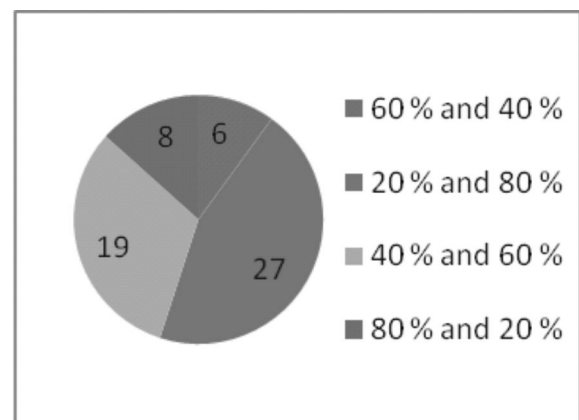
- a. Agree
- b. Disagree

The above chart explains that the 70 % of the students believes in quality of the teaching aids as impact on teaching learning.

**Figure 5.**

5. What percentage of ICT and Traditional - Blackboard teaching combination would you prefer?

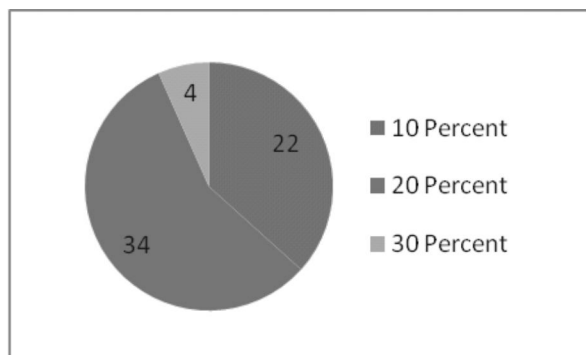
Blackboard	ICT
a. 60 %	40%
b. 20 %	80%
c. 40%	60%
d. 80%	20%

**Figure 6.**

From the above data it is clear that only 23 % students are expecting more of blackboard learning where as 77 % students are expecting ICT base teaching and learning resources.

6. Out of 6 hours of teaching for how many hours ICT based teaching is preferred?

- a. 2 hrs
- b. 3 hrs
- c. 4 hrs and more

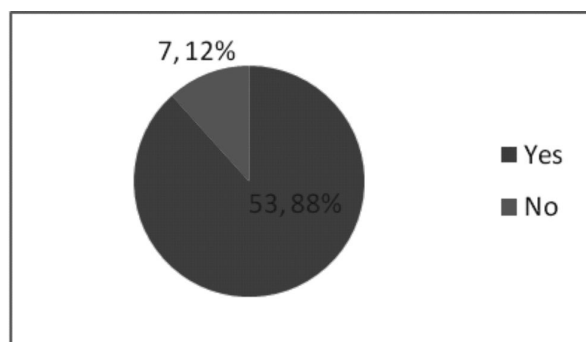
**Figure 10**

Above chart shows that 57 % students have improved their result by 20%, 37% students have improved result by 10% and remaining 6 % have improved by 30 % increase in marks.

10. Based on your experience about ICT based learning do you think that it will be beneficial for next batch.

a. Yes

b. No

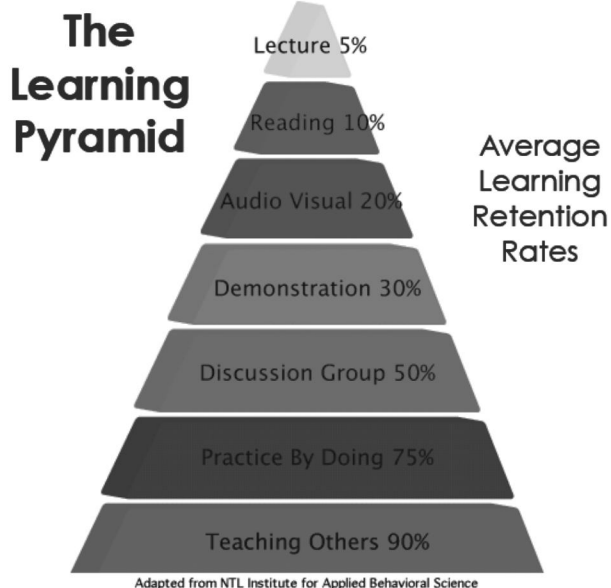
**Figure 11.**

From above chart we can conclude that 88% students advised to have ICT base learning as a teaching aid for future batches.

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4. Discussion:

If we look at this Learning Pyramid we understand that the Teaching and learning process is the joint effort of a teacher and the student. Learning is not just

**Figure 12. [4]**

for the student but also for the teacher. And hence combination of all the resources which enrich the quality of the process is essential. Learning by lecture gives 5 % impact on students where in providing them an information and making them to practice by the process of active learning gives more outcome, as the era is the learner centric (outcome based education) it's better to adapt the teaching aid's with technology and as per the requirement of the students. However, with the help of ICT, access to information is easy and faster. Students can acquire knowledge in just a single click. The basic motive here is to provide a conducive learning environment for teachers and students that will result in empowerment of both.

ICT a focus on learners – It motivates, engage the learners, it offers personal approach to learning, unleashing creativity in learning, create independence in learning & develop collaborative learning.

ICT a focus for the teacher – It offers new way of delivering the same knowledge, student centric teaching, overcome the barriers, reducing the burdens, time saving in administrative work & more comprehensive approach for assessment.

5. Findings and Conclusion

1. Students want an ICT based teaching and learning process for their better understanding.

2. ICT enhances the quality of education, students are expecting 20-30 % of traditional way of teaching and 70-80% ICT based teaching.
3. ICT gives access to more information within no time, with which it is easy to improve the result.
4. Methods of Active learning, flipped classroom will be easy to adopt, if ICT is taken into consideration.

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