CONVENTIONAL VERSUS MODERN: ROLE OF INFORMATION TECHNOLOGY IN IMPROVING TEACHING PEDAGOGIES

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Abstract

In this paper an attempt has been made to analyze the role of smart and conventional teaching. It is observed that the impact of Information Technology in education sector, has introduced new approaches to the teaching method. Education plays substantial role in the progress and development of every nation. Use of Information Technology accelerated the growth of this field. Earlier, conventional mode of teaching was popular but certain barriers have been noticed in student-teacher interaction, i.e., complete dependency on instructor, language barrier, lack of tangible study materials, etc. The inception of new technology in the field of education brought freshness in teaching methodologies. As a result teaching in new era has become interesting and teacher student friendly. It can be marked one step ahead from chalk and talk teaching method. Nowadays learning materials like e-books and video lectures are easily available on internet sites in different subjects for keen learners. As more and more new courses in different areas are being introduced, consequently number of students preferring online mode of learning. Information Technology has made complex subjects interesting and comprehensive. Though it has revolutionized the entire education system, but the role of conventional teaching can't be ignored. Education is not only about gaining bookish knowledge but preparing a student to become a good citizen in terms of carrying social values, human emotions, behavior, work ethics and other skills as a man of society. It brings students closer to the teacher whose experiences and interaction cultivates those skills along with subject knowledge. So for the best outcome conventional teaching must employ the smart technology based teaching methods. Smart method will help in developing the LSRW (Listening, Speaking, Reading and Writing) skills of students which is essential for their professional growth, and conventional teaching will contribute in their personal enrichment.

Keywords: Conventional method, Information Technology, Teaching pedagogies, LSRW, Active Learning.

1. INTRODUCTION

Education preferably provides knowledge to a person about various subjects. But acquiring knowledge on various subjects and topics at once would remain a dream if Information Technology were not introduced to the modern society. Information Technology has subsequent contribution in spreading knowledge and information worldwide. "It is the application of Computers to store, study, retrieve transmit and manipulate data or information, often in the context of a business or other enterprise" (Wikipedia)**.** It is a medium which made life easier and information handy. We are able to access information about a place, community, culture, society, its pattern and so on in the blink of an eye. It is a new and better way to educate oneself through electronic learning, online web and video courses. People, across the globe, are free to share their

ideas and opinions on the topics of common interest. The advancement of technology has broadly affected every sphere in the society. It has improved society by providing awareness, developed paperless culture in the organizations, and introduced various sources of entertainment. The impact can be marked on various domains such as society, business, education, and social media. IT has become an integral part of our routine life, and it would be better to say that no aspect of life has left untouched by Information Technology. Education, too, has been reformed and renewed by Information Technology and now it has become an indispensable part of education system. "Teaching business and management has changed over the past decades in terms of the types of delivery, especially with the use of technology" (Barrett, 2010, p. 18). Embracing the advancement through IT in educational institutes has made teaching easy and learning interesting. It provides variety of concepts to a reader which helps in building the foundation. It may count as a boon for a voracious reader and an avid learner.

2. CONVENTIONAL METHOD OF TEACHING

Education has a paramount role to succeed in life. Through education not only a single person gets benefited but it also helps in establishing a healthy and progressive society. Earlier conventional or back-to-basic teaching was popular owing to the lack of technology and technical skills. Conventional teaching, "refers to long-established customs that society traditionally used in schools" (Wikipedia). Later it was realized that this method is more teacher centered and less student oriented, which, in future, can bring hurdles to their personal and professional growth. Moreover in conventional teaching when information is being shared it is doubtful that the proper and correct information is reaching to each and every student or not. "A teaching method comprises the principles and methods used for instruction to be implemented by teachers to achieve the desired learning by students. These strategies are determined partly on subject matter to be taught and partly by the nature of the learner. For a particular teaching method to be appropriate and efficient it has to be in relation with the characteristic of the learner and the type of learning it is supposed to bring about" **(**(Wikipedia). Conventional teaching is observed limited and passive due to the weak listening skills of students. Among the four skills LSRW, listening is the most important skill, which helps in interpreting the message correctly. If a student is unable to comprehend the message he would not be able to decode it, and for a teacher it is very difficult to repeat the same sentences time and again. Also, it is hard to hold the attention of students for long hours while following ***chalk and talk*** method in teaching. According to Richards (Hake, Richard R., 1998, p. 64-74), "traditional teaching methodology was explained as learning that was mostly seen as under teacher's control. In this regard, the traditional classrooms were seen like ceremonial places where students sat in rows like spectators, while the teacher sat in front of them as a mayor or a priest" (Karanezi et al., 2015, p. 311). In such condition teaching is a challenge for a teacher where teacher student interaction is very less and a teacher acts as a solo performer. There can be certain problems in understanding level of students because each one is coming from different background. For an example if we talk about the nation like India where the medium of teaching in higher education is English which is a language of non-natives. This may create difficulty for the students in understanding the second language. Certain problems have been identified with the students when one way communication is going on as a result they neither clear their doubts nor raise questions because they are unable to understand hence unable to focus on the lecture. Conventional teaching sometimes becomes monotonous and lifeless due to following factors:

2.1. Merits of Conventional Method of Teaching

Conventional teaching method is being followed in educational institutes since long. But suddenly the need of change in the teaching approach has been realized and smart teaching method is introduced. But conventional teaching has its own advantages which cannot be denied because of modern and high tech learning aids. Conventional teaching has following benefits:

- It helps in explaining conceptual subjects like mathematics, physics and accounting. For these subjects an explanation with suitable example is required which can be drawn on the whiteboard to make the students understand.

- Conventional teaching doesn't pressurize a teacher to have technical knowledge. He focuses on his subject and gets less deviated from teaching. He can easily follow the old pattern without learning the new technical skills.

- Conventional teaching method is easy and cheaper than the modern teaching method. As it requires a classroom, a whiteboard and a marker. In rural areas establishing virtual classroom is difficult as the equipment are very costly. Also lack of proper technical knowledge can create delay in everyday teaching. Hence conventional method is more appropriate to teach the students in such conditions.

- Conventional method is helpful in developing students' critical thinking. They build their own idea based on the idea or clue given by their instructor to think deeply on the topics. They will be engaged more in study rather than wasting their time in unusual things.

- In conventional teaching the instructor also pays due attention to the teaching content. He gives time to the preparation because he doesn't have any readymade material to deliver in the class.

- In conventional teaching teacher and students feel themselves connected to each other. Their interaction is not mechanical rather it is always respectful and supportive. Teaching and learning simply not restricted to finding facts and acquiring knowledge, it is also about sharing ideas on various topics related to the life.

2.2. Demerits of Conventional Method of Teaching

- Pronunciation is one of those hurdles and the biggest drawback of conventional teaching. Sometimes the recipient does not understand the lecture due to this barrier. Receiving a particular word in incorrect manner can distort the entire crux of teaching content.

- In traditional method learner has complete dependency on the teacher. In such cases learner does not try to seek information from other sources which can be helpful in expanding his knowledge and mental boundary. He learns what he is being taught by the instructor.

- Conventional teaching takes much preparation time in reading content and preparing notes. And when it comes to deliver those prepared notes in the class again it is an uphill task to accomplish. It creates unnecessary burden for the instructor.

- As a learner is completely depended on teacher's explanation about the topic, if someday a student skips the lecture or does not concentrate properly in the class he has no second chance to obtain the same explanation.

- Poor listening and inefficient writing skills create problem for the instructor. When instructor draws some formula or theory on the whiteboard few students are not able to copy the symbols correctly, as a result instructor has to pay extra attention on such students which can be tiresome and time taking.

- In conventional teaching student suffers if the available study material in the library is insufficient. If he has to clarify some concept he has to rely on available stock only. Because the approach of explaining topics can be different in each book, and if the available book is not able to serve the purpose, in such condition an easy topic can be complex for him.

- Conventional teaching can be said less interactive. Teaching theoretical subjects can be boring as a result, targeted audience becomes indifferent towards the lecture.

3. SMART TEACHING METHOD

Modern education format has completely changed, which is a result of socio-economic shift. From the last decade use of technology has brought better opportunities and medium of educating the mass. People have scope to learn through the distant mode with their respective jobs and busy routine, which was quite difficult in early days. This is possible if we are well aware of the use of new technology as one can collect and verify the information through various sources. IT has emerged as the most potent tool for collecting, organizing, and disseminating information to people on a large scale through communication networks (T. Ashraf, 2004, p. 309). Information Technology has become an integral part of everyday life and a helpful tool to fight against the cutthroat competition. Therefore imparting quality education through good medium has become a priority of educational institutes. Educational institutes started following smart teaching mode because it is very much effective and easy. We can understand its importance by following points:

3.1. Advantages of Smart Teaching over the Conventional One

- Connecting oneself to IT made learning easy for everyone. One can access reading material easily on several topics and can develop a better understanding by reading from different sources.

- Use of audio and visual aids in the classroom helps students to understand the topic more efficiently. Use of projector for teaching makes class more interactive, as each slide is displayed on the screen which helps students in focusing on the topic. It is also beneficial for those whose listening skills are not good they can learn by focusing on written content.

- Communication is an art and to excel in professional field, therefore communication skills should be effective and impeccable. Language Lab helped students in overcoming these challenges. LL is an innovative method of learning. It assists students in honing their speaking and listening skills. They can use

head phone to improve their pronunciation as well as listening skills. Besides, on screen transcription of a particular word helps to pronounce it in the correct manner.

- Student can better understand topics through e-lectures, e.g. The National Programme on Technology Enhanced Learning (NPTEL) lectures have become great help to those who are unable to attend the classes as a regular student. This is a project funded by Ministry of Human Resource Development (MHRD), India to provide e-learning in Engineering, Science, Technology, Humanities and Management. The objective of NPTEL Programme is to enhance the quality of education. Also e-notes are available to clear doubts on internet.

- Modern teaching is time saving and less brain wrecking exercise for the instructor. He doesn't have to waste his time in scribbling his written notes again on the whiteboard.

- Use of audio and video material, image, chart, graph etc., enables students in developing a better understanding for the theory and they memorize it for longer duration.

- In modern method students can frequently inquire about the topic if they have difficulty in understanding the content on a particular slide.

3.2. Loop Holes in Smart Teaching Method

Of late we are surrounded by technology thus we are busy with machines which has significance role in deteriorating human values. We are maintaining distance from the human relations and becoming very much self-centered. Information Technology is boon to the education but excess of everything is bad. Modern teaching method has certain loop-holes, discussed below:

- Teaching with the help of modern technique is beneficial but at the same time it is very costly. Set-up of modern/virtual classroom requires suitable infrastructure, maintenance, skilled staff, proper electricity and internet facility. In rural areas possibility of getting all required things is a question mark. The equipment are so costly and if proper heed is not paid to the maintenance, in the long run equipment will stop working.

- Students can be careless whether they are present or absent in the class, as they know that they will collect the slides from the teacher. Student may feel disconnected with the teacher because he thinks that he will get everything available on the internet.

- Some instructors may have difficulty in learning new method of teaching. Connecting projector to the laptop or dealing with some immediate malfunctioning can embarrass them.

4. LITERATURE REVIEW

Conventional and modern method of teaching can be said two sides of the same coin. Both are good but can be done simultaneously by following active learning teaching method which involves technology based and learner centered teaching technique viz., reading, discussing, writing, thinking and role playing. It involves the participation of students as much as possible.

The term active learning "was introduced by the English scholar R. W. Revans (1907-2003)." (Bonwell & Eison, 1991) states that in active learning, students participate in the process and students participates when they are doing something besides passive learning" (Weltman, P.7, 2007). active learning is "a method of learning in which students are actively and experimentally involved in the learning process and where there are different levels of active learning, depending on students involvement" (Weltman, P.8, 2007). It is a model of instructions that focuses the responsibility of learning on learners. It was popularized in 1990s by its appearance on the Association for the Study of Higher Education (ASHE) report (Bonwell & Eison, 1991). In this report they discuss a variety of methodologies for promoting "active learning." They cite literature that indicates that to learn, students must do more than just listen: they must read, write, discuss or be engaged in solving problems. It relates to the three learning domains referred to as Knowledge, skills and attitudes (KSA), and that this taxonomy of learning behaviours can be thought of as "the goals of the learning process" (Bloom,1956).

There are diverse range of alternatives for the term "active learning" like learning through play, technology based learning, activity based learning, group work, project method, etc. the underlying factor behind these are some significant qualities of active learning. Active learning is the opposite of passive learning; it is learner-centered, not teacher centered and requires more than just listening; active participation of each and every student is a necessary aspect in active learning. Students must be doing things and simultaneously think about the work done and the purpose behind it so that they can enhance their higher order thinking capabilities. Many research studies have proven that activity learning as a strategy has promoted achievement levels and some others say that content mastery is possible through active learning strategies.

However, some students as well as teachers find it difficult to adapt to the new learning technique.

Numerous studies have shown evidence to support active learning, given adequate prior instructions.

- Richard Hake (p. 64-74, 1998) reviewed data from over 6000 physics students in 62 introductory physics courses and found that students in classes that utilized active learning and interactive engagement techniques improved 25 percent points, achieving an average gain of 48% on a standard test of physics conceptual knowledge, the Force Concept Inventory, compared to a gain of 23% for students in traditional, lecture-based courses.

- Similarly, Hoellwarth & Moelter (p. 540-545, 2011) showed that when instructors switched their physics classes from traditional instruction to active learning, student learning improved 38 percent points, from around 12% to over 50%, as measured by the Force Concept Inventory, which has become the standard measure of student learning in physics area.

In a 2012 report titled “Engage to Excel” the United States President’s Council Advisors on Science and Technology (PCAST) described how improved teaching methods, including engaging students in active learning, will increase student retention and improve performance in STEM courses. One study described in the report found that students in traditional lecture courses were twice as likely to leave engineering and three times as likely to drop out of college entirely compared with students taught using active learning techniques. In another cited study, students in a physics class that used active learning methods learned twice as much as those taught in a traditional class, as measured by test results

5.CONCLUSION

Innovative methods in teaching are welcomed because they are beneficial to the students. Undoubtedly, being familiar with technology seems need of time. Technology awareness prepares students to scale new heights so that they can able to present themselves as a complete package in the professional field. But at the same time the role of traditional or conventional teaching method should not be denied or discarded. It would be apt to follow both the teaching techniques at one platform. Maximum use of technology with active learning will help students in developing their LSRW skills. Visual aids can help them to retain the topic for longer duration in their mind. Therefore the use of Information Technology should be included from basic to higher level. Combining traditional and smart teaching can do wonders to the students at every level. Hence, Active Learning (combining active, experimental and conventional learning) should be adopted to balance the entire education system.

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