

Role of Technology in Higher Education

¹Anjali P. Kamble, Dr. ²Prakash T.Kamble

¹Podar International School, Yavatmal (M.S).

²College of Physical Education Yavatmal (M.S).

ABSTRACT:

Today we are in twenty-first century, new and rapidly improving technologies are in the process of transforming higher education. Now increased use in college classrooms of technology-dependent resources such as e-mail, the Internet, course web pages, and computer simulations. Technology has the potential to revolutionize the traditional teaching and learning process. Fundamentally, modern technologies have the ability to change the conception of a higher education institution. The important roles of technology in education lead to improve quality of studying; better communication facilitates skills and knowledge to students. Apart from that, with E-learning technology tools, students can access study material from any geographical area, wherever they go. As you can see, the importance of technology in education is tremendous, and its impact is growing. However, it is crucial to implement technology in education in the right way, because many traditional teaching methods should continue to exist. In addition, the computer is not applicable in every situation, nor is learning with it necessarily more efficient. Therefore, it is up to teachers to strike a balance between future-ready education and the good old offline teaching.

Key Words: Technology, Higher Education

Introduction:

Today we are in 21st century there is a landmark development in the science and Technology including Space, Défense, Atomic energy, Computer, Internet service etc. Through Internet invention we may collect required information within a fraction of a second from any part of the universe. Technology is the application of scientific knowledge to the practical aims of human life or, as it is sometimes phrased, to the change and manipulation of the human environment. At the dawn of the twenty-first century, new and rapidly improving technologies are in the process of transforming higher education. Now increased use in college classrooms of technology-dependent resources such as e-mail, the Internet, course web pages, and computer simulations. Technology has the potential to revolutionize the traditional teaching and learning process. Students no longer have to meet in the same place at the same time to learn together from an instructor. Fundamentally, modern technologies have the ability to change the conception of a higher education institution. No longer is a higher education institution necessarily a physical place with classrooms and residence halls where students come to pursue an advanced education.

Colleges and universities have generally been quick to adopt new technologies, often even before their educational value has been proven. Throughout its history, higher education has experimented with technological advances as diverse as the blackboard and the personal computer. Some technologies have become permanent parts of the higher education enterprise. Others, such as the slide rule and the 16-millimeter movie projector, have been replaced as more sophisticated or more cost-effective technologies have emerged to take their place.

Special Challenges of Technology in Education:

In spite of its technology presents higher education with difficult challenges. Systematic planning of technological enhancements to educational programs is difficult when technology changes so quickly and unpredictably. Academic planners are continually playing catch-up to implement new technology applications that appear more quickly than a careful planning process can anticipate. Similarly, paying for new technologies with exciting educational applications remains troublesome for institutions with more needs than resources. No one knows what higher education will look like in 2025 or 2100. It is certain, however, that colleges and universities will be very different places than they were in the year 2000. Many

factors will contribute to the changes that will occur as the higher education system moves into the future. There is no doubt that technology will be one of the driving forces contributing to the educational transformation that is already well underway.

Importance Roles of Technology in Education:

The important roles of technology in education lead to improve quality of studying; better communication facilitates skills and knowledge to students. Apart from that, with E-learning technology tools, students can access study material from any geographical area, wherever they go. Technology has introduced revolutionary changes in all areas of life, from interpersonal communication, economy, entertainment industry, even education. It seems that today, more than ever, students are faced with changes that not only fundamentally alter the way they learn, but their everyday life as well. It is simply impossible to ignore the tremendous impact that modern technologies have on new generations of students.

Children grow up with laptops, tablets, various gadgets and modern digital systems, so they have long been ready for the modernization of education. With that in mind, the importance of technology in education only becomes more obvious. Learning styles have changed over the years, gradually introducing new technologies with a potential to improve teaching. Students' readiness for technology in the classroom is excellent news, because the digital age brings new challenges, not only in education, but in all other areas of life as well. Therefore, it is important that students learn to harness all the potential of modern society while still at schools and colleges.

Benefits of technology In Education:

There are many benefits of technology in the classroom, so we have picked five of the most significant for this handy list. From increased engagement to more inclusive environments, the correct application of EdTech improves a wide range of learning outcomes. And of course, using the latest tech helps prep students for the future in a variety of ways. It's no exaggeration to say that technology has transformed the classroom and brought enormous benefits. In a fairly short time, amazing innovations like iPads, laptops, and smart phones have opened up a new world of information for students of all ages. Adapting to this exciting new reality can be challenging for both teachers and students.

1. Encourages Collaboration

Among the many advantages technology brings to the classroom is that it promotes working together. Through the Internet, ideas and opinions can be shared just as easily as files and images can be transported digitally. Outside the classroom, students love to share their experiences on social media such as Facebook, Instagram, Twitter, and Snapchat. So, it is only natural that bringing technology into the classroom will lead to greater collaboration. The Net is filled with apps and sites for encouraging students and teachers to work together.

2. Makes Students More Engaged to Retain Information:

Now, take that same young learner or teen and plug them into a tablet or other device and watch the involvement in the learning process take flight. The interactivity excites, drawing the learner in. Not only do students feel motivated and energized by technology in the classroom, but they also participate in active learning, a most worthy educational goal. Now, take that same young learner or teen and plug them into a tablet or other device and watch the involvement in the learning process take flight. The interactivity excites, drawing the learner in. Not only do students feel motivated and energized by technology in the classroom, but they also participate in active learning, a most worthy educational goal. It should be no surprise that studies show engaged students retain more of what they have learned. Maximum percent of the students involved said that technology helped learning and retention.

3. Accommodates Multiple Learning Styles:

It is tempting to use a one-size-fits-all approach with students. It's faster and easier, of course, to see how technology can benefit each group:

a) Auditory learners

respond best to spoken rather than written words. For these pupils, recorded lessons, audiobooks, and podcasts can effectively be woven into lessons.

b) Visual learners

rely more on sight than sound, however. They read faster than auditory learners and tend to pay more attention to details when reading. When it comes to integrating technology into the classroom for these types of students, ebooks and interactive whiteboards are good choices. In addition, PowerPoint lessons with graphs and other visually-oriented materials such as videos are beneficial.

c) Tactile learners

find active learning best, so teachers can encourage them to use their sense of touch. This often presents a challenge for them and their teachers. Especially in the past, traditional teaching was primarily thought of as a one-way street. Under that model, students were forced to sit in seats for a long time listening to the teacher or writing exercises. Tactile learners are more likely to get bored and distracted under those conditions. Simply put, accommodating multiple learning styles allows education to be delivered in a more personalized way. That makes it a definite win for the students.

4: Provides Instant Feedback for Teachers:

When teachers can communicate and monitor students through EdTech, they obtain a lot of feedback. This information exchange can be a two-way, interactive process. On the one hand, teachers may write assessments, or give audio or visual files regarding student performances directly to them. On the other, students can discuss questions or concerns directly with the teacher in a similar manner. They could even be asked to respond to a poll in real-time. These are timely and quite efficient methods that may also form a more permanent record for both students and teachers.

In other words, teachers and students are able to look at the content of these messages at any time they want to refresh their memories. All in all, the feedback loop is enhanced and sped up through the benefits of technology. This makes the process that much meaningful and productive.

5: Prepares Students for the Future:

When it comes right down to it, the education system is all about preparing young people for the rest of their lives. A big part of their future will be the work world. Increasingly, this means being comfortable with new technology. Schools and universities need to keep up to date with trends. In fact, a nation's competitiveness depends on having a population that is well informed and capable.

Conclusions:

It has been long believed that the most efficient teaching method is traditional lecturing, where students passively follow the teacher's lecture. A lot has changed in the last couple of years, and teachers were given the opportunity to make use of the advantages of modern resources. Therefore, as far as teachers are concerned, the importance of technology in education is obvious:

- Easier communication with students
- Records of students and their progress are digitized
- Testing can be done using different apps for students
- Teachers are better informed which positively affects the quality of teaching
- Possibility of creating engaging, multimedia-assisted lectures
- More effective, and time-efficient work in the classroom
- More time and opportunities for professional development

All these things improve teacher-student cooperation and aim to provide students with the best possible education

As you can see, the importance of technology in education is tremendous, and its impact is growing. However, it is crucial to implement technology in education in the right way, because many traditional teaching methods should continue to exist. In addition, the computer is not applicable in every situation, nor is learning with it necessarily more efficient. Therefore, it is up to teachers to strike a balance between future-ready education and the good old offline teaching.

Modern communication models have greatly facilitated learning from home, i.e. online learning. This teaching method became extremely important during the 2020 global pandemic when schools were forced to shut down and fully switch to distance learning. Even before that, online courses were very popular, because they provided education to people who wanted professional development, but didn't have enough time or money to get it

References:

1. Lundegård, W. Per-Olof
Identity transformation in education for sustainable development
A question of location, 53 (2009), pp. 465
2. 2.C.D. Maddux
Twenty years of research in information technology in education
Computers in the Schools Journal, 20 (2003), pp. 38