

Teachers and Librarians use Information Technology in the learning and teaching process - An overview

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ABSTRACT

The integration of Information Technology (IT) in the teaching and learning process has revolutionized the roles of teachers and librarians in modern education. This paper explores the transformative impact of IT on pedagogy, resource management, and student engagement. Teachers utilize IT tools such as interactive whiteboards, educational apps, and virtual learning platforms to create immersive and personalized learning experiences. Simultaneously, librarians leverage digital libraries, online catalogue systems, and content curation tools to provide students instant access to vast resources. This synergy enhances collaboration, fosters critical thinking, and prepares learners for a digital future. The paper highlights the need for the use of IT's on education and various types of IT tools that can be used by the teachers and librarians in the modern education system. Ultimately, the study underscores the potential of IT to empower educators and learners, driving innovation in the education sector.

KEYWORDS: Teacher, Librarian, Information Technology, Teaching Learning Process.

INTRODUCTION

Education is the Key factor in developing human capabilities. The Information Technology revolution has very deeply affected almost all areas of human activities such as agriculture, industry; medicine, research, and education are also not exceptional. A College is an institution of higher education that imparts the world of knowledge. Higher-level education has been provided more as a learning process than teaching. Classroom teaching alone will not provide all the needed opportunities for attaining complex educational objectives. A few years ago, Blackboards and chalk pencil was the only option in classroom teaching for teachers? But nowadays science and technology have a great impact on the educational environment. In the new environment that technological advancement has brought to education, much remains to be done to help teachers' almost new goals and become familiar with new techniques of teaching. There are CHP projectors, SLIDE Shows, LCD Projectors, DLP projectors, Class websites, class blogs and wikis, mobile devices, E-Journal consortia, etc. are increasingly used in higher institutions even in Assam. In the present day information technology is very important in educational institutions because it helps teachers to impart knowledge for students to acquire it. The word "Information technology "(IT) Is a combination of two words one is "information" other is "Technology". Information means process data which carries meaning, and technology refers

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to computers and telecommunications. IT means the application of computer and communication technology for gathering, processing, storage, retrieval and dissemination of information.

NEED FOR USE OF IT'S ON EDUCATION

Information is increasing every day on various levels and various subjects. Today information is in great demand for our teachers to provide updated knowledge to students today, the use of information technology in higher educational institutions has become inevitable. It helps in increasing greater interest in learning. It helps teacher's better presentation of information in class

- Teaching made interactive.
- It makes easy access to information.
- Strong information storage.
- Knowledge sharing is made easy.

OBJECTIVE OF THE STUDY

The objective of the paper is to find out the various advantageous factors of using IT in the teaching and learning process.

METHODOLOGY

The study is based on some secondary and tertiary sources of information. In this regard, some article on the internet is also taken into account. Technologies in teaching aid For Assam practical feasibility is a debatable matter due to poor infrastructural background in many higher educational institutions, especially rural areas. But in early 2011 UGC took the initiative to provide equipment funds for college and Assam was no exception. Some modern technologies used in the classroom are highlighted below.

INFORMATION TECHNOLOGIES USED IN CLASSROOM:

Computer and LCD Projector

The LCD or digital projector allowed the teacher to deliver lessons to the whole class from the PC. One cable connected the computer to the projector, which then projected the computer screen onto the wall. In collaboration with the class, the teacher added images and graphs to the slides of a presentation. This was a simple, but engaging, task that helped to hold Students' attention. LCD projectors are extremely useful and effective teaching tools that facilitate a range of learning opportunities when connected to a desktop computer in whole-class teaching scenarios. Teachers generally use an LCD or digital projector, in conjunction with a laptop or desktop computer, to project the computer screen image onto a screen or wall.

Interactive White Board and Smart Board

Interactive board is required i.e. computer or laptop Projector and a built-in power board or an interactive device. An interactive whiteboard provides touch control of applications. These enhance the experience in the classroom by showing anything that can be on a computer screen. That not only aids in visual learning, but it is interactive so the students can draw, write, or manipulate images on the interactive whiteboard.

Microphone

Using microphones and speakers make it possible for teachers to reach a large number of students simultaneously. Interactive media have proven to be useful in increasing student's concentration levels.

Digital cameras, scanners

Teacher can use their mobile camera and scanner and record their all lecture and save every written note in mobile as pdf, if they teaching in best level then they should record their video that can help the absent students for use later.

Class website

Create and maintaining a classroom web page is a good idea for teachers and students to update the classroom. An easy way to student's work is to create a web page designed for the class. Once a web page is designed, a teacher can post homework assignments, students' work, and famous quotes.

Class Blogs and Wikis

A wiki is software used to create a website that can be accessed and edited by multiple individuals from any web browser. Teachers can use a classroom wiki page to allow students to collaborate on a group project. Students and teachers can login to a single location and add or edit content on the page to their classroom wiki. Teachers or administrators can create an educational wiki that would allow multiple teachers to add and edit content dealing with specific topics. Blogs allow students to maintain a running dialogue, such as journals, thoughts, ideas, and assignments that also provide students comments and reflections.

Zoom, Google met

Zoom and Google met are video conferencing tool that provides instructors and students a way to meet online synchronously via a personal PC/laptop or cell phone with or without using video. Teachers can set up Zoom and Google met meetings to conduct classes online, as well as record them for later access by students.

Information is accessible

The Internet is a huge amount of information. It can be used as an effective tool for acquiring knowledge. There are several websites and web directories that offer information on literally everything in the world. College libraries have made significant changes in the information world. These changes have transformed libraries from storehouses to powerhouses of information. Computer and communication technology have enabled the storage, processing, retrieval and dissemination of information very quickly and easily. In library computers store a large number of files consisting of information consequently, it is a very useful device to manage total library function through the support of certain software. The networks of all university libraries and the major programs have been launched by the government of India under the sponsorship of UGC. The result of this program is the establishment of INFLIBNET. It has developed a Windows-based library management software SOUL. The changes being experienced during the present move to a largely digital environment question the value of investing in models based on a predominantly print environment.

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Digital Library

Libraries have played a role in providing authentic and reliable sources of information for teachers, staff and researchers. Colleges are not limited in the number of students like school education in general. Because of the large number of students in college classes, they get much less personal attention from teachers. Students therefore have to rely heavily on self-learning. In this regard, college libraries are complementary to the classroom teaching of students. A digital library is a treasure trove of knowledge that can be accessed and used by anyone with an internet connection. Imagine having a vast collection of books, journals, articles, images, and videos at your fingertips, all available online, and just a click away. Digital libraries have made it possible to access information and resources from anywhere, at any time, and at a fraction of the cost of physical libraries. Some examples of digital libraries are the National Digital Library of India (NDLI), the British Library Endangered Archives Programme (BEAP) Indian Academy of Sciences, JSTOR, etc.

Library consortia

Library consortia play a crucial role in academia and research by fostering collaboration and resource sharing among libraries. A library consortium is an alliance of libraries, typically academic or research-oriented, that leverages their collective strength and provides enhanced services to their respective institutions and patrons. These consortia are robust networks, enabling libraries to access a broader range of resources, reduce costs, and promote cooperation in collection development, digitization efforts, and innovative technology solutions. Example library consortia-LIST N-LIST: National Library and Information Services Infrastructure for Scholarly Content (N-LIST) is the college component of e-Shodh Sindhu. It provides access to e-resources to students, researchers and faculty from colleges and other beneficiary institutions through server(s) installed at the INFLIBNET Centre.

Institutional Repositories

An institutional repository is an archive for collecting, preserving, and disseminating copies of the intellectual output of an institution and digitized, particularly college, universities and Research libraries utilize their IRs for archiving published works to increase their visibility and collaboration with other academics.

YouTube

can act as a supplement to classroom learning. Students can review complex topics revisit lectures, and gain a better understanding of concepts they may have missed in class Flexibility: One of the greatest advantages of YouTube is its flexibility. For example, KKHSOU YouTube channel, NISOS You YouTube channel, NCERT Channel.

CONCLUSION

To teach effectively at the college level, teachers must acquire technological competence and stay updated on emerging technologies relevant to their subjects and the teaching-learning process. This ensures that they can engage students and facilitate dynamic learning experiences.

In higher education, both teachers and librarians should possess foundational knowledge of computer hardware, operating systems, application software, and peripheral devices such as storage devices, digital cameras, scanners,

and video conferencing tools. They should also be proficient in utilizing e-resources, group messaging platforms, and other digital tools that enhance communication and learning.

Moreover, educators are increasingly adopting advanced technological skills such as creating weblogs, managing websites, and developing digital learning materials. These innovations not only enrich the educational experience for students but also prepare them for a technology-driven world.

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