ROLE OF TECHNOLOGY IN DISTANCE EDUCATION

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Abstract

Technology is providing a positive impact on delivery mechanisms employed in distance education at the university level. Some institutions are incorporating distance education as a way to extend the classroom. Other institutions are investigating new delivery mechanisms, which support a revised perspective on education. This article discusses the impact of technology on the delivery mechanisms employed in distance education. It is suggested that those institutions, which adopt a delivery mechanism employing an asynchronous mode, can gain the most benefit from technology. This approach seems to represent the only truly innovative use of technology in education. The approach creates a student driven environment while maintaining high levels of interaction, both of which are factors that contribute to student satisfaction with their educational experience. Students in distance programmes typically have access to tools that allow them to repeat lecturers and interact with their fellow students and faculty. Students in all classes, including face-to-face and blended courses, benefit from having similar tools and technologies available.

Key Words : *Technology, Distance Education*

Introduction

The role of technology in distance learning/distance education also known as online learning or e-learning, has been transformative and pivotal in reshaping the landscape of education. Technology has enabled educational institutions to deliver instruction to students who

are geographically distant from traditional classrooms, and it has brought about several significant changes in the way education is delivered and consumed.

Digital technologies for learning, such as self-paced learning modules, multimedia case studies, simulations, video tutorials, and communications and assessment tools, can increase the array of learning opportunities for adult students and their teachers.

Technology and distant learning are two of the biggest trends in education today. Technology allow us to reach more people than ever before, and distance learning allows students to learn from anywhere at any time. These two trends have also been combined into a single revolutionary educational experience: online classes. Online classes allow students to learn from anywhere, without having to be physically present at a university or other school. In an online class, students are connected through the internet and interact with their classmates and professors using online forums.

Role of Technology in Distance Education

Accessibility: Technology has made education accessible to a wider and more diverse audience. Students no longer need to be physically present in a specific location to access high-quality education. This has opened up opportunities for people in remote areas, working professionals, and those with physical disabilities.

Flexibility: Online learning offers flexibility in terms of when and where students can engage with educational content. They can learn at their own pace, which is particularly advantageous for those with busy schedules or other commitments.

Diverse Learning Resources: Technology has provided a vast array of digital learning resources such as videos, interactive simulations, e-books, and online assessments. These resources enhance the learning experience and cater to different learning styles.

Interactivity: Distance education platforms often incorporate interactive elements, including discussion forums, virtual classrooms, and live chats. These tools facilitate communication and collaboration among students and instructors.

Self-Paced Learning: Technology allows for self-paced learning, enabling students to review and revisit content as needed. This personalization can lead to better understanding and retention of material.

Cost-Effectiveness: Distance education can be more cost-effective for both students and institutions. There are reduced overheads associated with physical facilities, and students can save on commuting and accommodation expenses.

Global Reach: Technology has broken down geographical barriers, enabling institutions to reach a global audience. Students can enroll in courses offered by institutions from around the world, which fosters a diverse learning environment.

Adaptive Learning: Some technologies employ adaptive learning algorithms that personalize the educational experience based on a student's progress and performance, ensuring that each student receives appropriate challenges and support.

Assessment and Feedback: Online platforms facilitate automated assessments, immediate feedback, and data analytics. Instructors can track student progress more efficiently and provide timely feedback for improvement.

Professional Development: Distance education has become a common method for professionals to acquire new skills and certifications, enhancing their career prospects.

Continuous Learning: Technology has enabled a culture of continuous learning, where individuals can update their knowledge and skills throughout their careers.

Better Efficiency: Technology has made certain teaching tasks quicker and easier. For example, a teacher can arrange an online quiz for their students, which will provide them with instant results and feedback. This then eliminates the need for the teacher to assess and look through each child's quiz. Educators are also able to use technology to schedule separate group or individual lessons, produce personalized content, and stay in contact.

Higher Engagement: The switch from a traditional school setting to an online learning platform allows educators to embrace more interactive tools and approaches that students will find engaging.

Technology allows a shift from static learning materials to more dynamic interactive media content. Students often learn faster and engage more when they are not only passively listening to a teacher and reading textbooks but also participating in engaging academic activities.

Adopting Progressive Educational Technology: New technologies provide educators with a bigger variety of teaching methods and materials. Some of these new technologies include mobile educational apps, collaborative platforms, learning analytics, virtual reality, and many

other innovative tools and approaches. These new educational materials and methods can help make the learning process much more appealing and engaging for both students and teachers.

The Flipped Classroom: It is a practice in which, students watch lecture videos as homework and discussion is carried on them in the class-time by the teachers. It has resulted in a remarkably better student performance, with noticeable grade boost-up. Students can now learn at their own pace and save class-time for interaction.

Technologies used to support ODL can be classified into two main categories,the first being hardware and second being, software.The hardware currently in used are radio, television, telephone(land, mobile ,fax, Voice over Internet Protocol or VoIP), and computers. Fiber optic cables, satellite and microwave transmission facilities made enhancements to the technological infrastructure.

Delivering Instructional Content: Instructional Television (ITV): Since most people is watched television the medium is familiar.Motion and visuals can be combined in a single format so that complex or abstract concept can be illustrated through visual simulation. Instructional television is an effective way to take students to new environments(the moon, a foreign country,or through the lens of a microscope).Time and space can be collapsed,so that events can be captured and relayed as they happen.It is very effective for introducing,summarizing ,and reviewing concepts.It can be used effectively as a motivational tool.

Delivering Support Services to Learners: The success of learners depends upon the various support services available to them. Moreover,the delivery of student support services must be congruent with the mode of delivering instructional content. Support Services like tutorials, library, guidance counselling, and academic and administrative consultations, must be available in a wide variety of forms.

Research and Development Work: Research and development is integral to the informed use of ICT in education. ICT can also be used to gather much needed data on geographically distributed subjects, such as students University staff in the learning centers, etc.

Conclusion: The growing use of internet technologies for distance education opens new educational possibilities that move well beyond the position of more sophisticated delivery tools.The communication and instruction possibilities made feasible by the interconnected

network foster exchanges among the students and instructors,and among the students in the classroom.

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