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Analytical Study on Role of ICT in Higher Education

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ABSTRACT

As a result of the disruption that it has caused to the traditional classroom mode of instruction, modern technology may in the coming years bring about a change in the organizational framework of higher education. Because of the proliferation of high-speed internet, it is no longer necessary for students and faculty members to gather at the same location for the purpose of education. Instead, they can stay in contact with one another through online mediums and continue their education from any location in the world. This article focuses on the technological shifts that are taking place in higher education and discusses the ways in which these shifts are assisting students and academicians in their pursuit of excellence in higher education.

Keywords: ICT, higher, education, role.

INTRODUCTION

The adoption of ICT is in the process of transforming higher education and provides students, academician a forward-thinking educational setting with the purpose of enhancing the learning and teaching process. Several educational institutions, in an effort to support both students and academicians, have encouraged the incorporation of technological advancements into the educational system. Because of the high costs of attending universities, there are some students who are unable to pursue higher education. Technology enables these students to pursue higher education at lower costs through online mediums.

As a result of technology changing the landscape of higher education, the majority of students and academicians have shifted their focus from offline to online learning. Students are able to gain learning experiences from all over the world, and academicians are able to deliver lectures and share their experiences with students all over the world via online medium. This has the potential to revolutionise the delivery of higher education as well as access to it for a larger number of students at a lower cost. Utilizing technology in an efficient manner can assist educators in organising and designing active learning opportunities for students, which in turn helps to motivate students and improves the quality of their learning. Because of the rapid advancement of technology, students and teachers are no longer expected to gather in the same location for educational purposes.

The development of education technologies and tools for the creation of digital content has increased the number of people who have access to personalised learning experiences. According to studies and anecdotal evidence, there are several benefits associated with the use of ICTs in the educational setting, including the following:

- The presentation of content via ICTs has the potential to be both interesting and appealing.
- The use of information and communications technologies enables educators to track and continually monitor the growth of each individual student.
- The delivery of education content that is relevant to each individual learner can be individualised thanks to ICTs.
- The use of information and communications technologies can facilitate the development of online social communities among various educational institutions, groups of students, or groups of educators.
- The use of ICTs makes it easier to learn how to learn.

The most recent developments in information and communication technologies (mobile tools, cloud-based solutions, etc.) make it possible to implement continuous learning processes in a variety of learning contexts and to provide students with support on demand. Let's take a look at how information and communication technologies make it possible to implement the aforementioned aspects of personalised learning in the classroom.

Using ICTs to evaluate student learning

Assessment in a traditional educational setting is typically limited to a series of examinations at the end of the course after students have completed the curriculum. The comparison of students' accomplishments to a predetermined standard set is the primary purpose of the assessments, which are typically executed through the use of grades or marks. It has been impossible up until this point to conduct a more in-depth evaluation of the requirements, capabilities, and development of each student.

Adaptations of Academic Management Systems, also known as AMS, help to make assessment easier to manage and more optimised all the way through the learning process.

It is possible to collect the full data on the development of students, including the results of multiple-choice tests, portfolios, works in progress, feedback from classroom performances, and so on, at the rate and in the format that is desired. These details can be utilised by educators in order to arrive at decisions that are data-driven concerning the modification of instruction for each individual student.

Making effective use of ICT in the classroom

When it comes to delivering content to students in the more traditional setting of the classroom, even the most experienced educators are required to rely on tried-and-true instructional methods. As a coercive measure to maintain attendance in classes, the "one size fits all" approach is therefore problematic.

Through the customization of teaching methods and subject matter to the needs of each individual student, which is made possible by information technologies, education can now be more individualised. This method has recently gained a lot of traction in the realm of e-Learning, but it is also something that can be used in the traditional classroom setting, particularly when personalised instruction involves the selective delivery of digital content.

The practise of combining several different instructional methods is known as blended learning. It is typically used to describe a scenario in which a number of different delivery methods are combined together in order to deliver a specific course. A combination of in-person instruction, learning at one's own pace, and participation in virtual classrooms may be used to accomplish this.

Privatizing education through the use of various forms of technology

Students in the same group in a typical classroom setting are required to follow the same learning programme at a pace that is designed to ensure that even students with low achievement levels can master the subject matter. The development of talented students is stunted as a result of this.

Not only can individual students' learning paths, but also their curricula, be tailored to their specific needs through the utilisation of academic management platforms and the reduction of accessibility barriers made possible by mobile learning. The content that is necessary for each student in the classroom can be brought to him or her individually. A learning management system will monitor each student's progress, ensuring that the fundamental information will be covered by all of the students in the class while also providing the highest achievers with the opportunity to receive more in-depth, intensive instruction.

How ICT alters the structure of educational institutions?

The rise of information and communication technologies has not significantly altered educational institutions in and of themselves. In the majority of them, students continue to learn other subjects using the same methods they did before computers were introduced, as computer use is still primarily focused on imparting information technology skills.

Computers and mobile devices, when used for personalised teaching and learning, not only change the processes involved in each of those activities, but also alter the organisational structure of educational institutions. The classroom has been reorganised to reflect the shift in focus from the instructor to the pupils, and new furniture has been installed. Students can be arranged in the classroom so that, rather than sitting in rows at tables, they face each other and the instructor while using individual computers or tablets. This alternative to the traditional classroom layout is becoming increasingly popular.

A new function for the educator

When implementing the personalised learning approach, the vast majority of educators are likely to run into some transitional challenges. And this should not come as a surprise. When students transition from traditional learning programmes to this new, open, and adaptable learning environment, they may run into problems that are analogous to those that the teachers have experienced. Teachers need to develop new pedagogical approaches in order to adapt themselves to the new teaching model and to ease the transition to this model that their students will experience. Their job description now includes mentoring, advising, and consulting in addition to teaching.

It is important for educators to update their skill sets, particularly in the areas of effective use of information technology, mentoring, mediating values, and encouraging students to be self-motivated. In addition to this, they should perform an in-depth analysis of the activities of their students. The success of the implementation of personalised learning is directly correlated to the teachers. It is necessary for educators to engage in extensive professional development in order for them to comprehend and implement the new instructional approach. This indicates that decision-makers in education policy should place a high priority on the continued professional development of educators.

ROLE OF ICT IN HIGHER EDUCATION

Higher education systems have grown exponentially in the last five decades to meet the demands of quality education for all. Because of the rapid developments that have taken place in information and communication technology, this facet has gained even more traction (ICT). In today's increasingly globalised society, there is an ever-increasing demand for labour that is both skilled and competent. Given these circumstances, the availability of high-quality higher education for all people has emerged as a critical factor in determining economic growth and development. The contribution of open and distance learning facilities is growing, which is helping to make higher education more accessible to more people and expanding its reach to the most rural areas of the country. In addition to this, it fulfils the aspirations of individuals to continue their education throughout their lives at a price that is reasonable.

The term "Information and Communication Technology" (ICT) is an umbrella term that refers to any communication device or application. This includes radio, television, cellular phones, computers, and network hardware and software, satellite systems, and so on. Additionally, it refers to the various services and applications that are associated with these technologies, such as videoconferencing and distance learning. ICT can be considered a subfield of Educational Technology when such technologies are used for educational purposes, specifically to support and improve the learning of students and to develop learning environments. ICTs are being used in higher education to develop course material; deliver content; share content; communicate between learners, teachers, and the outside world; create and deliver presentations and lectures; conduct academic research; provide administrative support; and enrol students, among other things.

People in today's information society are required to use various forms of information and communication technology (ICT) to gain access to knowledge in order to keep up with the most recent advances. Education, which plays a critical role in any economic and social growth of a country, always plays a critical role, and in such a scenario, education becomes even more important. Education not only raises an individual's level of productive skills, but it also raises the individual's earning power. It enhances their sense of well-being as well as their capacity to take in new information, it increases the amount of social interaction they have, it gives them access to improved health, and it provides a number of additional benefits that are more intangible. The many forms of information and communication technology (ICT) products that are currently on the market and have some bearing on education, such as teleconferencing, email, audio conferencing, television instruction, radio broadcasts, interactive radio counselling, interactive voice response system, audiocassettes, and CD ROMs, have all been put to use in education for a variety of reasons.

Higher education is being held to increasingly higher standards every year by society. This is due in part to the ongoing expansion of knowledge, and as a result, an increase in the topics that need to be covered in classes and programmes, as well as in part to the growing cognitive challenges and diversity. The advancement, convergence, and integration of information technology have all driven fundamental change in the information technology that academic faculty, students, colleges and universities have or might be expected to acquire in the future.

The incorporation of information and communication technology into classroom instruction and student learning is a priority for educational reform. Most of the time, information and communications technology is regarded as an instrument that is essential to fully participate in a knowledge society. The Information and Communication Technology (ICT) gives students a comprehensive understanding of the characteristics of technology, how to make use

of and apply a wide range of technologies, as well as the influence that ICT has on both the individual and society as a whole. Technology refers to the processes, instruments, and methods that modify the actions of humans. It also includes the ways in which things are done. The advancements in communication, enquiry, decision-making, and problem-solving made possible by ICT are the focus of this field.

CONCLUSION

Because of how rapidly technology is advancing in our modern world, many educational institutions now only administer tests online, which helps students improve their abilities. ICT contributes to the improvement of the teaching process, and with the most recent technology, thousands of students from all over the world are taking advantage of the benefits of online learning. The standard of teaching is raised, and an increased number of pupils can access it, thanks to advancements in information and communications technology (ICT). Education is an ever-evolving process; in response to shifts in the economic climate, it has been modernised and simplified with the assistance of advances in technology; as a result, it contributes to improved educational standards and outcomes. It is beneficial to faculties because they are able to easily share their knowledge with students through online mediums, which students all over the world can access. However, because technology is constantly evolving, faculties are required to keep up with the latest developments in order to share information with students. The implementation of new technologies in educational settings contributes to an improvement in educational standards. Many different types of businesses also lend a hand to educational institutions in their efforts to adopt innovative technologies, which in turn contribute to the expansion of the economy and to the pursuit of academic excellence at the university level.

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