

Enhancing Classroom Learning through ICT Integration in Education

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ABSTRACT

This abstract explores the critical role of Information and Communication Technology (ICT) in enhancing the management and administration of educational institutions. It highlights how rapid advancements in technology have transformed the governance of academic sectors, making administrative tasks more complex yet efficient. ICT facilitates a wide range of processes, from student administration to resource management, significantly improving operational efficiency. The flexibility and cost-effectiveness of these technologies support both learning and administrative activities, enabling institutions to better serve their communities. Furthermore, the integration of communication and information systems has revolutionized higher education, enabling seamless transfer, storage, retrieval, and processing of information. In the context of education, ICT encompasses various technological tools and resources, including computers, the internet, broadcasting, and telephony, which collectively support the creation, dissemination, and management of knowledge.

INTRODUCTION

Information and Communication Technology (ICT) plays a vital role in supporting powerful, efficient management and administration in education sector. It is specified that technology can be used right from student administration to var can resource administration in an education institution. Rapid growth in the field of education has made governance in academic sector a very complex task. The 21 century has witnessed tremendous advancements in technology which has led to far-reaching developments in the administrative system. Cost-effective technology combined with the flexibility in learning and administrative activities exp is essential to enhance efficiency. "Information and Communication technology provides several facilities and possibilities for educational administrators to do their tasks". There is a mention that communication and information systems have changed the very nature of higher education, allowing information to be transferred, stored, retrieved, and processed by almost all who work, study or interact with a given institution. ICTs stand for information and communication technologies and are defined, for the purposes of this primer, as a "diverse set of technological tools and resources used to communicate, and to create, disseminate, store, and manage information." These technologies include computers, the Internet, broadcasting technologies (radio and television), and telephony. "ICT in Education" means "Teaching and Learning with ICT",

INPUT SOURCE	OUTPUT SOURCE	OTHERS
Visualiser Document Camera	Projector	Digital Camera
РС	Interactive Whiteboard	Digital Recorder
Slate/ Tablet	Display: Monitor, TVetc,	Switcher
Student response system		Other technology
Application software		

Table 1: Input Source, Output Source And Others.

ICT can lead to improved student learning and better teaching methods and it also increase in student exposure to educational ICT through curriculum integration has a significant and positive impact on student achievement, especially in terms of "Knowledge Comprehension". "Practical Skill" and "Presentation Skill" in subject areas such as mathematics, science, and social study. However, we can see that there are many education technology solutions provided in the world which may cause confusion among educators about how to choose the right ICT solution. Let's have a look at the advantages and disadvantages of ICT tools for education and discover what kind of education ICT solution is suitable for our school needs.

MAIN ADVANTAGES OF ICT TOOLS FOR EDUCATION

- Through ICT, images can easily be used in teaching and improving the retentive memory of students
- Through ICT, teachers can easily explain complex instructions and ensure students' comprehension
- Through ICT, teachers are able to create interactive classes and make the lessons more enjoyable, which could improve student attendance and concentration

ICT Enhancing the Quality and Accessibility of Education

ICT increases the flexibility of delivery of education so that learners can access knowledge any time and from anywhere. It can influence the way students are taught and how they learn as now the processes are learner driven and not by teachers. This in turn would better prepare the learners for lifelong learning as well as to improve the quality of learning. In concert with geographical flexibility, technology- facilitated educational programs also remove many of the temporal constraints that face learners with special needs. Students are starting to appreciate the capability to undertake education anywhere, anytime and anyplace.

One of the most vital contributions of ICT in the field of education is- Easy Access to Learning. With the help of ICT, students can now browse through e-books, sample examination papers, previous year papers etc. and can also have an easy access to resource persons, mentors, experts, researchers, professionals, and peers-all over the world. This flexibility has heightened the availability of just-in-time learning and provided learning opportunities for many more learners who previously were constrained by other commitments, Wider availability of best practices and best course material in education, which can be shared by means of ICT, can foster better teaching. ICT also allows the academic institutions to reach disadvantaged groups and new international educational markets. As well as learning at any time, teachers are also.

ICT ENHANCING LEARNING ENVIRONMENT

ICT presents an entirely new learning environment for students, thus requiring a different skill set to be successful. Critical thinking, research, and evaluation skills are growing in importance as students have increasing volumes of information from a variety of source to sort through. ICT is

changing processes of teaching and learning by adding elements of vitality to learning environments including virtual environments for the purpose. ICT is a potentially powerful tool for offering educational opportunities It is difficult and maybe even impossible to imagine future learning environments that are not supported, in one way or another, by Information and Communication Technologies (ICT).

Authenticity is an important issue which should be addressed in the design and development of learning environments. Learning environments need to reflect the potential uses of knowledge that pupils are expected to master, in order to prevent the acquired knowledge from becoming inert. In addition, teachers should stimulate pupils to engage hin active knowledge construction. This calls for open- ended learning environments instead of learning environments which focus on a mere transmission of facts. ICT may contribute to creating powerful learning environments in numerous ways.

ICT ENHANCING LEARNING MOTIVATION

ICTs can enhance the quality of education in several ways, by increasing learner motivation and engagement, by facilitating the acquisition of basic skills, and by enhancing teacher training. When used appropriately, ICTs are also transformational tools that can promote the shift to a learner-centered environment. ICTs, especially computers and Internet technologies, enable new ways of teaching and learning rather than simply allowing teachers and students to do what they have done before in a better way. ICT has an impact not only on what students should learn, but it also plays a major role on how the students should learn. Along with a shift of curricula from "content-centered" to "competence-based", the mode of curricula delivery has now shifted from "teacher-centered" forms of delivery to "student-centered" forms of delivery.

ICT provides - Motivation to Learn. ICTs such as videos, television, and multimedia computer software that combine text, sound, and colorful moving images can be used to provide challenging and authentic content that will engage the student in the learning process. Interactive radio likewise uses sound effects, songs, dramatizations, content skits, and other performance conventions to compel the students to listen and become more involved in the lessons being delivered. Some of the respondents' parents opined that their children felt more motivated than before in such type of teaching in the classroom rather than the stereotypical 45-minute lecture. They believed that this type of learning process is much more effective than the monotonous monologue classroom where the teacher just lectures from a raised platform and the students just listen to the teacher.

ICT ENHANCING THE SCHOLASTIC PERFORMANCE

Based on the extensive usage of ICTs in education the need appeared to unravel the myth that surrounds the use of information and communication technology (ICT) as an aid to teaching and learning, and the impact it has on students' academic performance. ICTs are said to help expand access to education, strengthen the relevance of education to the increasingly digital workplace, and raise educational quality. However, the experience of introducing different ICTs in the classroom and other educational settings all over the world over the past several decades suggests that the full realization of the potential educational benefits of ICT. The direct link between ICT use and students' academic performance has been the focus of extensive literature during the last two decades. ICT helps students to their learning by improving the communication between them and the instructors

CONCLUSION

Managing the use of ICT is both challenging and rewarding. The arrival of digital technologies in schools has impacted the roles and responsibilities of school leaders in significant ways. ICT has triggered demands for systematic changes in schools.Inevitably school leaders and teachers feel the pressure to change and must find ways of implementing and sustaining technological innovation. This also reveals that enhancing the usage of ICT on higher education institutions these functional areas and especially for general administration will enable enhancement of overall information administration in higher education institutions in the realm of global competitive environment. This study could serve as a base for education planers to deploy Technology based administration in higher education institutions.

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