

Digitalization for Academia

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The conversion of text, pictures or sounds into a digital form that can be processed by a computer is called “digitalization.” Digital technology is one of the elements that collectively forms a system of numeration i.e O&I. The computer works on O & I, so the computer is an example of digital technology. There are five basic digital skills namely communication, handling information, transecting, problem solving and being safe and compliant online. For institutions, the aim of digitalization is not only to execute advanced innovation, but the point is to discover ways by which advanced technology can offer assistance to extend organization of objectives. The devices of digitalization incorporate (but not limited to) computers, web, smart phone, scanner, computerized camera, projector and printers.

The digitalization may be useful in institutions for online education, online examination, web-based sharing, computerized fabric (ppt/ Pdf doc), learning management system (LMS), and group studies. Digitalization is also useful in executing administrative tasks like making websites, online admissions, management information system (MIS), online search, biometric attendance, digital libraries, online transactions and social networking¹. Digitalization can be effectively utilized in education, like implementation of learning management system (LMS), development and distribution of study material, utilization of diverse learning strategies, setting up e-classrooms, computer labs and innumerable educational programs. The advantages of digitaliza-

tion also encompass personalized learning, self-directed learning, competency-based learning, digital classrooms and collaborative learning. Digital classroom is a classroom that uses computers, tablets and educational programmes to upgrade student’s understanding and learning capabilities.

There are several benefits of digitalization in education as it helps to improve learning outcomes for the students. In addition, it makes educational system more secure (by ensuring protection against cyber threats). It gives IT support to oversee and manage an advanced learning environment. Online learning is useful because it is robust with prompt application and good time management. It also provides more extensive and extended range of courses and programs with provision and information of opportunities for career progression promptly, and platform for virtual collaborative prospects. Various digital educational strategies include virtual classroom, the MOOC (Massive open online courses), SPOC (Small private online course) and social learning. Digital learners are overwhelmed with several traits of learners like empowered learners, knowledge curators, innovative designer, computational thinkers, creators, communicators and global collaborators². Evidence based benefits of digitalization have been particularly experienced during the pandemic of COVID -19 globally in the form of online classes, web based/LAN based/App based assessments and development of softwares to scan, assess, arrange and prepare results. At that time various digital tools were developed and successfully implemented to disseminate the results. Digitalization is being widely practiced in research by using digital tools in statistics and data interpretation, availability, accessibility and sharing of electronic research material. The digital resources help in speedy preparation of valuable documents on social issues like documentaries,

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mobile videos, photos, slides and welfare systems. It also helps in making useful posts on social networking³. In brief, the advantages of digitalization include time saving, transparency, overcoming geographical limitation, minimizing human error and its availability 24/7.

The disadvantages of digital learning are equally strong; e-learning may create a sense of loneliness. Everyone absorbs and acquires knowledge in their own manner. Online learning of skills and attitudes is a real challenge and requires additional training for teachers and trainers. Online classes may come across technical issues and long screen time poses several health hazards⁴. Online learning lacks imbibing from role models. Limitations of digitalization include dependency, physical and psychological pressures, pointless use and deficiency of development of basic skills and attitudes. We need to take precautions whilst incorporating digitalization in academic pursuits, like cyber security, user centric, physical resources and human resources.

Incorporation of technologies in teaching and learning is not new, but the rapid pace of technical progression is thought-provoking. The transformative potential of digitalization in education and academics is exciting and presents many opportunities and challenges⁵. We need to be flexible to adapt to use digitalization in academic pursuits but the threats of learning skills and attitudes through digital technology to become an entrustable professional. (Doctor or engineer) need a special focus.

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