ROLE OF ICT IN EDUCATION, RESEARCH AND SUPPORT SERVICES

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ABSTRACT

The role of information and communication technology (ICT) is very important in an education and support services; it also has a big role in research activities. The ICT provide both students and teachers with more opportunities in adapting learning and teaching to individual needs with technical innovation. The purpose of this study is to update with integrating Information and communication technology (ICT) that has contributed through programs and activities that complement and support the academic understanding in the classroom. The ICT helps to identify the current needs and challenges faced by professionals, access latest information, documents priorto, publication. There are many key issues to implement of ICT, we need to overcome challenges and make the effective functioning of this technology in education system.

Keywords: *student improvement; information and communication technologies; teaching and learning processes; educational innovation; challenges.*

1. INTRODUCTION:

ICT knowledge is "the ability to use digital technology, communication tools, and/or networks appropriately to solve information problems in order to function in an information society. This includes the ability to use technology as a tool to research, organize, evaluate, and communicate information and the possession of a fundamental understanding of the ethical/legal issues surrounding the access and use of information.[1]

Information and communication technology (ICT) has contributed immensely to social and economic improvements, such as higher employment and productivity, increasing access to a higher quality of life.[2]

ICT incorporates electronic technologies and techniques used to manage information and knowledge, including information-handling tools used to produce, store, and process distribute and exchange information.

ICT, if properly designed and implemented, can generate many positive outcomes: improved access for communities in rural or remote areas;

In the education and higher learning context, ICT enables healthcare professionals to be updated and trained on knowledge advances wherever are located.[4]

ICT-enhanced learning mobilizes tools for examination, calculation and analysis of information in order to provide a platform for student inquiry, analysis and construction of new information.

According to the United Nations Educational, Scientific and Cultural Organization (UNESCO), ICT "can contribute to achieving universal education worldwide, through the delivery of education and training of teachers, improved professional skills, better conditions for lifelong learning, and the potential to reach people that are outside the formal education process.[5]

2. ICT Tools

There are many ICT tools that is useful for education.   Laptop and Computers can be used as a teaching learning tool Interactive whiteboard is a good tool to get involve students in the class, the   teacher   can   control   the   board   from   his   table. Educational games can be used to have a fresh mind before starting the day or after a long day. Intranet helps to find important and informative website from all over the world, it also helps to know some serious issues, available options of their solutions, useful online tips etc. The informative YouTube of experiments, projects methods etc. are very much beneficial to understand basics. E –books, blog are available on the net to access to resources outside library

In addition to above many gadgets like E-reader (Kindle etc.), I-products (IPhone, IPod, I pad) also useful.

The Benefits of ICT can be achieved in formal education, wide variety of specialized training. The teachers and other educators improve their professional knowledge, competence, skill, and effectiveness and in circulate among students.

Several studies reveal that students using ICT facilities mostly show higher learning gains than those who do not use. Students who used computer tutorials in mathematics, natural science, and social science score significantly higher on tests in these subjects. Students who used simulation software in science also scored higher.

3. The Key Challenges of ICTs Integration in Education

The integration of ICTs in education systems may face various challenges with respect to policy, planning, infrastructure, learning content and language,

The infrastructure challenges that may exist are absence of appropriate buildings infrastructure, shortage of electric supply and net facilities, and lack of knowledge of different types of ICTs. Because of this, one need to deal with infrastructure related challenges before the planning of ICTs integration to education systems.

With respect to challenges of capacity building, we have to develop competencies of teachers and school administrators for the successful integration of ICT in the education system. For instance, teachers need professional development to gain skills with particular applications of ICT,

The school leadership also plays a key role in the integration of ICT in education. Lack of support from the school administration is also a big challenge.

In integrating ICT in education, we have to care for the relevance of the learning content to the target groups. With respect to language, English is the dominant language in many of educational software, while English language proficiency is not high in many of the developing countries, and this is one barrier in the integration of ICT to education.

Another great challenge is the financing. ICTs in education programs require large capital investment

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