INFORMATION AND COMMUNICATION TECHNOLOGY BRIDGING THE DIVIDE IN EDUCATION: ICT AS A DIGITAL BRIDGE

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ABSTRACT

Information and communication technologies (ICTs) have long been seen as important potential tools to enable educational reform processes improving both access to education, and the quality of that education. Information and Communication Technologies (ICTs) have been touted as playing a major role in bridging the educational inequalities, with the potential of overcoming obstacles like geographical barriers, teaching learning difficulties, individual differences, problems of people with disability, communication difficulties and information inaccessibility. Motivated by this potential of ICT to bring about transformational changes in education and in response to the information needs of the modern information times. ICT improving the overall standard of education by reducing the gap in education. ICTs can be important drivers for educational reform, utilized as a lever for bridging the divides, as a vehicle to introduce new practices and/or as an enabler of restructuring of the educational system. The increased diffusion of ICTs will offer potentially relevant 'solutions' to challenges not only at the core of the teaching and learning process itself, but also its application can accelerates and improves education system on a number of fronts. This paper looks at the contribution that ICT can make in different educational arrangement to bridge the gapes and provides opportunities.

Key words: Information and Communication Technology, Educational Inequalities, Digital Bridge

Introduction

Different technologies are nowadays converging; so that the information networks satellite, cable, fibre optics, telephone will be used in complementary ways to deliver content in diverse formats to distinct educational audiences. The important thing is for the knowledge distribution between the different unequal groups to be more even. Educational opportunities made available through ICT might thus be a powerful means of overcoming social and world inequalities. Universal access to ICT and the Internet is seen as necessary to avoid social divisions and to open up opportunities for all by ensuring that future 'knowledge economies'. ICT in education may have important domestic and international repercussions in the context of existing inequalities. ICT brings to education the capacity to reach massive audiences with consistent quality of content, and to target groups with specialised needs. The use of the new technologies in developing countries could contribute to solving traditional learning gaps, reducing the educational lag of the adult population, and consolidating a national education system that offers quality services to all sectors of society.

However, for this to occur to full potential, it is necessary to identify and comply with a series of conditions and strategies, based on the specific requirements and context of each country. The impact and repercussions of ICT are two-fold. On the one hand, ICT may help significantly to increase delivery and coverage of educational services to the different segments of society, by offering more varied and flexible programmes, able to respond to an increasing and diversified demand. On the other, it may have considerable impact on the quality of education, in as much as it transforms the traditional teaching-learning process, to the point where a cognitive gap emerges between teachers and students with access to ICT and those without. It is important to underline that ICT brings beneficial side effects in addition to the

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original objectives, with impact on the overall socio-economic context. These effects are seen in the creation of a new technological culture, with increased productivity and competitiveness in the economy and stimulation of lifelong learning. Moreover, the same technological infrastructure can be used for different educational objectives servicing other audiences. All such groups are then able to organise themselves to receive and use knowledge and information in new and unexpected ways. Such beneficial side effects, almost non-existent without ICT, are of particular importance to developing countries: the social returns are likely to be higher, with more people gaining benefit in more ways. Information and communication technology (ICT) in the past decade has added an important new element to the issue of education inequality. New technologies are widely viewed as having the potential to either alleviate or exacerbate existing inequalities (Warschauer, 2000, 2003). Computers and the Internet are viewed as powerful tools to increase learning among marginalized students and provide greater access to a broader information society (Cummins & Sayers, 1995). The increasing popularity and economic utility of computers and the Internet have brought changes in the way societies and their individuals interact, the way we shop, attain college degrees, pay taxes, use the library and even find a job (Wilson, Wallin, & Reiser, 2003).The Internet contains more information than the world's largest libraries (Emeagwali, 2000). With access to the Internet one can retrieve information from the world's largest information database. According to Lagos (2003), the Internet is a worldwide system of linked computers networks. Computers, which are replaced with typewriters by taking their functions in the beginning, are now being commonly used in a scope ranging from interpersonal communication to e-school and e-state applications. So, they have become an inseparable part of the social life. Information technologies are not only the instruments used in learning and teaching, but they are also the tools used to find and transfer information (Akkoyunlu & Kurbanoglu, 2003). In this context, two essential skills come forward. One of them is computer technologies, as the inevitable result of using technology in education process; and the other is information literacy. Information literacy skills are among the essentials of learning for a lifetime which arises as a requirement of the 21st century. Using computer technologies is not only an element that supports education, but also a precondition for information literacy skills (Akkoyunlu & Kurbanoglu, 2003). Depriving or/and not utilizing these technologies create unfavourable situations both in social and individual aspects.

ICT can affect the pace at which the learning gap is bridged in developing countries, both domestically and in relation to other nations. The great challenge is to harness the advantages of those technologies, in order to improve the delivery and quality of educational services, as well as to accelerate the rate at which knowledge is distributed and learning chances and outcomes are equalised throughout society. The organisation (BRIDGES 2001), argues that ICT needs to be affordable; people must understand how to put it to use and not be discouraged from using it; and the local economy must be able to sustain its use. All of these factors combine to form, what is called at BRIDGES, 'real accesses. It moves beyond 'physical access' and creates opportunities for people to use technology effectively to improve their lives (BRIDGES 2001). In recent times, factors have emerged which have strengthened and encouraged moves to adopt ICTs into classrooms and learning settings. These have included a growing need to explore efficiencies in terms of program delivery, the opportunities for flexible delivery provided by ICTs (Oliver & Short, 1997); the capacity of technology to provide support for customized educational programs to meet the needs of individual learners (Kennedy and McNaught, 1997) and the growing use of the Internet and World Wide Web (WWW) as tools for information access and communication (Oliver & Towers, 2000). As we move into the 21st century, these factors and many others are bringing strong forces to bear on the

adoption of ICTs in education and contemporary trends suggest we will soon see large scale changes in the way education is planned and delivered as a consequence of the opportunities of ICT.

ICT as a Digital Revolution in Education

The development of the information society and the widespread dissemination of Information and Communication Technology (ICT) give rise to new opportunities for learning and acquiring new digital skills and competences that are necessary for employment, education and training, self-development and participation in society. As our societies become more knowledge-based, what people need to learn and know also changes? ICT shifts and transforming the way people work, learn, train, make sense of their world and have fun in a digitalised, networked and knowledge-based society. This new technology is being incorporated into the public school curriculum and is transforming the way information is being created and distributed. Communities that wish to keep or recruit new high-paying jobs need to provide businesses with high-speed access. Individuals must learn to use this new technology to have any chance of being successful in the emerging knowledge economy (Wilson, et al, 2003). The use of information and communication technologies (ICT) are seen by many commentators as underpinning the social and economic progression of nation-states throughout the first stages of the 21st century (Livingstone & Helsper, 2007; Selwyn, 2004). The revolution in information and communication technologies (ICTs) has transformed both the economy and society (Castells 2000; Kotkin 2000). The ICT revolution has created new tools, such as personal computers (PCs) and the Internet, which have reinvented and, in many instances, improved the ways all societies communicate, learn, and earn a living today (Chakraborty and Bosman, 2005). Most of the analysts have presented convincing arguments over the past two decades as to how new computer and telecommunications technologies will transform countries into 'knowledge economies' and 'network societies'. The ability to use ICT has been heralded by politicians to be 'the indispensable grammar of modern life' and a fundamental aspect of citizenship in the prevailing information age. Indeed, many governments in Industrialized countries have been spurred on by the apparent inevitability of the information society and have initiated ICT based programmes which aim to ensure that their citizens do not get 'left behind' and are able to 'win' in the new global era (Selwyn, 2002, 2004).

Many educators and researchers as well as parents and youths themselves, have expressed several reasons why the nation should be concerned about the gap between the ICT "haves" and "have-nots" (Hick & McNutt, 2000; Turow & Nir, 2000). These concerns fall into four main themes: educational advantages, future employment and earnings, opportunities for social and civic involvement, and equity and civil rights issues. Many educators and researchers maintain that computers, educational software, and the internet offer a number of educational advantages (Lepper & Gurtner, 1989; Ross, Smith, & Morrison, 1991; Tezci, & Dikici, 2006; Yalçınalp & Aşkar, 2003). ICT can provide students and teachers with a large body of easily accessible information; create opportunities to reinforce learning basic, new, and higher-order cognitive skills; and increase student interest and motivation, parent-school communication, and parent involvement. These advantages, in turn, are expected to produce positive educational outcomes such as increased student success and school retention (U.S. Department of Education, 1999; Wenglinsky, 1998). Research tends to support these expectations, generally finding positive relations between school, home, and community uses of ICT and a variety of academic outcomes both for socio-economically disadvantaged and other children and youth (Ross et al., 1991; Sutton, 1991). The evolution of technology has an impact on the way we live, work, teach and learn. Over the past few decades, technology has completely transformed our lives in all possible ways. Education undoubtedly is one of the most important

investments in building human capital and a medium that not only sculpts good literate citizens but also makes a nation technologically innovative, thus paving a path to economic growth. In recent years there has been a groundswell of interest in how computers and the Internet can best be harnessed to improve the efficiency and effectiveness of education at all levels and in both formal and non-formal settings. Although most commonly associated with higher education and corporate training, e-learning encompasses learning at all levels, that uses an information network—the Internet, an intranet (LAN) or extranet (WAN) whether wholly or in part, for course delivery, interaction and/or facilitation. ICT helps in providing a catalyst for rethinking teaching practice (Flecknoe, 2002; McCormick & Scrimshaw, 2001) developing the kind of graduates and citizens required in an information society (Department of Education, 2001); improving educational outcomes (especially pass rates) and enhancing and improving the quality of teaching and learning (Wagner, 2001; Garrison & Anderson, 2003). ICTs have the potential for increasing access to and improving the relevance and quality of education. It thus represents a potentially equalizing strategy.ICT may function as a facilitator of active learning and higher-order thinking (Alexander, 1999; Jonassen, 1999). The use of ICT may foster co-operative learning and reflection about the content (Susman, 1998). Furthermore, ICT may serve as a tool to curriculum differentiation, providing opportunities for adapting the learning content and tasks to the needs and capabilities of each individual pupil and by providing tailored feedback (Mooij, 1999; Smeets & Mooij, 2001).

ICT as a Digital Bridge for Geographical Differences in Education

The power of information technology has been significantly stronger due to its increased presence everywhere. ICT is anytime-anywhere. It has the ability to transcend time and space. Keeping this module in mind, ICT has made digital learning possible. One can now use online course study material, at any hour of the day. ICT-based educational delivery has made all learners and the instructor to be in one physical location. ICTs make possible asynchronous learning, or learning characterized by a time lag between the delivery of instruction and its reception by learners. Online course materials, may be accessed 24 hours a day and 7 days a week. In concert with geographical flexibility, technology-facilitated educational programs also remove many of the temporal constraints that face learners with special needs (Moore and Kearsley, 1996). Students are starting to appreciate the capability to undertake education anywhere, anytime and at any place. 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 (Young, 2002).Through online technologies learning have become an activity that is no longer set within programmed schedules and slots. Learners are free to participate in learning activities when time permits. This freedom has greatly increased the opportunities for many students to participate in formal programs. The wide variety of technologies that support learning are able to provide asynchronous supports for learning so that the need for real-time participation can be avoided while the advantages of communication and collaboration with other learners is retained. Information and Communication Technologies (ICTs) have been touted as playing a major role in bridging the social and economic divides that exist in most developing countries, with the potential of overcoming obstacles like geographical barriers, communication difficulties and information inaccessibility, Rao, S. S. (2009). Motivated by this potential of ICT to bring about transformational changes in education and in response to the information needs of the modern information society Guomundsdottir, G. B. (2005).

The benefits of information technology have been exposed in various ways. The explosive growth of telecommunications, particularly the Internet, not only virtually eliminates physical distances, but also extensively delivers a great deal of information to individuals and societies. The Internet provides several

opportunities for the academia. It is a mechanism for information dissemination and a medium for collaborative interaction between individuals and their computers without regard for geographic limitation of space (Leiner et al., 2000; Singh, 2002). 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. By closing the divide, people would be given equal opportunity to communicate and support their quality of life. This also includes the opportunity to participate in civic activities. In addition to access from home, public access is another major gateway to computers and the Internet. Internet access clearly provides a great deal of benefit to society, particularly, in terms of culture. In a powerful information society, communication patterns, flow of information, social norms and practices could be exchanged and transferred effectively. Moreover, the equality of opportunity has significant value in a democratic society.

ICT as a Digital Bridge for Learning Gapes in Education

ICTs are a potentially powerful tool for extending educational opportunities, both formal and non-formal, to previously underserved constituencies scattered and rural populations, groups traditionally excluded from education due to cultural or social reasons such as ethnic minorities, girls and women, persons with disabilities, and the elderly, as well as all others who for reasons of cost or because of time constraints are unable to enrol on campus. Improving the quality of education and training is a critical issue, particularly at the time of educational expansion. 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. ICTs are also transformational tools which, when used appropriately, can promote the shift to a learner-centered environment. If designed and implemented properly, ICT supported education can promote the acquisition of the knowledge and skills that will empower students for lifelong learning. When used appropriately, ICTs especially computers and Internet technologies enable new ways of teaching and learning rather than simply allow teachers and students to do what they have done before in a better way. These new ways of teaching and learning are underpinned by constructivist theories of learning and constitute a shift from a teacher-centered pedagogy in its worst form characterized by memorization and rote learning to one that is learner-centered.ICTs provide both students and teachers with more opportunities in adapting learning and teaching to individual needs, society is, forcing schools aptly respond to this technical innovation. (Tinio 2002), states the potentials of ICTs in increasing access and improving relevance and quality of education in developing countries.

The use of ICT in educational settings, by itself acts as a catalyst for change in this domain. ICTs by their very nature are tools that encourage and support independent learning. Students assume greater responsibility for their own learning when they use ICT, working more independently and effectively: 'students receive more individualised tasks and greater insight into teachers' aims, and are able to work at their own tempo with tasks appropriate for their level of study'. In addition they consider that ICT offers assignments better suited for their individual needs and makes it easier to organize their own learning, through the use of, for example, digital portfolios. Diverse learning situations equip students with a range of skills and work techniques; they develop confidence in their own capacity to learn that eventually enables them to perform better in their subjects. Students using ICTs for learning purposes become immersed in the process of learning and as more and more students use computers as information sources and cognitive tools (Reeves and Jonassen, 1996), the influence of the technology on supporting how students learn will continue to increase. More so than any other type of ICT, networked computers with

Internet connectivity can increase learner motivation as it combines the media richness and interactivity of other ICTs with the opportunity to connect with real people and to participate in real world events. ICT-enhanced learning is student-directed and diagnostic. Unlike static, text- or print-based educational technologies, ICT-enhanced learning recognizes that there are many different learning pathways and many different articulations of knowledge. ICTs allow learners to explore and discover rather than merely listen and remember. The World Wide Web (WWW) also provides a virtual international gallery for students' work (Loveless, 2003). ICT can engage and inspire students, and this has been cited as a factor influencing ready adaptors of ICT (Long, 2001; Wood, 2004).

ICT as a Digital Bridge for Teaching Differences in Education

The utilization of ICT learning settings and tools in educational processes, evidently leads to radical changes both in the role of teachers and learners and to the emergence of new teaching and learning environments and methodologies (e- Learning, Web-based Learning, Open and Distance Learning) as well as new training modalities (on-line training, on-site training, Blended-Learning, Instructor led Learning/Training, Classroom Training -C-training-…).New virtual training settings aimed at facilitating tools and resources to favour communication and interaction and distributing teaching materials through the web will emerge in order to encourage and promote collaboration and co-operation among the participants in teaching and learning processes. On the other side, many authors such as (Salinas 2003), agree in the fact that the integration of ICT into education generates a set of transformations which modify all the elements which take part in the educational process: organization, student, curriculum and mainly, they affect the teacher's role, function and attitude. The impact of the Internet in education in the recent years fosters the vision of a open, global and flexible learning, as authors such as (Colis 2003) leading to radical shifts in the teacher's role and competencies. In the framework of this educational landscape the role of the teacher is that of acting as guide and Instrument to assure a comprehensive learning process via the Internet, managing the student's learning process by creating - at the same time- new instructional models set in newly-created virtual environments. (Colis 2003) understands knowledge manager as the person who is able to manage the student´s skills, abilities and knowledge, motivating and taking benefit of the student´s both individual and collective learning possibilities.

In the past, the conventional process of teaching has revolved around teachers planning and leading students through a series of instructional sequences to achieve a desired learning outcome. Contemporary learning theory is based on the notion that learning is an active process of constructing knowledge rather than acquiring knowledge and that instruction is the process by which this knowledge construction is supported rather than a process of knowledge transmission (Duffy and Cunningham, 1996). The strengths of constructivism lie in its emphasis on learning as a process of personal understanding and the development of meaning in ways which are active and interpretative. In this domain learning is viewed as the construction of meaning rather than as the memorisation of facts (Lebow, 1993). Learning approaches using contemporary ICTs provide many opportunities for constructivist learning through their provision and support for resource-based, student centered settings and by enabling learning to be related to context and to practice (Berge, 1998). Since ICTs can open up the classroom to the outside world.

As learning shifts from the "teacher- centred model" to a "learner-centred model", the teacher becomes less the sole voice of authority and more the facilitator, mentor and coach from "sage on stage" to "guide on the side". The teacher's primary task becomes to teach the students how to ask questions and pose problems, formulate hypotheses, locate information and then critically assess the information found in relation to the problems posed. Most of the teachers in the sample schools said that ICT enhanced learning

was a new experience for them. So they have in turn become co-learners and are trying to discover new things along with their students. As a whole the teachers enjoyed the ICT enhanced instructional style, which was highly motivating to the students and helped in the learning process. Teachers with their own laptop computer has increased positive attitudes and teachers' confidence in using 'hands-on' experience with ICT for education. (Becta, 2003). On the other hand the feedback from students was very positive. They equally enjoyed learning more and indicated that the Internet material helped them better understand the content of the revised course. The internet materials helped them to get the latest and updated information. Teachers say that they have effective materials, which helped them to illustrate certain points to the students in an easier and faster way. They themselves confessed that internet upgraded their knowledge. My observation in the present makes me feel that with the introduction of ICTs in the classroom, the teacher's role in the learning process becomes even more critical. What can and has changed is the kind of role that the teacher plays. The role of students, in turn, has also expanded. ICT-enhanced learning promotes a thematic, integrative approach to teaching and learning. This approach eliminates the artificial separation between the different disciplines and between theory and practice that characterizes the traditional classroom approach. Technology has the capacity to promote and encourage the transformation of education from a very teacher directed enterprise to one which supports more student-centered models.

ICT as a Digital Bridge for Individual Differences in Education

Introduction of ICT into schools and project-based approaches should change how students interact with the content through new types of learning activities. In the Information and Communication Technology age, the methods in which learners and teachers are engaged in the pursuit and construction of learning is very different from the past. Earlier the students were expected to copy the material dictated by the teacher in their notebooks for later learning and understanding of the content. But now we are faced with new challenges of access and of quality where we need to find new ways of organizing the teaching learning experience. 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-centred" to "competence-based", the mode of curricula delivery has now shifted from "teacher-centred" forms of delivery to "student-centred" forms of delivery. ICTs provide greater opportunity for students and teachers to adjust learning and teaching to individual needs,

Impact of ICT in educational contexts, its potential to alter the teacher-learner relationship, in particular to shift the balance from the dominant provider/recipient model to a more facilitative approach, thereby promoting greater independence of learning. Learners work more autonomously with ICT. The pupils themselves find that they do assignments more on their own way when using a computer and their parents consider that they solve assignments more at their own level. According to the teachers, pupils work more in cohesion with their own learning preferences, resulting in a favourable impact on both academically strong and weak students. In recent years however, there has been a growing interest to know how computers and internet can best utilized to improve effectiveness and efficiency of education at all levels and in both formal and nonformal settings. As there is a shift of theories explaining learning processes, ICTs become handmaiden for learning activities. (Voogt's 2003) description on the major roles, distinguished ICTs as an object for study, an aspect of a discipline or a profession, and a medium of instruction. As a medium of instruction, ICTs fit to realize and implement the emerging pedagogy of constructivism (Davis, 1997; Office of Technology Assessment, 1995; Panel on Educational Technology, 1997; Watson, 1996). Moreover, (Voogt 2003) differentiated between traditional learning setting and constructivist approaches. The former considers learning as transmission of knowledge to students which is

the sole responsibility of the teacher. On the other hand, the constructivist approach considers learning as authentic and learner centred. ICT, the computer for example is a great help in the constructivist approach, where one can design simulated and individualized learning environments to students.

Different groups of pupils were found to be gaining in different ways from the use of ICT. ICT used in special schools often enabled communication at a basic and fundamental level. For example, some pupils could not communicate with the external world, either at all, or easily, without the use of ICT based access devices. Pupils with special needs or behavioural difficulties gain in different ways from the use of ICT. ICT supports their motivation and concentration and teachers become more aware of pupils' needs and problems. ICT provides teachers with the opportunity to provide various learning tasks within the same classroom for the benefit of the individual pupils. The information aspects of ICT were fundamentally important to other groups, such as those who were gifted and talented.

ICT as a Digital Bridge for the Disable People in Education

The disability indicates human limitation of one kind or other, in performing various tasks performed by other human being in general. It may be one or more of the kind of physical, mental or sensory one including visual and hearing. Generally people with disability automatically become underprivileged, because they may not have proper access to the recourses, accessible otherwise.ICT usually improves the efficiency and effectiveness of a common individual learner, but for a disabled learner it represents more than this. ICT for them is a sort of extension of their physical body part and provides an opportunity to communicate, gain access to education services and become gainfully employed.

Today ICT is being used as a tool for improving the quality of life by improved efficiency and enhanced effectiveness. Different types of ICT tools assist the people with disabilities by providing them with learning opportunities, capabilities and also increase potential of the disabled in different walks of life. ICT makes them capable by providing the ability to access knowledge with the help of suitable digital media. ICT is playing very important role in communicating with peers, thereby promoting collaborative and social learning environment. ICT also helps disabled students in reading, writing, hearing and seeing process, (Lasa Information Systems Team 2010).ICT have the potential for reducing discrimination and providing more opportunities to engage people with disabilities in all aspects of life including teaching and learning. ICT offers a range of specialized software and hardware solutions for communicating, accessing and inputting data/information to/from web applications. For example Assistive technologies are used for helping the disable people for studying and gaining knowledge with the ICT.Assistive technologies usually refer to those products, devices or equipment's, which are used to increase or improve the functional capacities of individuals with disabilities. Some of the tools/applications for assisting different kind of disabled learners: ICT bases specialized vocational training to perform functions within abilities, Specialized Keyboards, such as Braille, Braille Printer, Conversion of local language to Braille, Screen Readers, Touch Screens, Eye Tracking, Talking word processors, Screen Magnifiers etc.

Accessibility is the quality of a system that makes it easy to learn, easy to use, easy to remember, error tolerant, and subjectively pleasing, (Jakob Nielsen 2010). People with disabilities should be able to use and access all the information provided for the learning experience, regardless of the type or degree of disability they suffer. Web Accessibility Initiative (WAI) guidelines are the result of the negotiations that the World Wide Web Consortium (W3C) adopted for promoting the use of ICT for people with disabilities. These guidelines are published and broadly used guidelines for W3C Web Accessibility Initiative, (2010).Web Content Accessibility Guidelines (WCAG) 2.0 has given wide range of recommendations for making Web content more accessible to a wider range of people with disabilities, including blindness and

low vision, deafness and hearing loss, learning disabilities, cognitive limitations, limited movement, speech disabilities, photosensitivity and combinations of these web applications developed using these guidelines often make Web content more usable to users in general. Web Content Accessibility Guidelines 2.0. (WCAG) explains in detail how to make a Web site accessible for people with a variety of disabilities. W3C User Agent Accessibility Guidelines (UAAG) 2.0, for software developers, explains how to make accessible browsers, multimedia players, and assistive technologies that interface with these.

ICT as a Digital Bridge for Different Resources in Education

Historically, information resources at libraries, schools, and universities have only been available within the walls of these institutions, in a wide variety of physical media, at certain times of the day, and in limited quantities. Because of advances in ICT, it is no longer necessary for students and teachers to be at a certain location at a specific time to acquire a physical object. The Internet represents the greatest collection of human knowledge ever assembled, and it is available to every student and teacher properly equipped with ICT. An unlimited number of digital representations of physical objects can now be made available to students at any time and from any place.

Digital library initiatives are being undertaken in countries around the world that will provide collections that are electronically accessible of the Internet including printed works (e.g. textbooks, journals, illustrations, maps, charts and graphs), photographs, films and videotapes, paintings, 3D models, graphics, animations, software, reference materials, audio files, and so forth. Specialized collections of digital information are also being created. For example, the entire works of B.F Skinner may be accessed, searched, and downloaded from a websites. Web-based language dictionaries provide a means to translate words and phrases from one language to another. Museum's website offers visitors a virtual tour and access to digitized images of major works from its collection. Thousands of websites now exist that contain collections of high quality curriculum guides, lesson plans, and instructional activities. Specialized websites designed to provide information and assistance in specific subject areas are also proliferating. ICT-supported learning encourages interaction and cooperation among students, teachers, and experts regardless of where they are. Apart from modelling real world interactions, ICT-supported learning provides opportunity to work with students from different cultures, thereby helping to enhance learners teaming and communication skills as well as their global awareness. It models learning done throughout the learner's lifetime by expanding the learning pace to include not just peers but also mentors and experts from different fields. It is important to mention that the use of newer ICT is being integrated with use of older technologies, enabling the existing resources and services to be continuous use.

Conclusion

Education cannot solve the problems of inequalities, without equal access and quality learning for all, existing gaps will surely deepen. ICT come into sharp relief, and reinforce the case for assertive action towards closing the technology and learning gaps. ICT can affect the pace at which the learning gap is bridged. ICT improving coverage, quality and relevance of educational services. ICT increases the flexibility of delivery of education so that learners can access knowledge anytime 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. Wider availability of best practices and best course material in education, which can be shared by means of ICT, and can foster better teaching.ICT, brings more rich material in the classrooms and libraries for the teachers and students. It has provided opportunity for the learner to use maximum senses to get the information. It has broken the monotony and provided variety in the teaching learning

situation. ICT facilitates differentiated learning, allows students to work to their own ability, and motivates disenchanted students. It may have benefits for particular groups of students, thus providing them with an advantage over others. ICT is trust for people with disabilities for their teaching and learning.It can be a powerful tool in supporting education and inclusiveness of the people with disability. The learning resources must be developed to meet the requirements of all disabled people by overcoming the traditional barriers to mobility and geographic distance. ICT provide the necessary infrastructure facilities such as high speed network connection to access the e-resources. It allow for the creation of digital resources like digital libraries where the students, teachers and professionals can access research material and course material from any place at any time. Such facilities allow the networking of academics and researchers and hence sharing of scholarly material. ICT in education and to incorporate it into the policy on educational innovations and activities like teaching and learning. It is crucial to integrate ICTs with the curriculum of each subject so this could replace traditional teaching methods by new teaching tools and technology.

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