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A pilot study of Global ICT strategy applications in sustainable continuing education

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Abstract

In the area of continuing education, computer network has been an important part of people's lives in the growth and advancement of quality education. This challenge explores the function of the information system in sustaining technology workers for social and economic growth in human communities worldwide and analyzes computer network applications and major features of continuing education. Continuing education is anticipated to employ the usage of other new wireless technologies in the immediate future, through the use of modern cell technology, smartphones or related products. However, this does not sideline the use of the simple computer network to support information, as ever less developed countries also keep up with today's and future sophisticated technology in e-education, especially ongoing education for working people and adults, without leaving their own offices or homes. This paper explores the issue of global ICT and its implementation in sustainable education.

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1. Introduction

This paper deals with device and internet links used to manage and reveal knowledge for learning purposes by Information Communication Technology's (ICT). The initial objective draft of this paper was introduced by one of the writers at the education meeting in Stamford University, Malaysia and getting considered to be a part of this proceedings. ICT's are transforming culture dynamically, impacting all facets of life and shaping schools more and more. Since ICTs give both students and teachers more chances to adjust learning and teaching to individual requirements, culture requires schools to adjust appropriately to these educational advances. Albini et al. [1] has suggested the mobile health solutions using ICT to integrate and optimize the education management structure of the patients in healthcare sectors of developing countries.

Traditional 'learning and education' is deemed an autonomous social operation, but interconnectivity networks have been a result of the mix by utilizing a device in combination with educational distribution. Modern education networks infiltrate and expand quickly and thereby threaten the conventional education structure, the philosophy of education system, educational theory, teaching, instructor roles, and the learning of students. The emergence of the Internet, the whole school system's dilemma and affordable continuing education would propel the educational transition in the current century. [2]

2. Computer Networks in Continuing Education

The global realities of convergence and virtualization through digital learning, distance education and others apparent aspects of the Internet Era that impact curriculum content has been explored further in this article.

2.1. Global Integration

The penetration of the information community and intent culture (ICIT), and mainstream culture influences the curriculum of education. In such circumstances of curriculum change, the following consideration should be counted: [3], [4]

1. Traditional disciplines are weakened and modern variations of alternate subjects and contents are necessary. New curricula therefore enhance information exchange and the creation of creative talents.
2. The science spirit and humanistic spirit are unified as this convergence strengthens human spirit and public spirit. In the modern era, research and technology advancements improve school education, family education and neighbourhood education.

2.2. Digital Educational Theory

Human society and culture has moved from the farm to the industrial society, and now the usage of computers and supercomputers creates economic morphological shifts, and technical growth that contributes to a shift in demand for trained human capital and talents. The ubiquitous and critical function of technology and its new commodity, information technology, indifferent areas of human society, like higher education and its large impact, necessitates an analytical or conceptual analysis into the essence and roots of information technology (IT) the methodology and objectives of its implementation and growth [5], [6].

2.3. Digital Learning Impacts and ICT Developments

Many different ICT uses are feasible in education including the usage of ICT as resources to endorse alternative teaching practices and thoroughly informational instruction, which requires an entirely different approach of teaching [7]. The advancement of digital technologies, specifically Internet development, created a digital learning system to respond to the needs of emerging ways of immersive learning outside the classroom Today, the learning needs of both the environment and the student body change. The content of learning, artifacts of learning shift in the era of the

Internet. Brain Science is getting more nuanced, and migration materials provide people with an insight into the features of their own learning.

In addition, seven common forms of intelligence include verbal, quantitative, and logical intelligence in standard school, accepted artistic intelligence, spatial or visual intelligence, intelligence in athletics, or intellectual and physical intelligence. Inherent intellect or introspection skills have been excluded, according to Professor Howard Gardner of Harvard University [8]. The usage of seven forms of knowledge is further progressed by the advancement of digital technologies.

3. ICT Computer Network Construction Strategy in Continuing Education and Training Systems

3.1. Continuing Education Website Group

The advancement of education in multiple fields and classes, including website groups with multiple functions such as advertising, class registration, career applications, blog features, internet exchanges, remote video features, education and science testing and teaching tools and e-libraries, helps to establish continuing education. Teachers and students can communicate digitally individually or in unison.

3.2. LAN Repository and Distance Education

The computer network teaching resource library offers teaching information services and thereby increases the sharing of quality materials through physical or contextual borders between teachers and learners.

Information may be distributed and utilized anywhere and every time through the advancement of information technology. The distance learning environment becomes the chosen path between generation Y and next generation C (computers). Asynchronous training via the Phone, immersive two-way video guidance and one-way video pre-grabbing are the key methods.

3.3. Wireless Network in Continuing Education

It is promising to improve the wireless network. It is intended to spread faster and more extensive information network services to users. Wireless network [9] is unrestricted, with seamless reach, simple flexibility scalability characteristics and minimal network maintenance costs. Wireless devices can enter the network anywhere in the network distribution such that they can enter the network anywhere, anywhere and provide realistic uses in continuing education [10]. The Future of Cloud Computing in Continuing Education.

We believe the 'cloud learning' would transform the face and shape of ongoing schooling. Professionally, I realize it would impact stakeholders and continuing education services, potentially applying them to teaching and other aspects to develop capabilities and competences for learners who can be trained and employed. Corporations, in particular those engaged in the distribution of education, may be updated organizationally. This would influence individuals at work and at work, as well as people who own and run businesses domestically and internationally. (Figure. 1) shows the model structure of E-learning cloud. Further, education "Cloud" may be interpreted as "cloud computing education, education cloud services based on intelligent open architecture and cloud computing platforms based on a thorough integration to include various resources, platforms and applications as necessary to provide users with different class services to respond to users' educational needs [11].

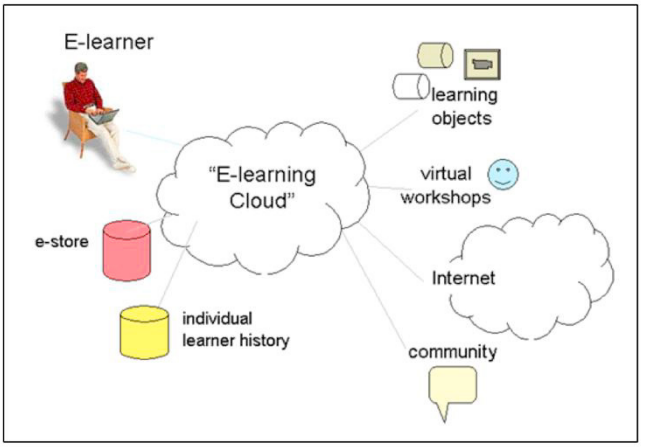

Fig. 1. E-learning Cloud model.

4. Strategic ICT in Continuing Education

4.1. Network Construction, Continuing Education Everywhere

The constantly developing ICT development impacts the computing network that today is used, as the above would be spread over a transmission line in various parts of the same computer so that local network resources and other network machine resources may be accessed that's pretty much like "cloud" seeking to alter the simulated universe of ICT use. Another way of relaxing of space constraints is the constraints of face-to-face experience, i.e., the dimensions of the rooms and buildings and the student-teacher ratios. ICTs simply allow a very cheap cost for reproducing and transmitting a lesson by way of multiple means, such as digital video, and its (simultaneous or ulterior) television, radio or the Internet. [12]

The learning mechanism or material can even be codified and at least in some regions, structured for learning artifacts such as interactive software, which may be utilized synchronously or asynchronously in theory for millions of learners [13]. Continuing education will knock down regional boundaries, time and space and minimize space and time expenses. In example, China currently mostly utilizes the self-network, correspondence, or two in conjunction with computer networks in order to address the first sites in the process of continuing education. It can be exempt from limits on time, distance, encouraging students to engage in ongoing training or other network in their own residences, removing the need to reserve spaces and a lot of time back and forth in continuing education.

4.2. Sharing Continuing Education Resources

Continuing education provides for shared IT tools like digital knowledge resources, technological resources, database resources and computer hardware to address individual teacher needs and create a rich classroom climate [14]. The explanation is that the instructor will find further teaching materials, which will enrich the teaching material, enhance the active environment of the classroom to encourage the desire of the students to learn and thus transform beyond passive acceptance of conventional teaching methods and strengthen positive ties between students.

4.3. Data Communication and Teaching Diversification

Computer networking between computer to computer, computer and user contact, the file transfer, e-mail services, remote access services, offer assistance for independent research in the teaching of continuing education[15]. Students may study at their own pace, as online text, audio or video, electronic content, electronic

newspaper archive, all sorts of databases, digital archives, search engine and web pages are easily available to students, as well as their own interests.

4.4. Network Applicationsand Teachers- Students Information Literacy

The utilization of computer networks plays an important role in the formation of teachers and the student knowledge awareness in continuing education. In the Knowledge Society, the data network is an essential teaching tool for information literacy, primarily in the information storing and quick retrieval processes which involve collecting information for teachers and students to set up information analysis network courses[16]. Computer searches of knowledge on books, library automation, Internet search infrastructure and computer technologies, web search engines, online search skills, Internet information assessment and technical competencies for information processing and management are also increased teacher-student capacity to retrieve information and thereby improved access to information [17].

5. Strategic ICT Applications in Sustainable Continuing Education

5.1. Wealth of Teaching Resources

Sustainable continued education is being introduced from across the globe with money. Teachers and students across the network easily obtain the most innovative, comprehensive first-hand tools globally, share world-renowned teachers and get the latest tips. Teachers will also complement and change teaching material anywhere or anywhere online, arrange recent classes or lectures, enable students from the internet to gain up-to-date and urgent information. [18].

5.2. Variety of Teaching Expression and Exchange

The network teaching method incorporates a number of media, such as image, illustrations, photos, animation, audio, video, text and hyper-sexual, specific and abstract knowledge and information. In order to obtain information through independent research and comprehensive learning tools for self-education, students may connect to the world via any significant database and other website access. The student is not used as a receptor for insight and information, but rather as an agent of transition, reaction and contact with the mass of materials he or she seeks. [19], [20]

The Internet Era facilitates a variety of twin-way knowledge sharing platforms, with teachers and students debating each subject at any time within a nation by utilizing fora, e-mails, remote login, file upload, chat forums, blogs and microblogging [21]. A multi-national or global stage, teachers and students increasingly establish interactions between peers or classmates several times, at any time and wherever.

5.3. Advanced Teaching Methods and Environment

The reality, more specifically, that teachers use the media for learning software in realistic teaching to bring diverse knowledge, such as detailed capacity to process phrases, numbers, pictures, photographs, audios and three-dimensional flashes, a representation of objective subjects and lifelike images, presentation of fundamental information is seen far more clearly. [22]

The diversification of the network environment offers a large scope for individualized teaching growth. Both instruction and individual learning also rendered customized schooling possible. Without geography, there is no network distribution time limit.

5.4. Unlimited Learning Course

Many consumers of such a system will profit tremendously from fast and simple access to the information it provides, including those who have only little or no information technology experience. The framework is therefore

built to support a diverse variety of consumers, researchers, and others to allow an efficient usage of the digital library. The method of learning becomes agreeable, versatile and diversified, thus improving learning performance. Moreover, as innovations of next century begin to evolve and grow, evolving wireless technologies like the usage of modern cell and smart phones or related equipment can take different forms and new functions [23]. In this connection, whatever emerging goods reach the world market, we are convinced that these next waves of wireless and interactive technology [24] can transform the way and the way in which continuing education is provided to its target audiences.

In reality, considering the infantile phase of "cloud," we are very sure that continuing education providers can use 'pay-as-you-use' access for 'cloud' providers (and thus pay a subscription charge on a monthly-, trimester-, half- or annual basis). This ensures that in future private businesses offering continuing education will reduce their expenditure in capital resources to become business subscribers to "cloud" networks. The final analysis is then the aim must justify the means" i.e., continuing schools utilizing "cloud" facilities can or may not cost less, however the "cloud" will enable continuing schooling accomplish what it needs-offering access to any sort of education and certification online, everywhere, anywhere [25]. Thus, the existing and latest continued education technologies used may be old, but the advantage of modern mobile and other wireless technology may be efficiency and distribution quality.

6. Conclusion

Computer networks for continuing education have progressively developed and improved the function and standard of learning with the advancement of modern information technology. Continuing education digital networks improve instructor and student knowledge awareness and self-learning capacity. The field of internationalized education accelerates the sharing and dissemination of knowledge and facilitates continued education for sustainable growth. In addition, we share the opinion that sustainable continuing education must improve and build value to strengthen our human capacity to stabilize our communities.

Further, the globe is getting smaller and smaller today because the internet and mobile devices allow citizens to connect remotely in various areas of a nation, area and continent. In general, the effect of future and advanced technology on online continuing education and associated management structures would establish new interconnections and contact between individuals and human communities worldwide.

In conclusion, we think that following research on this subject, continuing education might use other new wireless innovations, including the use of established cell technology, smart telephones or other similar equipment in the foreseeable future. However, this does not sideline the use of the simple computer network to support information, as ever less developed countries also keep up with today's and future sophisticated technology in e-education, especially ongoing education for working people and adults, without leaving their own offices or homes.

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