

E- LEARNING TECHNOLOGY: IMPLICATIONS TO EDUCATION FOR ALL

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Abstract

Education is an instrument for national transformation and sustainability. For this reason, there was a world Declaration on Education for All (EFA) in a conference in Jomtien Thailand in 1990, from this conference, the world Declaration on EFA was adopted which stressed that education is a fundamental human right and this pushed countries to strengthen their efforts to improve education in order to meet the basic learning needs for all. Providers of education are making efforts for new opportunities to meet these learning needs which e-learning is one of these opportunities. Today most educational institutions can no longer claim to be the ultimate source of knowledge and remain within a content transmission approach. This paper therefore discussed E-learning technology for Education for All. It discussed the meaning of e-learning, the approaches to e-learning, advantages of e-learning and how these can help in achieving the EFA goals. Conclusions were made and some recommendations were proffered. Such as; computers and other ICT facilities should be made available at all levels of the education system etc.

Key words: E-learning, Education for All, Technology.

Education for transformation and sustainability is the continual refinement of the knowledge and skills that lead to informed citizenry that is committed to responsible individual and collaborative actions and which will result in an ecologically sound, economically prosperous and equitable society for present and future generations. This has led to the total

commitment by the sub-Saharan Africa especially Nigeria to embrace the world declaration on Education for All (EFA) held in Jomtien 1990 conference. In this conference, representatives of the international communities agreed to “universalize primary education and massively reduce illiteracy by the end of the decade”. From this conference, the world Declaration on EFA was adopted which stressed that education is a fundamental human right and pushed countries to strengthen their efforts to

improve education in order to ensure that the basic learning needs for all were met by 2015 which was later extended to 2010.

The principles underlying education for national transformation and sustainability include, but are not limited to strong core academics, understanding the relationships between disciplines, systems thinking, lifelong learning, hands-on experiential learning, community-based learning, technology-based learning, partnerships, family involvement, and personal responsibility (Ogunleye, Oke and Adeoye, 2007). Today, education has become a commodity in which people seek to invest in for their own personal gain, to ensure equality of opportunity and as a route to a better life (Davies, 1998). As a result, providers of education are making efforts for the provision of the learning needs of learners and teachers.

In Nigeria, many teachers increasingly need more effective and efficient opportunities for professional development so as to strengthen their skills and also the labour force in every sector of the Nigeria economy. Yet such opportunities remain limited and largely reliant upon traditional methods that often do not produce optimum results. Indeed, short and infrequent training programs, in which individuals gather at a central locations for lectures from experts, can result in a net loss for human resource development budgets, costing more in travel and absence from

work than they produce in improved practice on the job. Fortunately new opportunities for improving professional development and meeting the World Declaration on EFA to universalize primary education and massively reduce illiteracy through the use of e-learning are becoming increasingly available and affordable worldwide. It is commonly thought that new technologies make a big difference in education. Many proponents of e-learning believe that everyone must be equipped with basic knowledge of technology as well as use it as a vehicle, for reaching educational goals. These paper will therefore look at e-learning technology for Education for All (EFA).

What is E-learning?

E-learning (also called electronic learning) is defined as all forms of electronic supported learning and teaching which are procedural in character. They aim at effecting the construction of knowledge with reference to individual experience, practice and knowledge of the learner. Information and communication systems, whether networked or not, serve as specific media to implement the learning process (Wikipedia 2010).

E-learning is essentially the computer and network enabled transfer of skills and knowledge. E-learning refers to using electronic applications and processes to learn. E-learning applications and processes include web-based learning, computer-based

learning, virtual classrooms and digital collaborations. Content is delivered via the internet, intranet/extranet, audio or video tape, satellite tv, and CD-Rom. It can be self paced or instructor led and includes media in the form of text, image, animation, streaming video and audio.

Approaches to E-Learning Services

There are a number of e-learning that depends on the amount of physical interaction, entirely on-line e-learning occurs without any face-to-face interaction. Coursework and materials are distributed electronically through e-mail, websites, online forums and/or CDs or DVD-ROMS. Combined learning uses a combination of internet-directed instruction, as well as face-to-face interaction.

Bates and Poole (2003) and the OECD (2005) suggested that different types or forms of e-learning can be considered as a continuation, from no e-learning, i.e no use of computers and/or the internet for teaching and learning, through classroom aids, such as making classroom lecture power point slides available to students through a course website or learning management system, to laptop programmes, where students are required to bring laptops to class and use them as part of a face-to-face class, to hybrid learning, where classroom time is reduced but not eliminated, with more time devoted to online learning, which is a form of distance education. They went further to argue that when

instructors say they are using e-learning, this most often refers to the use of technology as classroom aids, although overtime, there has been a gradual increase in full online learning.

Computer-Based Learning

Computer-Based Learning (CBL), refers to the use of computers as a key component of the educational environment. While this can refer to the use of computers in a classroom, the term more broadly refers to a structured environment in which computers are used for teaching purposes. The concept is generally seen being distinct from the use of computers in ways where learning is at least a peripheral element of the experience.

Computer-based Training (CBTs)

Computer-Based Training are self-paced learning activities accessible via a computer or handheld device. CBTs typically present content in a linear fashion, much like reading an online book or manual. For this reason, they are often used to teach static processes, such as using software or completing mathematical equations. CBT is often used interchangeably with web-based training (WBT) CBTs provide learning stimulus beyond traditional methodology from textbook, manual or classroom-based instruction. For example, CBTs offer user-friendly solutions for satisfying continuing education requirements. Instead of limiting students to attending courses or reading printed manuals, students are

able to acquire knowledge and skills through methods that are much more conducive to individual learning preferences (Harasin, Hiltz, Teles and Turoff, 1995). For example, CBTs offer visual learning benefits through animation, or video, not typically offered by any other means.

Computer-Supported Collaborative Learning (CSCL)

Computer-Supported

Collaborative Learning (CSCL) is one of the most promising innovations to improve teaching and learning with the help of modern information and communication technology. Most recent developments in CSCL have been called E-learning 2.0, but the concept of collaborative or group learning whereby instructional methods are designed to encourage or require students to work together on learning tasks has existed much longer. It is widely agreed to distinguish collaborative learning from the traditional 'direct transfer' model in which the instructor is assumed to be the distributor of knowledge and skills, which is often given the neologism E-learning 1.0, even though this transfer method most accurately reflects computer-based learning systems (CBL).

Technology-Enhanced Learning (TEL)

Technology Enhanced Learning (TEL) has the goal of providing socio-technical innovations (also improving efficiency and cost effectiveness) for e-

learning practices, regarding individuals and organizations, independent of time, place and pace. The field of TEL therefore applies to the support of any learning activity through technology.

Other approaches to e-learning include: computer-assisted instruction or computer aided instruction (CAI), internet-based training (IBT), web-based training (WEB), online education, virtual education, virtual learning environments (VLE) (which are also called learning platforms), m-learning and digital educational collaboration. These alternative names emphasize a particular aspect, component or delivery method.

Benefits of E-learning

There are many significant advantages for the students who learn on-line.

1. **Convenience and Portability:**

- a. Courses are accessible on your schedule
- b. Online learning does not require physical attendance
- c. Learning is self-paced (nor too slow, not too fast)
- d. You're unbound by time-courses are available 24/7 (twenty four of the days).
- e. You are unbound by place-study at home, work or on the road.
- f. Read materials online or download them for reading later.

2. **Cost and Selection**

- a. Choose from a wide range of courses to meet your needs

- b. Degree, vocational, and certificate programmes.
- c. Continuing education
- d. Individual courses
- e. Wide range of prices to fit your budget
- f. Go back to school to get a degrees, learn a new craft or just have fun.

3. **Flexibility**

- a. Online learning accommodates your preferences and needs – it is student centered.
- b. Choose instructor-led or self-study courses.
- c. Skip over materials you already know and focus on topics you would like to learn.
- d. Use the tools best suited to your learning styles

4. **Higher Retention**

Online learning will draws the learner to topic he/she will like and enjoy. Studies show that because of this and the variety of delivery methods used to reach different types of learners retention is frequently better than in a traditional classroom.

5. **Greater Collaboration**

Technology tools make collaboration among students much easier. Since many projects involve collaborative learning, the online environment is far easier (and often more comfortable) to work in since learners do not have to be face-to-face.

6. **Global Opportunities**

The global learning community is at your fingertips with online learning. The technologies used give online instructional designers the ability to build in tools that take you to resources you may never see in a traditional classroom. E-learning is naturally suited to distance learning and flexible learning, but can also be used in conjunction with face-to-face teaching, in which case the term. Blended learning is commonly used. With e-learning which is exciting, energetic, enthusiastic, emotional, extended, excellent and educational, the EFA declaration and its goals will be achieved.

Education for All (EFA)

Education for all (EFA) is a global movement led by UNESCO, aim at meeting the learning needs of all children, youths and adults by 2015. The movement was launched in 1990 at the world conference on Education for all (EFA) in Jomtien, Thailand. There, representatives of the international communities, agreed to universalize primary education and massively reduce illiteracy by the end of the decade. From this conference, the world Declaration of EFA was adopted which stressed that education is a fundamental human right and pushed countries to strengthen their efforts to improve education in order to ensure the basic learning needs for all were met. The framework for Action to meet the Basic

learning needs established six goals for the year 2000.

Goal 1: Universal access to learning

Goal 2: A focus on equity

Goal 3: Emphasis on learning outcomes.

Goal 4: Broadening the means and the scope of basic education

Goal 5: Enhancing the environment for learning

Goal 6: Strengthening partnerships by 2000.

In 2000, ten years later the international communities met again at the world education forum in Dakar, Senegal. The forum took stock of the fact that many countries were far from having reached the goals established at the world conference on EFA. The participants agreed on the Dakar framework for Action which re-affirmed their commitment to achieving EFA by the year 2015 and identified six key measurable education goals which aim to meet the learning needs of all children, youths and adults by 2015. In addition, the forum reaffirmed UNESCO's role as the lead organization with the overall responsibility of coordinating other agencies and organizations in the attempts to achieve these goals. The six goals established in the Dakar framework for Action, EFA; meeting our collective commitments are;

Goal 1: Expand early childhood care and education.

Goal 2: Provide free and compulsory primary education for all.

Goal 3: Promote learning and life skills for young people and adults

Goal 4: Increase adult literacy by 50 percent.

Goal 5: Achieve gender parity by 2005, gender equality by 2015.

Goal 6: Improve the quality of education.

In order to evaluate each country's progress with regards to the EFA's goals, UNESCO has developed the EFA Development Index (EDI). The EDI measures four of the six EFA goals selected on the basis of data availability. Each of the four goals is evaluated using a specific indicator and each of those components is then assigned an equal weight in the overall index.

Considering the approaches to e-learning which included CBL, CBTs, CSCL, TEL etc and the benefits of e-learning, one would find out that e-learning if effectively utilized, the goals of EFA will be fully achieved and the world declaration on EFA would be realized.

Recommendations

Based on the study, the following recommendations were made

1. Computers and other ICT facilities be made available at various levels in the school systems.
2. Children and adults should be encouraged to make use of computers in order to be familiar with them.
3. e-learning educational provision like the Nigerian Universities Network NUNET, the School Net Project, the Teachers Network (Teach Net, National Open University etc should be promoted and more e-education initiatives encouraged.
4. Training of teachers and other computer instructors in the use of e-learning should be made more effective.

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