ROLE OF INTERNET IN ENHANCING THE NEW HORIZONS IN DISTANCE EDUCATION

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Abstract

This paper reviewed the concept of distance education, traditional and new features in distance education, and the roles and constraints to the use of internet in distance education. Distance education has evolved into new features based on the emergence of new technologies and the need for better learning outcomes. Internet has been described in this paper as being beneficial in this type of educational programme. It facilitates the learning and interaction between teachers and learners. However, the constraints of cost, skill and quality of content were raised. Recommendations were made such as increased allocation of time to prepare a quality internet-based learning materials.

Keywords: Internet; Distance Education; New Horizon

Due to the changes in the forms and methods of education resulting from technological advancement, distance education is increasingly practiced. Distance education is defined as distributed education, open and distance education, cross border or borderless education (Swai, 2006). Distance education is any educational process in which all or most of the teaching is conducted by someone removed in space and/or time from the learner, with the effect that all or most of the communication between teachers and learners is through an artificial medium, either electronic or print (UNESCO, 2002a). Basically, distance education takes place when a teacher and student(s) are separated by physical distance, and technology (i.e., voice, video, data, and print), often in show with face–to–face education, is used to bridge the instructional gap. Two main factors have led to an explosion of interest in distance learning: the growing need for continual skills upgrading and retraining; and the technological advances that have made it possible to teach more subjects at a distance. These types of programmes can provide adults with a chance for continuing education, reach those disadvantaged by limited time, distance or physical disability, and update the knowledge of workers at their places of employment.

Many educators ask if distant students learn as much as students receiving traditional face–to–face education. Research comparing distance education to traditional
face-to-face education indicates that teaching and studying at a distance can be as effective as traditional instruction, when the method and technologies used are appropriate to the instructional tasks, there is student-to-student interaction, and when there is timely teacher-to-student feedback (Willis ND). In distance education the normal or principal means of communication is through technology powered by the internet.

Internet plays a vital role in enhancing the quality of distance education. It helps to ensure that the right information is delivered to the learner who studies it for his/her increased understanding and knowledge. A wide range of technological and internet-based options are available to the distance educator. They fall into four major categories (Willis ND):

- **Voice** – Instructional audio tools include the interactive technologies of telephone, audio-conferencing, and short-wave radio. Passive (i.e., one-way) audio tools include tapes and radio.
- **Video** – Instructional video tools include still images such as slides, pre-produced moving images (e.g., film, videotape), and real-time moving images combined with audio-conferencing (one-way or two-way video with two-way audio).
- **Data** – Computers send and receive information electronically. For this reason, the term “data” is used to describe this broad category of instructional tools.

**Features and New Horizons in Distance Education**

The operation and goals of distance learning system defines its features. The mission may be directed towards particular purposes, target groups, regions, sectors or levels of education and training, and driven by particular values and philosophies of learning and education. According to UNESCO (2002b), the features include:

1: **Courses and curricula**: Many distance education systems provide courses in preparation for examinations and degrees which are equivalent or similar to those offered by conventional institutions, and subject to similar regulations as regards content, admission and assessment.

2: **Teaching strategies and techniques** depend partly on the type of programme and the needs they are designed to meet. There may be a connection between teaching strategies, economy and the choice of technology.

3: **Learning materials and resources** are essential components in all distance learning systems. Comprehensive, well designed materials may stimulate self-directed learning and thus influence the quality of the system as a whole.

4: **Communication** between teachers and learners is a necessary component in distance education, as in all other forms of education. New technologies allow the organization of virtual groups, and in countries where access to the Internet is common, this is the fastest growing approach to distance teaching.

5: **Support delivered locally** is a common component in most single mode institutions. A letter, a telephone call or an e-mail message is of course delivered locally and is more likely to be the means of learner support.
6: **Student and staff management** sub-system: From an administrative perspective the student and staff management sub-system comprises admission, allocation to courses and student services, administering the learning and teaching procedures, assignments and assessment, monitoring drop-out and completion, and examinations.

7: Effective **management and administration** needs not only competent staff, but also well designed, efficient administrative systems and routines, planning and monitoring systems, budgetary and accounting systems etc.

8: Finally, **evaluation** should be a component, in order to provide information relevant to the adjustment of the roles and operation of system components, and in order to secure their optimal contribution and development.

These features of distance education have changed a great deal since the introduction of new technologies. As a comparison, the past and current features of distance education has been articulated by Moraes, Rodrigues, Matuzawa, and Fiuza (2003) and can be seen in Table 2 below. This shows the changes and the new horizons in distance education. This new features make the quality of the education higher and more effective.

### Table 1: Past and Current or Future of Distance Teaching and Learning

<table>
<thead>
<tr>
<th>Past</th>
<th>current/future</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical Classroom</td>
<td>Virtual Classrooms</td>
</tr>
<tr>
<td>Focus in the teacher</td>
<td>Focus in the student</td>
</tr>
<tr>
<td>Model of lessons based in display of the content for the teacher (owner of the knowledge)</td>
<td>Model of lesson is based on the discovery by the student for exchange with teacher and colleagues</td>
</tr>
<tr>
<td>Customized contents</td>
<td>Personalized contents</td>
</tr>
<tr>
<td>Transmission of information</td>
<td>Facilitation of access to information</td>
</tr>
<tr>
<td>Stand-alone work</td>
<td>Group working</td>
</tr>
<tr>
<td>Fixed calendar</td>
<td>Flexible calendar</td>
</tr>
<tr>
<td>Centered organization</td>
<td>Decentralized organization</td>
</tr>
<tr>
<td>Local</td>
<td>Global</td>
</tr>
</tbody>
</table>

### Roles of Internet in Maximizing New Horizons of Distance Education

Effective interaction and feedback strategies will enable the instructor to identify and meet individual student needs while providing a forum for suggesting course improvements (Willis, ND). Although technology plays a key role in the delivery of distance education, educators must remain focused on instructional outcomes, not the technology of delivery. The Internet is the largest, most powerful computer network in the world and encompasses 1.3 million computers with Internet addresses that are used by up to 30 million people in more than fifty countries (Moraes, et al 2003). According to Moraes, et al 2003, with access to the Internet, distance educators and their students can use:

- **Electronic mail (e–mail)** – Like postal mail, e–mail is used to exchange messages or other information with people. Instead of being delivered by the postal service to a postal address, e–mail is delivered by Internet software through a computer network to a computer address.
• Bulletin boards – Many bulletin boards can be accessed through the Internet. Two common public bulletin boards on the Internet are USENET and LISTSERV. USENET is a collection of thousands of topically organized newsgroups, covering everything from supercomputer design to bungee cord jumping, and ranging in distribution from the whole world to single institutions. LISTSERV also provides discussion forums on a variety of topics broken out by topic or area of special interest.

• World–Wide Web (WWW) – The WWW provides Internet users with a uniform and convenient means of accessing the wide variety of resources (pictures, text, data, sound, video) available on the Internet.

• Instructional Possibilities of the Internet
Distance educators can use the Internet and WWW to help students gain a basic understanding of how to navigate and take full advantage of the networked world into which they will be graduating. Some instructional possibilities of the Internet include:
• Using e-mail for informal one–to–one correspondence. Feedback from the instructor can be received more quickly than messages sent by mail. Students can read messages at their convenience and easily store them for later reference.
• Establishing a classroom bulletin board. Distant students often work in isolation without the assistance and support of fellow students. Setting up a class bulletin board can encourage student–to–student interaction. With a class computer conference, individual students can post their comments or questions to the class, and every other individual is free to respond. The conference can also be used to post all modifications to the class schedule or curriculum, assignments/tests, and answers to assignments/tests.
• Engaging students in dialogue with other students, faculty, and researchers by encouraging them to join a bulletin board(s) on topic(s) related to the class.
• Developing a classroom home page. The home page can cover information about the class incuding the syllabus, exercises, literature references, and the instructor’s biography. The instructor can also provide links to information on the WWW that would be useful to students in the class (e.g., real research data on agricultural markets, global climate change, or space missions). Other links could access library catalogs or each student’s individual home page.

Traditionally, distance education consisted of and used passive media such as print media, radio, and videotaped lessons, teaching and learning modes that often derive low potential for interactivity. Within the context of traditional distance education delivery, interactivity occurred mainly through correspondence between individual students and their instructors using print materials. With the advent of the Internet based technologies, however, distance education practitioners now have at their fingertips technology that allows them to magnify and greatly enhance the quality of current distance education models, thereby creating new and increased levels of interaction,
communication, and collaboration among and between students, teachers, and their institution (Schrum, 1998 in Moraes, et al 2003).

**Constraints to the Use of Internet in Distance Education**

However, despite its increasingly widespread use (National Education Association, 2000), distance education delivered via the Internet is not an easy task. The challenges include the allocation of enough time necessary for planning, designing and offering of online distance education courses; and the creation of dynamic virtual communities that encourages students to become independent learners capable of seeking out information from different sources. Many student lack the ability to use the internet for distance education. As a result, institutions must be prepared to provide support so that their students can develop the necessary skills and abilities to engage in online learning.

An important problem for many countries is the legality of distance education. Many educators have to admit that the employers are rather sceptical about the certificates of distance education (UNESCO Institute for Information Technologies in Education, 2003). They evidently identify distance education with that of correspondent courses which are not highly estimated by the communities. The problem of cost also affect the use of internet in distance education. There are schools and universities who do not have free access to the Internet, where the majority of students cannot afford the access to the Internet from their home computers. No less important is the problem of the quality of developing electronic textbooks, additional instructional materials.

Language problem also affect learning as the largest part of information in the Internet is in English. The English language becomes dominant in the Internet, however the information space of other countries is developing swiftly. So, learning not one but two and more foreign languages turns out to be a very urgent problem for the education systems of all countries. Access to ICTs and the Digital Divide also affects the use in distance education. Access to modern information and communication technologies varies greatly around the world. Until now, ICTs have not corrected the divide between technology-rich and technology-poor countries initiated with the Industrial Revolution (Haddad and Jurich, 2009)

**Conclusion and Recommendation**

Distance education, due to the opportunities Internet resources and facilities provide, gives a good credit to the students to consult with highly qualified specialists, who conduct a distance course, share their views with their course mates, get an access to libraries, museums, databases, which they certainly can not have in the traditional education. The internet has been seen as a vital tool for effective distance education. The paper has discussed the concept of distance education, the traditional and new features and the role of internet in distance education. Some constraints were also pointed out, hence for a more effective distance education, the following recommendations are made:
The professionalism of the staff and management is very important. The Internet can contribute to solve this problem via teleconferences in which tutors from different countries can share their experience at the web sites organized for this purpose, etc. However, the effectiveness of distance education like full-time education or any other forms of education depends on definite factors.

In incorporating the Internet into a distance delivered course, efforts should be made to ensure that all students in a course must have Internet and WWW access to ensure equal opportunities for computer interaction and feedback. Also, convenient access to a computer at home or work may influence student success.

Students may face the concurrent challenges of learning basic computer skills, new software, and appropriate online communication skills. Trouble-shooting student computer problems will probably become a part of normal instructional responsibilities. Setting up a specific classroom conference for ongoing discussions of specific hardware and software problems may help students to work through these problems on their own.

Some students might hesitate to contribute to computer conferences or to send e-mail because of a lack of familiarity with the proper protocols. Encourage students to use e-mail, classroom conferences, electronic bulletin boards, and the WWW early in the course so they overcome inhibitions. Specifying a minimum number of e-mail communications per week will encourage active participation.

There is need to allocate enough time and energy to planning, designing and offering of online distance education courses; and the creation of dynamic virtual communities that encourages students to become independent learners.

References


