The Impact of English Interactive Online on the students' achievement in English Language in Jordan

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Online learning: Effective of EIO learning for basic education in Jordan

Abstract

Over the last decade there has been an augmenting shift away from the conventional teaching and learning to modes where the Internet now plays a key role. E-learning is increasingly forming an integral part of course delivery and instruction, and is reshaping traditional learning worldwide.

This paper outlines the shift from traditional learning to online learning practices. Then it discusses the use of technology, particularly English Interactive online, to support and enhance effective learning. It considers relevant studies within the context of technology based learning, and highlights the effectiveness of the EIO program in Grades 7,8,9 in 100 discovery public schools at Amman Directorates in Jordan. The paper indicates that technology based pedagogy and an effective online learning environment are crucial to support and enrich effective EFL learning outcomes.

Keywords: English Interactive Online (EIO)- English as a foreign language (EFL)- achievement-technology based learning- online learning- Discovery schools.

Introduction

The English language is more than a language in which to communicate ideas and thoughts, but a language which is historically and intricately tied to economics. Today, English influences all areas of popular culture and has become the main language of advertising, satellite broadcasting, computer software, and the Internet; it is the language of international air traffic and maritime communication, policing, and emergency services; it is used to extensively and deemed to be so important in the academic, scientific, and technological sectors that over 80% of all information is stored in electronic retrieval systems in English. Of approximately 12,500 international organizations listed in the 1995- 1996 Union of International Associations' Yearbook, it is estimated that 85% make official use of English. More books are published in English than any other language (Crystal, 2003).

The English language has helped to facilitate globalization and has continued to increase its utility within the information Age with the use of the Internet cell phones, and mass media. The English language and globalization have together ushered in the 21st century, marked by dramatic increases in business and overall global communication. In many ways, whether it is

outsourcing, tourism, international travel, global migration, or local business, this language of wider communication is facilitating economic growth.

This paper examines how online learning, particularly employing (e-EFL/ EIO) Internet technologies, may encourage and support effective learning. More specifically, the paper argues that effective online learning utilizing the Internet can best be attained by merging it with traditional face to face teaching and learning practices. 'Effective learning' refers broadly to the increased connectedness between effective learning processes (such as collaboration, interaction, participation, responsibility), and learning outcomes and objectives (higher order thinking, critical thinking and problem solving skills) (Watkins, et al, 1996; Pomorina, 2000). In reviewing the literature, evidence shows that by using the Internet in teaching, exciting opportunities are provided to both learners and teachers that facilitate *collaborative, project based* and *authentic* activities, which are otherwise not available through the traditional face to face mode of teaching.

Effective learning will determine effective learning outcomes, which in turn will build human capacity and contribute to the economic well-being of our learners and society as a whole. Furthermore, the skills and knowledge that will be acquired through use of the Internet may be advanced into the workplace. This is in line with one of the priorities indicated by the objectives of Jordan's General Education Plan: "To produce graduates with the skills and competencies required to participate in the modern world in the 21st century" (Ministry of Education, 2003). For Jordanian students to become multi-skilled and competitive in the modern workplace, our education institutions have to follow and adopt global education trends in technology and innovation.

Literature Review

Traditional teaching and learning practices, based on the 'transmission model' of teaching delivery and instruction, involved limited participation and active learning, with students taking little responsibility for their own learning experiences (Coventry, 1997; Kennedy, 1998; Poulter, 2000). Best practice acknowledges that traditional face to face lectures are "relatively ineffective in terms of providing an opportunity for learning" (Poulter, 2000:1) and that it is associated with a number of restrictions (Ashton & Zalzala, 2000; Bork, 2001) that may prohibit effective learning from taking place. Although traditional face to face offerings can result in some learning, complementing it with the Internet is more likely to result in significantly more effective learning.

The web offers many possible resources that can enhance and support traditional teaching instruction and delivery, and learning. It provides access to information sources, encourages meaningful interactions with subject specific content and enhances collaboration among individual learners (Greeno et al, 1998); including collaboration between the instructor and learners (Tan & Wong, 1996). Thus the Internet facilitates *collaboration, interactivity,* and *project oriented* learning, and provides an *authentic* environment for learning (Kennedy, 1998; Kearsley and Shneiderman, 1999; Deacon et al, 2000). Very importantly, it supports a variety of learning styles and student backgrounds (Tan & Wong, 1996; Slay, 1997; Ashton & Zalzala,

2000), and advances the equalization of learners (Kennedy, 1998). An Internet based learning environment enables users to exercise more *control* over their learning experiences (Brack, 1996; Kearsely & Shneiderman 1999). This is especially true for students with different learning styles, since the Internet can be used in an asynchronous environment allowing them to work at their own pace at any suitable location.

There exist a variety of web resources that can be used in teaching and learning. However, they do not necessarily lead to favorable learning outcomes. In the absence of the *creation or design of an effective online learning environment* this cannot be achieved. The Internet can be used to create and support such a learning environment that will enhance learning processes, encompassing activities involving interactivity and flexibility, motivation and confidence, collaboration, construction of knowledge and active learning, which are noted to have delivered quality e-learning experiences (Tan & Wong, 1996; Agostinho, et. al., 1997; Shneiderman & Kearsley, 1999; Salmon, 2001).

A perceived disadvantage of using the web is that the number of links and information available might overwhelm some learners, hence confusing and discouraging them. Traditional teaching modes include the reliance on print materials (Alcock & McFarlane, 2001), particularly the traditional textbook, since "It organises an enormous amount of information in a socially acceptable pattern" (Rockman, 1999), which is not provided by the web. On the other hand, increased access to rapidly updated information, interactivity and collaboration, are all opportunities provided when using the Internet in learning. Internet tools such as *WebQuest* and *WebCT* are increasingly being employed with teaching to facilitate active learning. Web based course materials are now being designed for use as a supplement to textbook materials used in traditional teaching and learning environments (Axelson & Hardy, 1999).

The literature researched indicates that online education encompasses a relatively high degree of student *interaction* and *participation* when compared to traditional face to face learning. Many authors have found that students who took a course through an online or technology medium acknowledged that their participation levels increased and were far greater than in a course they took that was offered purely by means of traditional face to face instruction. A study by Daley et al (2001), established that learners' *attitudes* and *perceptions* were largely determined by their level of participation in an e-learning environment, and hence had a positive impact on their learning experiences. In this study, each student in a group presented a problematic case from their respective practices as adult educators, and facilitated the discussion of their respective cases for one week. When a student was not leading the discussion, that student participated as a group member in the discussion of other students' cases. Each group consulted web resources and made database inquiries to explore and challenge students' cases, and share experiences through dialogue.

Furthermore, if the attitudes and perceptions of learners were positive, they were able to acquire knowledge that is not only subject specific in content, but their learning experiences were associated with increased cognitive skills such as problem solving, decision making, analytical, critical thinking, and others. These learning processes tend to foster effective learning outcomes because there exists a positive motivational effect on learners that is associated with the use of

technology in education (Valdez, et. al., 2001). Thus there is a strong relation between positive attitudes and perceptions, motivation, confidence and participation when learners *interact* and *collaborate* in a technology based environment. In the context of engagement theory, interaction and participation are closely connected to *collaboration*. Further, *project based* and *authentic* learning was encouraged and led to successful learning experiences.

Summary & Summary (1998)at Southeast Missouri State University, Department of Economics conducted a study to determine the impact of web based instruction upon student attitudes, performance and more specifically interest in the subject (first year level economics). Web based instructional resources included online syllabi, online tutorials, links to course related material on the web, and bulletin boards. The study concluded that using Internet resources synchronously did indeed contribute to greater *interest* in the subject because their *attitudes* towards economics improved. Eighty per cent of the respondents found that their learning experiences were indeed enhanced (Summary & Summary, 1998:1-8). The results revealed that integrating WebCT tools that facilitate *collaboration* and *project based* learning, and provide an external or *authentic* environment, enhanced the learning experiences of participants.

Numerous studies show that educators lack the required skills and knowledge for effective Internet course instruction and delivery (Cronje, 2001; Singh & Erwin, 2001; Valdez et al, 2000). Lecturers who aspire to increasingly employ the Internet as a teaching and learning tool "usually require support and assistance" (Bagdon & Gross, 1997:1), especially when it comes to the technical aspects of web based course design (Alcock & McFarlane, 2001). In cases where instructors are not adequately experienced in the technical aspects of web based course design, they should work closely with information technology personnel. This is particularly important to ensure that the instructor can maintain his or her focus on aspects relating to pedagogy and learning strategies, which are crucial for the succeeding in the context of *engagement theory*.

A study by Cronje (2001:8)[6] affirmed that "... lack of knowledge about technology" and "too little knowledge of WebCT to use it optimally" are major concerns for lecturers using WebCT in their teaching programs. Internet based sessions need *trained synchronous instructors* to assist and give guidance to learners on a continuing basis (OLT, 2001).

The education system of the Hashemite Kingdom of Jordan has improved consistently since the mid-1900s. The role played by a good education system has been significant in the development of Jordan from a predominantly agrarian to an industrialized nation. Jordan's education system ranks number one in the Arab World and is one of the highest in the developing world.

The recent education reforms started in the early 1990s. This reform process was accelerated under His Majesty King Abdullah II in early 2001 with a vision to make Jordan the regional technology hub and an active player in the global economy. The National Vision and Mission for Education, as developed and endorsed in late 2002, states the desired direction for general education in the country. The two major consultative documents, that helped shape the national vision and also set directions for educational reform initiatives, were Jordan Vision 2020 and the 2002 Vision Forum for the Future of Education. These documents spanned kindergarten to lifelong continuing education. The overall strategy proposed by the Forum was endorsed by the

Economic Consultative Council (ECC) in October 2002. The national development strategy and the Forum results were consolidated into specific development plans, the Social and Economic Transformation Plan, the General Education Plan 2003-08.

In July 2003, the Government of Jordan launched an ambitious program in the entire MENA region a 10 year multi-donor Education Reform for the Knowledge Economy Program (ErfKE) of which the World Bank provided US$120 million. The goal of the program was to re-orient the education policies and programs in line with the needs of a knowledge based economy, improve the physical learning environment in most schools and promote early childhood education. This first phase of program is from 2003–2009, closing in June 2009.

The second phase of the ErfKE, which is aligned with IBRD and IFC Country Assistance Strategy (CAS) for the Hashemite Kingdom of Jordan, will be from 2009-2015. The aim of this program is to strengthen and institutionalize the reforms introduced under ERfKE I, with a particular focus on school level implementation and teacher quality. It will strengthen the institutional capacity of MoE in policy, strategic planning and monitoring and evaluation, and improve teacher employment, utilization and professional development policies and implementation. The program will also fine tune the curriculum and student assessment to ensure alignment with the knowledge based economy. (World Bank,2009)

Jordan Education Initiative recently received the UNESCO prize on ICT use in Education. This pioneering education project in Jordan schools is based on utilizing the power of information and technology with the proven methods of learning to transform the learning environment in schools.

The researchers attempt to identify teaching strategies for basic education in Jordan that are crucial for lifelong learning. This includes among others; "...use of peer assisted and self directed learning, *experiential* and *real world learning,* they make use of *problem based learning*..." (Breier, 2001:14-15). Further, when considering outcomes based learning in relation to the context of an e-learning environment, we can expect effective learning outcomes.

The challenge to EFL teachers at schools is to seek appropriate mechanisms to develop an online learning environment that will facilitate *motivation, confidence, participation, problem solving, analytical, and high level thinking* skills. As already stated, technology based learning offers many learning opportunities that can provide such mechanisms and resources to spur active and outcomes based learning. The Internet provides *flexibility and interactivity in learning,* which can be particularly useful for the backgrounds and learning styles of Jordanian learners.

The use of computers in education should increasingly be viewed as an *effective communication tool* with vast opportunities for addressing the needs of these learners, since geographical location and time do not matter in an asynchronous e-learning environment.

Educators at Jordanian schools are adequately equipped with the necessary technology skills, but are not equipped particularly in using the Internet as a tool in their teaching. Adopting it will enable them to extend the limitations of the boundaries associated with traditional classroom

environments, and provide them with flexibility and opportunities to further advance their teaching strategies to meet the needs of our diverse learners. Hence, *professional staff development and training* in online education is crucial.

Finally, the researchers proposed that *integrating the Internet into a curriculum* will prepare learners for the challenges that will accompany the rapidly changing technological environment. It is important that restructured curricula incorporating the Internet with pedagogy should be developed and implemented within the context of Jordan's Educational Framework. Integrating the Internet into a curriculum will provide lifelong learning opportunities for personal and professional development of our learners.

Research Methodology

A mixed method including qualitative and quantitative data collection and analysis were used to determine the effectiveness and impact of English Interactive online on the students' achievement. The sample of the study contains the students at 7, 8, and 9 grades in 100 public discovery schools at Amman directorates in Jordan.

Classroom observations for teachers were conducted as they were implementing EIO. Quantitative data were collected in the form of a survey where learners rated their use of and experience with EIO. Also, pre-tests and post-tests were administered to students who were in control groups exposed to conventional instruction, and to students who had received instruction through EIO. T-test were conducted to assess whether students had made significant progress from the start to the conclusion of the program, and ANCOVA (Analysis of Covariance) was conducted on comparison control and experimental groups to see if there were significant differences between the groups.

Findings

Given the distribution of the evaluations, it is not possible to compare classrooms across grade levels. Generally though, it seems that the presence of adequate technology both in and out of the classroom affects student learning, and successful facilitators are better able to anticipate technology challenges and manage the use of technology for learning. However, facilitators from experimental classrooms were less likely to incorporate non-technology- based evaluations and instructional strategies, indicating that technology needs to be incorporated into the classroom in a more balanced way.

Two sets of quantitative data were collected:1) student survey responses to assess students' perceptions of the EIO curriculum and 2) results of the pre-tests and post- tests administrated to the students.

The pre-tests were done prior to the implementation of the study to establish the English proficiency level of the students and similarity of the groups of students involved in the study. The post –tests were administrated at the end of the implementation of the EIO curriculum.

All the experimental groups responded very positively to the EIO program. Across the board students had high levels of satisfaction with general improvement in English, and with EIO making learning English more exciting. There were also a fairly unanimously high proportion of positive responses to the questions regarding improvement in reading, speaking, and listening skills. There was more variation in responses to alignment with curriculum, and IT components of the program. Judging from the student survey responses, the EIO program is a successful and desirable English language learning tool.

Overall, there was much difference between the experimental groups of students who were taught utilizing the EIO curriculum and the control group of students who were taught through the regular curriculum. In Grades 7,8, and 9, there was a significant difference between experimental and control groups. However, within groups, students in Grades 8, and 9 experimental groups made better significant improvement in English proficiency.

The implementation of EIO and the evaluation helped to identify the strengths of the EIO and some of the difficulties that should be addressed. From the student surveys it is clear that students feel very positive about EIO, that they feel the program improves their English, and that they find the EIO experience superior to conventional EFL instruction.

Technology infrastructure challenges create barriers to learning. Generally classrooms are very big, and not every student had access to their own computer either at school or at home. In addition, the physical organization of classroom space made it impossible to rotate groups of students so that some could work on the computers while others worked on other EIO tasks.

As far as the pre – and post-test results are concerned, it is difficult to make a conclusive finding regarding the difference between EIO curriculum and conventional EFL instruction. The enthusiasm that students expressed in the surveys for EIO is matched by the achievement results. The students in the experimental groups performed better when they were in schools and classrooms where they had better technology support.

Conclusion

The key to effective online learning is to increasingly engage learners. As the quality, sophistication and speed of access to web resources continue to improve, greater benefits are likely to accrue in adopting the Internet as a learning tool in the future. This paper indicates that using the Internet to learn, together with traditional face to face instruction, is likely to yield effective learning outcomes. Integrating the Internet into a curriculum, whether adapting an existing one or designing a new one, is likely to have a significant, positive impact on learning outcomes.

In Jordan, e-learning is in its infancy and the extent to which the Internet is used to foster learning is limited. Empirical findings are questionable. As more schools are likely to employ the Internet in teaching and learning, further research will be required to investigate the effectiveness of using it to complement traditional on campus courses in Jordan.

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