WEB-BASED INSTRUCTION (WBI) FOR DEVELOPING EFL STUDENTS' READING AND WRITING SKILLS AND PROMOTING CULTURAL AWARENESS

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ABSTRACT: Higher education institutions have experienced a huge dramatic shift in instructions and course delivery methods due to swift in technological advancements. Technology-enhanced instruction has become one of the most striking issues persistently debated. The question of 'how' still remains controversial. However, tremendous researches have been conducted proposing practical considerations and framework. Hence, the present study is an attempt to contribute to reveal the myth of 'how' web-based tools and resources could successfully and efficiently foster students reading and writing skills and cultural awareness. Following the imperial research patterns, two discrete sets of instructions were employed among EFL students' at university level. The statistical analysis of the results obtained from the tests conducted and disclosed the reality that EFL students' Reading and Writing Skills remarkably improved in Web-based Instruction environment. The study identifies a number of issues in the favour of Web-based teaching and learning. Derived from the findings, it's strongly recommended that Web-based Instruction could play vital role in fostering EFL students' creativity, efficiency and productivity.

KEYWORDS: Web-based Instructions, EFL, Language Skills

INTRODUCTION

The Diffusion of Technology has spawned a number of tools and resources for boosting instructions and course delivery methods at higher education institutions. Although all these tools and resources vary in nature, their capabilities and potentials could not be ignored. Among these vibrant tools is the Web-based Instruction (WBI).

Generally speaking, Web-based instruction (WBI) refers to the utilization of online resources, applications, and software for enhancing instruction and course delivery methods. On the other hand, any attempt to integrate these online resources for classroom instruction represents a form of WBI. According to Khan (1999:5),"Web-based Instruction (WBI) can be viewed as an innovative approach for delivering instruction to a remote audience, using the web as a medium". Several terms have recently been utilized in educational settings. For instance, Web-Based Training, Web-based teaching and learning, Web-based testing, Web-based communication, etc. However, all these concepts may slightly differ in nature, but they are used interchangeably to refer to the capabilities of Web technology for classroom instructions. According to Relan A and Gillani B. J. (1997: 43), "WBI as the application of a repertoire of cognitively oriented instructional strategies implemented within a constructivist and collaborative learning environment, utilizing the attributes and resources of the World Wide Web". Likewise, Ritchie & Hoffman (1997), stated, "In fact WBI is a hypermedia-based instruction program, which utilizes the attributes and resources of the WWW to create a meaningful learning environment where learning is fostered and supported".

LITERATURE REVIEW

The Concept of WBI

The concept of Web-Base Instruction has captured a prominent place in teaching and Learning languages. English in particular has gained popularity and dispensation over the other languages as most of the web contents are published in English. A great number of Technologyenhanced instruction practitioners have discussed the merits of Web-based Instruction over the conventional classroom. Therefore, the richness of online resources, applications and software have been appreciated. Many research initiatives have been taken to probe into the outcome of this new trend in English Language Teaching (ELT) especially in the areas of instruction, materials designing and development. (Warschaure, Shetzer & Meloni 2000; Walz, 2001; Son, J.B., & O'Neill, S., 1999; Son, 1998; Lee, 2005; Bootchuy, 2008; ARISMENDI, Alberto; LÓPEZ, Doris; MARIN, Luisa, 2014) The recent advancements of Computer-Assisted Language Learning (CALL) has proposed one of the most popular media, i.e. the existence of World Wide Web in the teaching-learning settings. CALL impact on fostering EFL students' language proficiency has been reckoned as a vital means in EFL settings. (Stern, 2004; De Assis and Nelida, 2007; Conrad and Munro, 2008). With the tremendous and huge amount of resources and materials available on the WWW and the opportunities of incorporating them in an instructional design, the concept of (WBI) has emerged as a vital tool for languages teaching and Learning. The inclusion of WBI in educational settings has added a new prospect to language learning and teaching.

The promises of WBI for sustaining and facilitating English instruction have bolstered the necessity for incorporating its resources and application to expand Students' knowledge and interaction beyond the limitation and confinement of textbooks and classroom time. Computer-Mediated Communication, another form of WBI, has empowered English practitioners to expand their communication in a virtual world where interaction with native speaker, for instance, has been made possible only with a few clicks. Additionally, WBI may create huge opportunities for effective interaction or communicative competence that has always been an important area for language practitioners.

WBI, which has been remarkably seen as a new drive for sustaining teaching and learning, provides great potentials for English language teaching. Due to its flexibility and richness of resources, integrating WBI for instruction has become a trend and it empowered teachers with ample opportunities to provide their students with innovative teaching strategies. Consequently, all these new practices have forced many teachers to reconsider their pedagogical sound practices and start using these resources for creating authentic and meaningful contexts for their students.

The question of 'why' English teachers tend to integrate web-based resources and materials along with their teaching strategies is a much debated issue in ELT. Chun and Plass (2000: 153) observe, "Current approaches and methodologies for teaching second languages reflect the new emphases on developing competences beyond the linguistic/ grammatical domain. More importantly, the availability and use of current technologies that support Computer-Assisted Language Learning (CALL) and Computer-Mediated Communication (CMC) raise the critical question of whether or not there is indeed a paradigm shift in how languages are taught and learned." Proponents of technology-integration believe that WBI has a lot to offer for English teachers and learners. The benefits of using WBI for facilitating Language proficiency can precisely be summarized:

- It motivates students in a new learning environment.
- It enhances learning flexibility, creativity, and productivity.
- It helps in teacher's professional development.
- It combines asynchronous and synchronous communication.
- It creates huge opportunities for enhancing students' communicative competence.
- It develops students' self taught strategies and ensures learning autonomy.
- It makes the best of authentic recourses and materials.

Reading and writing: New challenging and Prospects.

The proliferation of technology has infused innovative and novel communication practices worldwide. Normally, people communicate in verbal and written formats on a regular basis. Traditionally, literacy is closely related to having the skills needed to read and write. According to Kress, (2003: 23), "... literacy is the term to use when we make messages using letters as the means of recording that message". However, this definition of literacy has been transformed to include the skills that are required to communicate using various digital formats. This definition is illustrated by Selfe and Hilligoss (2001: 256), "Today the definition of literacy has expanded from traditional notion of reading and writing to include the ability to learn, comprehend, and interact with technology in a meaningful way". Communicating in these digital formats has promoted the necessity of reading and writing skills in particular. Reading in the hypertext environment absolutely differs from reading from a textbook or any other printed formats. (Miall ,2000; Coiro, 2003; Chorney, 2005; Warschauer and Kern,2000). On the other hand, technology has provided e-writers with amazing capabilities to increase the number of their audience as they communicate through asynchronous and synchronous digital tools and resources. For instance, social media networks, blogs, and websites. (Lankshear and Knobel, 2003; Merchant, 2007; Gee, 2004).

METHODOLOGY

To find broad-spectrum answers to the following research questions, the researcher adopted empirical method by involving two discrete sets of instructions into face-to-face and web-based Instruction. (Controlled and experimental)

Research Questions

- 1. How does WBI affect the development of EFL students' reading and writing skills?
- 2. To what extent does WBI enhance students' understanding or responding to intercultural contents?
- 3. What could help language practitioners to design innovative and creative instructional strategies?

Subjects

Research population for the experiments consisted of three Sudanese universities: Sudan University of Science and Technology, Gedaref University and University of Gazira. These universities were randomly drawn from a pool of 26 universities. The selection of 150 EFL students at university level was based on the fact that they had at least complete 7-8 semesters

and were expected to cover most of the course requirements. As a result, they were expected to be proficient in dealing with different English language styles. Moreover, it was supposed that they were apt to lead the trends by making use of modern instructional technologies.

Instruments

A number of instruments were utilized in order to collect certain types of evidences and persuasive justification of the effect of web-based resources and materials in developing EFL students' reading comprehension, writing performance; and promoting their cultural awareness. These instruments were: A Pre-test & Post-Test (experiment #1), A Reading Comprehension Test (experiment #2), Writing Test (experiment #3).

Procedure

To probe into the research questions, a short orientation was provided for the EFL Students of the above said universities. The main idea of this orientation was to use Web-based application as a new drive for developing students' reading and writing skills and cultural awareness. Three experiments were designed under the scope of WBI aiming at investigating the potential of the web resources in English classes compared to face-to-face teaching. See table 1 & 2 for the distinct sets of instructions of the three experiments.

Table No. 1: Instructional strategy for controlled group

Skills	Writing/ reading/ culture							
Foundational	Students would expose to orientation lecture about idioms							
objectives	 Student would collect and organized the acquired information. 							
Teaching Points	The fundamentals of writing Skills							
	 English idioms and idiomatic use 							
	 Reading comprehension strategies. 							
Linguistic skills	 Collecting information 							
	 Organizing information 							
	Writing drafts.							
Resources	Library books and references.							
Interaction	Not available							
Length	A 15-week project							

Table No. 2: Instructional strategy for experimental group

Skills	Writing/ reading/ culture
Foundational	• Students would surf the Web to obtain information.
objectives	 Students would exchange e-mails to obtain feedback.
	 Student would collect and organized the acquired information.
Teaching points	The fundamentals of writing Skills
	 English idioms and idiomatic use
	 Reading comprehension strategies.
Technical skills	• E-mailing

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	Word processing
	 Saving files to the system
Linguistic skills	Collecting information
	Organizing information
	Writing drafts.
	Peer editing
	Posting e-mails
Resources	A web site http://www.usingenglish.com/reference/idioms/
	 http://www.examenglish.com/TOEFL/toefl_reading.html
	 Feedback (reinforcement, response and information
	Tutors consultation
	 Web-based tools and resources.
	Google Doc
	Word Processing Program
Interaction	Students to the web.
	• Students-to-teachers.
	• Students-to-students.
Length	A 15-week session

Experiment 1: Task-based E-mail Exchange

Tremendous researches have been conducted to probe into the potentials of e-mail in EFL settings. (Barson, 1991; Cononelos & Oliva, 1993; Gray & Stockwell, 1998; Kern, 1996; Lunde, 1990; Son& O'Neill, 1999; Davis & Thiede, 2000). The main objective of the task was to attest the role of e-mail in enhancing EFL students' cultural awareness compared to conventional teaching settings. Furthermore, it aims at exploiting e-mail as a medium for creating ample opportunities for EFL students to interact and collaborate in the process of knowledge construction. The demonstration of the Task-Based E-mail exchange took place in two different teaching environments: face-to-face traditional setting (controlled) and WBI setting (experimental).

The controlled group received the instruction about the task in handouts. On the other hand, students of experimental group were supplied with a set of questionnaire before the demonstration took place for a need analysis to assess their computer literacy. Accordingly, they had training on using e-mail and search engines. Then instruction and guidelines were e-mailed to them explaining what is expected from them and what they are going to do. Afterwards both the groups were gathered together in a traditional classroom to teach the use of idioms. The objective was to show them how language is culture interpreted on free compositions. Later, they took a pre-test on the meaning of idioms that was designed to measure their existing ability to use idioms in different contexts. At this stage, the teacher of controlled group explained different aspects of idioms such as its definitions, examples, and difference of meaning in different cultures verbally. Students were also put to practice their knowledge in the classroom. In contrast, tutors established asynchronous and synchronous discussion through live discussion and e-mail exchange with students of the experimental group. They also acted as consultants for the group by responding to their inquiries electronically and offering feedback to their written tasks which was absent in the controlled group.

Evaluating Students Achievements

Immediately after the end of the project, a post-test was conducted with the aim of measuring the impact of using web-based application as a new medium of instruction.

Experiment 2: Web-Based Reading Comprehension Activity

Current practices of technology-enhanced instruction has provided EFL students with tremendous opportunities to be successful readers. (Larson, 2009; Chan, 2002; (Miller, 2005).

The main objective of this experiment was to investigate the effectiveness of e-resources in enhancing students' reading comprehension and vocabulary acquisition at a higher level of thinking. A detailed explanation of the reading comprehensions strategies and techniques was given. Then, Students are exposed to 5 reading passages adopted from TOEFL preparation materials. (http://www.examenglish.com/TOEFL/toefl_reading.html). The link has been sent to the experimental group via e-mail while students of the control group received the same content but in a printed format and asked to consult books and references available in the department library. Students of the experimental group had the privilege of studying the reading passages in a hypertext environment. In addition, they took the advantages of a great number of web-based materials such as reference tools (online dictionary, Thesaurus, Concordencers) to assist them in comprehending every nuance about the reading tasks.

In order to evaluate students' achievement in reading skill, a reading comprehension test was designed with a 10- reading text and MCQ (Multiple Choice Questions) answer options. The language of the reading texts and that of the questions were made different to assess students' comprehensibility and understandability.

The test was conducted in two distinct learning environments: traditional settings for control and in a language lab wired for the Internet for the experimental group.

Experiment 3: Web-Based Instruction for Enhancing Writing Skills

The experiment was initiated by a detailed description about the nature of the task. Later, both groups (experimental and control) were taught the basic fundamentals aspects of free writing. Students had already received different instruction regarding the task. (See table 1 & 2). Both the groups were asked to write an essay on idioms and idiomatic expressions. The controlled group was provided with paper dictionaries and some handouts to use as reference materials. Collaboration over the written task, peer review, for instance, was not allowed. In addition, they were asked to finalize their work hand written in a traditional environment and submit their final productions directly to the researcher. On the other hand, experimental group assigned the same task. However, they were allowed to collaborate over the task with their peers and teachers. The first draft of their writing was discussed, reviewed and edited collaboratively through Google Doc. Later, the final draft was emailed to the researcher.

Statistical Analysis

The data received from tests conducted throughout the research were analyzed by using Statistical Packages for Social Sciences (SPSS). Basic statistical tests were performed which include frequencies, central tendency (mean, median, mode), dispersion (standard deviations), reliability analysis and t-tests.

RESULTS AND FINDINGS

1. The statistical Analysis of the Result obtained from the Pre-test and post-test

Table No. 3 T-Test for the Mean score of Controlled and Experimental groups in the Pretest and post-test

Test	Group	N	Mean	Std D.	T-Test	DF	Prob. V
Pre-test	Cont.	74	4.2297	1.676	0.243	73	0.809
	Exp.	74	4.162	1.783	0.243		
Post-	Cont.	74	5.797	1.647	-7.564	73	0.000
test	Exp.	/4	7.378	1.362			

Table No. 3 shows that students of both the groups were sharing the same background knowledge about the cultural implication embedded in idioms and idiomatic expressions during the pre-test time. However, the post-test result indicates that the experimental group outplayed the controlled group in language acquisition and performance. The richness of resources and the availability of the tremendous resources on idioms had a deep impact on improving students' cultural awareness and their understanding of the underlying concepts of idioms and their usages. It eventually worked for their linguistics competence and performance. Hence, the results confirm a positive impact of WBI on the experimental group.

The statistical Analysis of the Result obtained from the Reading Comprehension test

Table No. 4: T-Test for the Mean score of Controlled and Experimental groups in Reading Test

Group	N	Mean	Std D.	T-Test	DF	Prob. V
Cont.	75	4.800	1.748	-25.009	73	0.000
Exp.	75	8.667	0.977			

Table No. 4 demonstrates that there are statistically significant differences between the two groups in comprehending a reading text. It is worth mentioning that the use of web-based tools and resources have empowered students to tackle some reading barriers specially those associated with insufficient vocabulary knowledge.

The statistical Analysis of the Result obtained from the Essay Writing Test

Table No. 5: The T-test for the Assessment categories of Essay Writing between Controlled and Experimental Groups

Assessment Category	Group	N	Mean	Std. D.	T-Test	DF	Prob . V.
Organization	Cont.	75	3.107	0.953	-6.135	74	0.000
	Exp.		3.960	0.743			
Style	Cont.	75	3.533	0.9492	-4.164	74	0.000
	Exp.	73	4.120	0.753			
Grammar	Cont.	75	3.333	1.155	-4.741	74	0.000
	Exp.		4.160	0.839			
Content	Cont.	75	3.053	1.038	-8.024	74	0.000
	Exp.	13	4.240	0.751	-0.024	/4	0.000

Table No. 5 provides evidence that there is statistically significant difference between the two groups in their written productions. The fact that the use of web-based resources and tools has outstandingly empowered students' engagement in a mutual collaboration environment (tutor's feedback, peer editing via Google Doc). Furthermore, the use of word processor program for the final production has contributed positively to the students' success in producing well-organized and coherent writing.

Implications

Web-based tools and resources can be a supportive and additional resource for students' in developing their reading comprehension and vocabulary acquisition. (Referred Q#1)

WBI assisted students in developing their ideas by using WWW. It supported them to work for an error free, and better production in terms of organization and style. As a result of WBI, students tend to be independent learners, thinkers and workers. Consequently, they develop more skills and more knowledge, which actually provided them with a better guiding principle to experience a new learning fashion. (Referred Q#1)

WBI maximizes the options for developing students' cultural knowledge by exposing them to multicultural context. (Referred Q#2)

The huge amount of web-based materials and resources provide teachers with unlimited access to new techniques and strategies that can be used to support their instructional strategies and delivery of courses. (Referred Q#3)

The research yields a noticeable shift in teachers' traditional role from a dominator of knowledge to that of a facilitator, organizer, and supervisor. In addition, Web-based materials support teachers to present their students with a meaningful and authentic context and create situations that enable them to develop their competence in reading and writing. Thus, WBI ensures EFL teachers opportunities to be more self-confident as they explore new methods and techniques. (Referred Q#3)

Finally, the research shows that email, Google Docs, and Word Processors can be a useful tools for teaching English that can be used in teacher-student and student-student interaction no matter whether for formal or informal discussions. This observation can be clearly seen in the

Published by European Centre for Research Training and Development UK (www.eajournals.org) contribution of Warschaure, Shetzer & Meloni (2000), Belisle (1996), Warschaure (1995), and Wang (1993).

CONCLUSIONS

These simple experiments reveal how the utilization of the WBI for enhancing classroom instruction has great potentials for both EFL teachers and students. Exchanging of E-mails as one of the most brilliant applications of the web technology that can maximize teacher-student and student-student interaction by breaking the myths of confinement of classrooms. What is more, Web-based reading resources have a great impact on tackling students reading barriers associated with insufficient vocabulary. Equally WBI may play a critical role in motivating students in a new learning environment and fostering teachers' creativity in designing innovative instructional strategies and course delivery methods. Moreover, WBI develops students' critical-thinking approaches to cross-cultural communication and being a part of the dynamic changing world.

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