

Impact of Using Technology in Teaching English Language

Rashid Hasan Taha Mohamed

Najran University || KSA

Abstract: The present study aimed at investigating to what extent teachers use technological devices and (as general) in the department of English Language in Hasahiesia Joint School. The study aims to identify which factors contribute to, or discourage teachers use of technology in English Language teaching. It also focuses on the actual role played by English language teachers. Descriptive, analytical and experimental methods are used to test quantitatively and qualitatively the collected data. Data are collected through two research instruments, namely, a test (pre/ post-test) and two questionnaires at the end of the experiment to elicit the subjects attitudes towards technology. One questionnaire is directed to the teachers (30 teachers) and the other is directed to the students (52 students who are divided into two homogeneous groups after the first test). Intervention interwoven with the regular teaching by research is conducted. The quantities and qualitative data are statistically analyzed by using the (SPSS). According to the questionnaire results, It is clear the students have positive attitudes towards such learning. The results also show that the mere introduction of computer technology resources. Consequently, the provision of training which is the key factor in both changing attitudes and encouraging teachers to incorporate technology in their instruction is highly recommended.

Keywords: Educational Technology - Teaching - English Language.

أثر استخدام التكنولوجيا في تدريس اللغة الإنجليزية

راشد حسن طه محمد

جامعة نجران || المملكة العربية السعودية

المستخلص: هدفت الدراسة الحالية إلى التحقق من مدى استخدام المعلمين للأجهزة التكنولوجية و(بشكل عام) في قسم اللغة الإنجليزية في مدرسة الحصاحيصية المشتركة. تهدف الدراسة إلى تحديد العوامل التي تساهم في أو تثبط استخدام المعلمين للتكنولوجيا في تدريس اللغة الإنجليزية. كما يركز على الدور الفعلي الذي يلعبه مدرسو اللغة الإنجليزية، حيث يتم استخدام الأساليب الوصفية والتحليلية والتجريبية لاختبار البيانات التي تم جمعها كمياً ونوعاً. يتم جمع البيانات من خلال أداتين بحثيتين، وهما الاختبار (الاختبار القبلي / البعدي) واستبيانان في نهاية التجربة لاستنباط مواقف الأفراد تجاه التكنولوجيا. استبيان واحد موجه للمعلمين (30 مدرساً) والآخر موجه للطلاب (52 طالباً تم تقسيمهم إلى مجموعتين متجانستين بعد الاختبار الأول). يتم إجراء تدخل متشابك مع التدريس المنتظم عن طريق البحث. يتم تحليل الكميات والبيانات النوعية إحصائياً باستخدام (SPSS). وبحسب نتائج الاستبيان. من الواضح أن الطلاب لديهم مواقف إيجابية تجاه هذا التعلم. تظهر النتائج أيضاً أن مجرد إدخال موارد تكنولوجيا الكمبيوتر. وبالتالي يوصى بشدة بتوفير التدريب الذي يعد العامل الرئيسي في تغيير المواقف وتشجيع المعلمين على دمج التكنولوجيا في تعليمهم.

الكلمات المفتاحية: تكنولوجيا التعليم – التدريس – اللغة الإنجليزية.

Definition of Terms and List of Abbreviations

ICT: Information and Communication Technology

Course Structure: Refers to the course organization and course delivery within the Learning Basic Skills System (Moore, 1997). The course structure expresses the rigidity or flexibility of structuring elements used in the course design such as: learning objectives, teaching strategies and evaluation methods so that it can be delivered through the various media of communication. In this research, course structure is comprised of two constructs, namely course structure content and course structure assessments.

Blended Learning: Smith and Baber (2005: 13) define blended learning as “a model which combines some of face to face (f2f) teaching with online learning”. According to Colis and Moonen (2001), it is “a combination of traditional face-to-face and online learning so that instruction occurs both in the class room and online”.

Blogs: are weblog, web log or simply blogs. A blog is a web application which contains periodic time-stamped posts on a common webpage. These posts are often but not necessarily in reverse chronological order. Such a website would typically be accessible to any Internet User.

Social Constructivism: Constructivism is a psychological theory of knowledge which argues that humans generate knowledge and meaning from their experiences. Kim (2001) states that “*social constructivism emphasizes the importance of culture and context in understanding what occurs in society and constructing knowledge based on this understanding*”.

Wikis: Wiki is a Hawaiian term meaning “quick”. Ward Cunningham, an American computer programmer who created the first wiki, describes a wiki as “the simplest online database that could possibly work”. The Encyclopedia Britannica states that wikis are dated to 1995, when Cunningham created a new collaborative technology for organizing information on Web sites and called this new software Wiki web.

Computer-Mediated Communication (CMC): CMC involves interpretive, interpersonal and presentation communicative modes. It is the process used by people to exchange and/or acquire information or knowledge through the computer and the Internet.

Asynchronous: Asynchronous is one kind of CMC which is used to describe how communication can be transmitted intermittently instead of in a steady stream. Email, listservs, usernet, chat rooms, threaded discussions and PowerPoint are examples of Asynchronous CMC.

Synchronous or real-time: Synchronous is the other form of CMC in which people communicate with each other through computer or the Internet in real time simultaneously. Videoconference, Moos (Multiple-User Object Oriented) and Muds (Multiple User Domain) are examples of Synchronous CMC.

Computer Assisted Language Learning (CALL): CALL is a form of computer-based learning methodology. It is an approach to teaching and learning by using computer and computer-based resources (e.g., use the Internet to present) to assist language learning.

Attitude: Positive or negative inclinations of learners towards their content area. Language learners' willingness, satisfaction, and motivation to accept or to reject implementation of multimedia instruction in language learning are explored in this study.

Motivation in Language Learning: Motivation in language learning represents how an individual desire to learn a target language based on intrinsic or extrinsic motivation. In this study, motivation is used to describe how important it is in language learning since "it provides the primary impetus to initiate L2 learning and later the driving force to sustain the long and often tedious learning process" (Dörnyei, 2005: 65)

Autonomy: Autonomy is an independently controlled process, developed by learners through different paths based on their needs, strategies and the context in which they are inserted in and also reflect their beliefs and responsibility over learning.

Self-Determination Theory (SDT): SDT is a macro theory of human motivation and personality since it deals with an individual's inherent growth tendency and innate psychological needs. It explains an individual's motivation behind the choices the individual makes without any external influence and interference. It focuses on the degree of an individual's behavior that is self-motivated and self-determined (Deci & Ryan, 2002).

Intrinsic Motivation: Intrinsic motivation exists in the relation between individuals and activities. It takes place while learners are driven to perform in an interesting activity. It plays an important role that explains the relationship of an individual's autonomy and foreign language motivation.

Extrinsic Motivation: Extrinsic motivation refers to any form of regulation which is external to the enjoyment of the activity itself (Noel, 2009).

The Socio-Educational Model: Motivation is the central idea of the Socio-Educational Model to simulate an individual to learn the target language. It is related to Attitudes to Learning Situation and Integrativeness. This model focuses on language learners' various roles of different characteristics while learning a target language. It combines with an individual effort and desire to achieve the language goal.

Ideal Self: Ideal self represents the attributes (or effort) an individual would like to possess, and what people wish to become in the future. It is a promotion focus and its concern is on growth, achievement and goal reaching (Higgins, 1998).

Ought-to self: Ought-to self is what an individual feels obligated or duty bound to become. Ought-to self is a prevention focus (Higgins, 1998) and is concerned with regulation of behavior in order to stay responsible, safe and avoid possible negative outcomes (Dörnyei, 2005: 106).

Learning Experience: L2 Learning experience "covers situation specific motives related to the immediate learning environment and experience" (Dörnyei, 2005: 106).

Hands-on Activity: Students are involved in activities during the learning process.

Social Constructivist Learning Theory: This theory states that learning is an active process of creating meaning from different experiences as well as from the world around them. The learning process takes place when learners are involved in social interaction which focuses on the dynamic nature of the interplay between the teachers, the learners, the learning environment or the context and tasks.

Mediation: Mediation is a tool for problem solving or for goal accomplishment. Based on mediation theory, the main role for the teacher is to find ways to help language learners find a way to learn and understand the target language.

Willingness to Communicate: Language learners are willing to use acquired language to communicate with others. 12

Communicative Competence: Communicative Competence consists of both the knowledge of linguistics rules, in addition to the knowledge of how these rules are used to communicate meaning. Communicative competence is a language ability which includes the grammar rules and how to apply acquired language into real-life social context (Hemes).

- This study tries to examine motivation and attitudes of EFL learners toward implementation of technology in teaching English as a foreign language, the study also attempts to investigate whether the use of technology in the classroom can enhance foreign language learning process.
- It aims at clarifying to what extent teachers use technological devices and ICT as general in teaching EFL/ESL in the department of foreign languages, faculty of Education, Open University of Sudan.
- The study also aims to identify which factors contribute to, or discourage teachers' use of technology in English language teaching.
- It focuses on the actual role played by English language teachers.
- The research aims at investigating a number of factors that are known to influence students' learning and how technology experience the students receive affect their attitude and motivation towards language learning.
- The researcher is interested in investigating EFL learners' computer literacy, educational background, and preferred learning strategies characteristics that might affect their motivation to integrate technology into their language learning.

The main question set in this study is: what are the advantages and disadvantages of using computer network technology in language teaching? However, this question would be addressed only after the following subsidiary questions are answered by the study:

1. Are there any differences in the skills of English Language between the pupils who learn English language by using computer as assisted factor and the others who don't?
2. What is the impact of the use of technology in learning English as a foreign language?
3. What are the attitudes of students towards using technology in language learning?

4. What are the attitudes of teachers' of English in Sudan towards using modern technology in language teaching?
5. To what extent are these teachers of English qualified and ready to implement technology in the process of their teaching?
6. To what extent do teachers authentically use sufficient technological devices in their teaching process?

1.4 Hypotheses of the Study

The present study aims at testing the following hypotheses:

1. Using technological devices facilitates the English language learning process.
2. Students have positive attitudes towards the use of technology in English language learning.
3. Teachers provide students with sufficient electronic relevant references/ devices.
4. Teachers authentically use sufficient technological devices
5. Educational institutions are well equipped with technological aids.
6. There are differences in the skills of English Language between the pupils who learn English language by using computer as assisted factor and the others who don't

This study will be significant for all parties who hope to improve the teaching of English through *the use of ICT*. The use of technology nowadays represents an investment of both **time** and **money**.

a. Investment of Time

Just as technologies may save money over the long term, they may also save time. Increased demands on time are partly due to the difficulty of using new online multimedia technologies in their still-early stages (comparable, perhaps to the early days of tuning a radio or starting a car when those machines were first invented). However, time demands are determined not only by the need to learn how to master the technology, but also by the changing dynamics of the online classroom. The researcher believes that technologies create excellent opportunities for long-distance exchanges, but such exchanges can be extremely complicated in terms of coordinating goals, schedules and plans.

b. Investment of Money

The use of new technologies in the long run tends to result in higher productivity at least in the economic sphere. Productivity in education is certainly harder to measure, but it is not unreasonable to assume that in the course of time new technologies will help create more effective foreign language learning. For college language learning programs, such expenses usually should entail hardware, software, staffing, and training in addition to the provision of at least one networked computer laboratory.

2.1 A Brief History of Technology and Language Learning approach

Virtually, every type of language teaching has had its own technologies to support it. Language teachers who followed the grammar-translation method relied on one of the most ancient technologies in

education, the blackboard being a perfect vehicle for the one-way transmission of information, the blackboard was later supplemented by the overhead projector which is another excellent medium for the teacher- dominated classroom, as well as by early computer software programs which provided what were known as “drill-and-practice” grammatical exercises.

In contrast, the audio-tape was the perfect medium for the audiolingual method (which emphasized learning through oral repetition). University language classes in the 1970s and 80’s usually included obligatory sessions at the audio lab where students would perform the dreaded repetition drills. (Barbra, 1993).

As English has become the dominant/ international/ common language in the world, it has also become one of the components of tertiary, secondary, primary and even pre-school education in the EFL teaching contexts. Thus, the concept of young learners has started to cover a larger age range than it did 2 or 3 decades ago. This change can clearly be seen in the quality and quantity of course books written for different ages and levels of young English language learners, and the publications made in this area. Moreover, it also brings a demand for competent English language teachers to teach (very) young language learners.

METHODOLOGY

Technology offers a powerful support for learning skills through inquiry and problem solving. It can promote students' exploration through collaborative involvement in authentic, challenging multidisciplinary tasks by providing realistic complex environments for student inquiry. Technology also furnishes information and tools to support investigation and to present data in ways that support critical thinking and problem-solving. Although the effectiveness of the use of technology in teaching foreign languages is taken for granted, its validity and efficacy in a conservative society like that of Saudi Arabia needs to be carefully reinvestigated through proper experimental research. Accordingly, this study is launched to verify the usefulness of using such an approach in a Sudanese setting.

This chapter provides a description of the population and sample of the study, how data were collected and how they were organized. The study outlined the statistical procedures used for data analysis. This chapter provides a detailed description of students and teachers (the samples) to whom the questionnaires were distributed.

3.1 Methods

The study used an experimental design with two randomly assigned groups to investigate the effect of using technology to teach English to class eight students at Hasahiesa Joint School. The current study variables were divided as follows:

- A. The Independent Variable: The independent variable of this study is represented in the technological teaching approach which is used to teach the task-based activities designed by the researcher.
- B. Dependent variables: The dependent variables in the current study are
- Student's achievement
 - Student's attitude towards technologically aided learning.

3.2 Population of the Study

The population of this study was composed of male and female students studying English at Hasahiesa Joint School (class eight). As this population was too large to be investigated, a sample had been randomly chosen from class eight at Hasahiesa Joint School.

3.3 Samples of the Study

The selected sample of Education, at Gezira University consisted of fifty-two students of English major from the faculty of Education, Hasahiesa Joint School. They studied English for at least eight years in basic level, during of which they were taught the four English language skills (reading, writing, listening and speaking).

The sample was divided into two homogeneous groups: one group receives electronically aided instruction (experimental group) and the second group receives normal traditional instruction(control group).

The second sample is composed of thirty teachers who were randomly chosen from the English departments in the faculties of Education.

3.4 Instruments the of Study

Since the researcher is keen to collect authentic data for the study, therefore, two instruments were carefully chosen; an attitude questionnaire and a test. Both were developed and piloted on a representative sample. Both instruments were given to four ESP specialists to confirm their validity. The questions used in both instruments are intended to measure the effectiveness of using technology to teach English at the tertiary level. After receiving the comments and feedback from the specialists, the researcher improved on the contents and the instructions of the instruments to make them simpler and clearer for the participants/subjects of the study.

Findings of the Study.

The main question set in this study is: what are the advantages and disadvantages of using computer network technology in language teaching?

The answer as reflected by the study is as follows:

A advantages

Computer technology has been used in language teaching since the 1980's. However, with the advent of Internet, the computer has been transformed from a tool for information processing and display to a tool for information processing and communication. The instant worldwide connections enabled by the Internet have changed the way teachers and learners work in their teaching and learning of second/foreign language. Indeed, the use of the Internet and the World Wide Web in second/foreign language instruction has been increasingly recognized. A number of applications of computer network technology have been utilized such as multimedia, email, electronic journals, databases, World Wide Web, chat, audio and video conferencing etc. This research investigates both advantages and disadvantages of incorporating such technology in language courses. The computer network has offered language teachers'/learners' tools for communication and collaboration as well as tools for improving their pace.

- There are many differences between student who learn English Language by using computer as assisted factor and the other student who don't.
- The computer-networked-learning environment facilitates language teaching and learning by providing teachers and learners with valuable sources of materials where teachers can exploit multimedia to support their language teaching.
- Teachers integrate authentic materials on numerous Websites such as <http://www.geocities.com>, <http://owl.english.purdue.edu/> etc. into language lessons. With regard to learners, they are exposed to a wide range of resources such as online dictionaries, thesauri and machine translation software, which enables learners to learn vocabulary while reading.
- Quite a few authentic language journals such as The Modern Language Journal, The Internet TESL Journal etc. are available on the net and databases. The use of the Internet can remove the greatest obstacle to access the authentic written word.
- Most language students, especially those in English as foreign language (EFL) contexts, cannot afford to subscribe to any foreign newspaper. Accordingly, electronic newspapers are a great chance for educators and learners because they are accessible and almost go for free.
- Learners can obtain lecture notes and prepare for lessons beforehand or review the lessons from anywhere at any time suitable for them.
- Computer network has been seen as a useful tool for communication. Advances in computer technology have created remarkable new ways to connect language learners.
- Synchronous communication (happen at same time) enable language learners to communicate rapidly and inexpensively with other language learners or speakers of the target language around the world (Warschauer and Healy, 1998). From these kinds of communication, positive affective benefits for learners are reported in the foreign language classroom.

- The advantage of computer mediated communication (CMC) brought about by Internet is that learners are given an opportunity to interact with others without interruptions, time pressure or social anxiety. Moreover, the use of technology redistributes teacher and classmate attentions so that less able students can become more active participants in class.
- The on-line environment enhances communication between teacher and learners. Warchauter (1997) explores the use of email between teachers and students in a graduate of (ESL) writing class. He finds that using email enables teacher to provide immediately students with detailed and rapid feedback on the problems and questions they raised.

Computer- based communication technology provides tools for language learners to improve their language skills. Learners are exposed to numerous software programs to improve their reading, listening, speaking skills and grammar knowledge.

- The use of technology in foreign language learning also appears to influence the development of communicative skills. In fact, computers can offer foreign language learners more than drills; “they can be a medium of real communication in the target language, including composing and exchanging messages with other students in the classroom or around the world” (Oxford, 1990: 79).
- The network environment enables a new form of language learning i.e. distance learning. Indeed, the Web has created the capability of opening classroom doors to the world. Online environments and the use of the WWW provide students with skills such as online communication, discussion, problem analysis, problem solving, critical thinking and negotiation of meaning.
- Distance learning is especially of benefits in language learning because not everyone can afford to study abroad and explore the language cultures. In contrast, with the application of the Internet and the WWW, students can attend foreign language classes from home without having to go to the country where the target language is spoken.
- Distance learning technology makes it possible to bring the target culture into the classroom and thus, closer to students. Since language learning is a multifaceted social and cultural phenomenon, one of the most essential pedagogical principles of language teaching is one that emphasizes the study of language in a cultural context because language and culture are inextricable and independent. Sanaouri and Lapkin (1992) found that in an email exchange project between these students and native French speakers, students assumed increased responsibility for their learning and broaden their cultural knowledge. Indeed, virtual trips enabled by the Internet offer students an opportunity to visit countries and learn about the people, language, and culture. Undoubtedly, understanding the culture of the target language enhances the understanding of the language.
- The application of new teaching methodologies that are more learner- centered requires the re-evaluation of the role of the FL teachers and learners in a CALL environment. Despite of some

obstacles, what has been offered by the computer network technology is far too beneficial to be ignored. There is no doubt that the computer network technology e.g. the Internet and the WWW offers teachers and learners vast amount of materials and communication possibilities to enhance their language teaching and learning.

Disadvantages

However, the discussion would be incomplete without addressing the disadvantages or obstacles related to the issue of using computer network technology in language teaching and learning in terms of financial barriers, content considerations, technical features and pedagogical perspectives. The foremost challenge is the issue of access. Students must have computer and Internet access. Therefore, they will meet with difficulties when technology is not always as reliable as it should be and Internet access is not always available. This situation is common in quite a few English as foreign language (EFL) contexts. Financial barriers include the cost of setting up a network in the school, which can be expensive.

- Financial barriers also include the investment in training. The use of the Internet in language teaching and learning requires some technological knowledge and computer skills from both teachers and learners. Insufficient computer skills from students may affect the quality of online collaboration (Lee,2004).
- Since many of the teachers have not been trained to use technology, others do not understand how to use the new technologies; they may be reluctant to use technology in classroom.
- Searching for materials online can sometimes be time- consuming and frustrating. Many learners find it difficult to read papers on a computer screen.
- Since it is easy to become bombarded with too much information with little control over the quality and accuracy of the contents, a certain technical expertise is required from both teachers and students.
- Little is known about how to make use of Internet- based materials or how to design tasks that allow the learners to explore these materials and yield expected learning outcomes. There are still limitations on navigation and hyperlink structures in the networked learning environment, which can make learners get lost. Besides, communication on the Web will be difficult when the network is slow at peak times.
- Students may drop out because of technical problems in terms of the speed of the network and the reliability of the software.

The following subsidiary questions which were addressed by the researcher at the beginning of the study are answered by the study as follows:

- a. What is the impact of the use of technology in learning English as a foreign language?

Statistics reflect greater improvement in the performance of the students who use technological devices in their learning process compared to those who do not use such devices.

A t-test reveals a significant difference between the levels of performance of all subjects in grammar Control Group (C.G.) (8.50%) Experimental Group (E.G.) (12.00%), Vocabulary (C.G.) (9.85%), (E.G.) (15.31%), listening (C.G.) (5.62) (E.G.) (13.31%) reading (C.G.) (10.69), (E.G.) (12.69) writing (C.G.) (6.38) (E.G.) (12.46).

- b. What are the attitudes of students towards using technology in language learning?

The experimental group students are asked to elicit their opinions, impressions, responses and attitudes towards the electronic learning in which they have participated. Table No. (4.4) shows that about two thirds, i.e., (65.4%) of the students agree or even strongly agree that they hope to use computer as a tool to facilitate their progress in education.

When students are asked to mention to what extent they rely on others when using computer oriented tasks in the past, (57.7%) of the students responded that they agree or even strongly agree with the statement that they used to rely on others to do their computer-related tasks but now they report that they depend mainly on themselves. See table No. (4.7)

- c. What are the attitudes of teachers' of English in at Gezira University towards using modern technology in language teaching?

- Tables (4.13), (4.15) reflect:
- Almost all (100.0%) of the subjects claim that the use of technology in teaching facilitate learning the materials, also enabled them to read and write better, enjoy what they read as well as made it somehow easier to check and revise.
- Table (4.14) reflects that a respective number (96.7%) of the teachers do not consider the use of technological devices a waste of time and effort.
- Table (4.15) shows that the greatest majority of teachers, i.e., (93.3%) agree or even strongly agree that using technology economizes on time and helps them to provide more material and information for their students.

- d. To what extent are the teachers of English qualified and ready to implement technology in the process of their teaching?

Table (4.19) indicates that (50.0%) of the respondents usually or even always use multiple sources such as websites and research journals etc., to support students' collaborative writing/search which confirms the fourth hypothesis and answers the question.

- e. To what extent do teachers use sufficient technological devices in their teaching process?

To offer insight into the use of electronic tools by teachers, the following direct questions are asked:

- **How often do you use electronic tools when teaching an English course over?** The result shows that (3.3%) of teachers never use electronic tools, while (66.7%) of them respond that they rarely do so. See table No (4.16).

- **How often do you use e-mail to communicate with your students?**

The subjects' answers confirm that (46.7%) of the teachers never use e-mail to communicate with their students while (23.3%) indicate that they rarely do so. See table (4.17).

- **How often do you use chat bar to communicate with your students?** The teachers' answers reflect that (40.0%) of respondents never communicate with their students via the mentioned tool, while (36.7%) of them indicate that they rarely do so. See table (4.18). accordingly, the results of these tables specifically (4.16), (4.17), (4.18) reject the fifth hypothesis.

- Although using technology has a positive effect upon improving the students' skills and enhancing their linguistics knowledge, teachers do not use it sufficiently.

- f. To what extent are colleges in Sudan ready to provide technical facilities and support for teaching English?

The participants are asked if technological devices are available in their college and /or university in general. Table (4.12) indicates that a dominant majority, i.e., (96.7%) of the teachers agree or even strongly agree that technological devices are available in their colleges as well as at the university in general.

- g. To what extent do students seek out e- activities that promote problems-solving and critical thinking?

- Table (4.5) confirms that the majority i.e. (76.9%) of the experimental group students seek out e-activities that promote problems- solving and critical thinking.

- The positive attitudes that experimental students have towards learning English language skills resulted from their experience in studying English via using technology approach for basic skills. This made it easy for them to accept and implement the researcher's instructions to send e-mails, respond to any comment on their colleagues' ideas, writing on their private blogs, and also help them to practice social communication with minimum effort.

In the light of the above, the researcher outlines the following findings:

- Using the ICT to teach task-based English skills has a positive effect upon the writing skill.
- There is a positive impact on the attitude of students in the experimental group towards learning task-basic English language skills.
- The subjects report that the use of computers in writing enables them to write better as regards revising capitalization and punctuation on their written tasks.
- Learning via using technological devices helps students to accomplish their tasks more quickly.

- The subjects agree that they enjoyed about the convenience and freedom of practicing e-exercises in learning which helps them to be more confident,
- The subjects also report that the course has significant impact on their attitude towards learning English in the future and stated that they will use technological devices to continue their education.

5.2 Recommendations for Further empirical Studies:

Based on the findings of this research, a series of recommendations for further practical applications of CALL are formulated.

First: This study should be replicated and similar studies should be conducted using other Sudanese universities in all parts of Sudan. Therefore, this study could be considered as the first step towards the whole country technology integration.

Second: Using larger samples of different tertiary levels is recommended so as to determine to what extent the outcomes of the current research can be generalized, not only at the tertiary level, but at all levels of education.

Third: This research focuses on the students at the foreign language Department. It would be interesting to conduct further research in other Sudanese faculties to see whether their students have the same attitudes towards learning via ICT. This is also recommended to determine and evaluate barriers and attitudes that could affect the integration of the learning by using ICT in EL classrooms.

Fourth: This research is undertaken based on a one term course. However, the replication for longer durations can be more effective in promoting EFL student writing ability and could give more reliable results.

Fifth: It is recommended that the Ministry of Higher Education in Sudan should take the initiative of the integration of technology into universities in order to offer teachers of English language The training enables them to succeed in integrating these electronic pedagogical devises in their classrooms teaching, especially in terms of considering the challenges that teachers are likely to face in when teaching some contexts.

5.3 Recommendations for Training Teachers on the Use of Technology

In order to raise awareness of the benefits of using technology, and to provide professional references to help Saudi English language teachers with practical issues and ideas on how to use technology in the EFL classroom, the researcher enumerates hereunder some suggestions that are also likely to help teachers overcome the challenges they face when attempting to use technology in limited technology contexts:

- Arrange and conduct professional workshops to help English teachers with practical issues and ideas on how to use technology in the EFL classroom and how to overcome the challenges in a limited technology context. It would be wise to begin with introducing teachers to simple tools like basic Internet, emails, etc. Then, they can move further to the use of blogs, online exercise creators, and wikis as online collaboration tools.
- Create an online platform in order to have a place to communicate, share and discuss issues related to how to use online tools in learning and teaching English.
- Encourage teachers to enroll in free online courses and join online communities of practice for teachers. This can help generate confidence within a teacher to use computer, create CALL content, and to use online tools.
- Hold monthly meeting specifically to discuss technology issues.

Design a program for interested language teachers who are currently unconvinced-skeptical, in order to determine how to integrate successfully the ICT.

Conclusion

In order to achieve good results through the use of technology devices and ICT integration into the EFL tertiary classrooms, priority should be given to training teachers on how to use technology. It is also advisable that Ministry of Higher Education in Sudan works out a policy that aims to take further steps towards encouraging teachers to adopt new innovative ways in teaching English. Although this integration needs efforts and on the part of all concerned to overcome the challenges, the teachers have to be the backbone in this respect. In order to agree on a unified vision, teachers should also be aware of the new technologies as this will definitely change the methods they follow and the way in which they practice their profession in the future.

Modern technology cannot be an effective component of educational institutions if the teachers are not convinced of the worthiness of using it.

To sum up, integrating the technological learning/teaching approach requires teachers who persist to integrate technology in their methods and use it to improve student learning. In fact, computer applications will never replace teachers' role as they are the key factor to whether technology is used properly and effectively or not.

REFERENCES

- Bates, M., & Wilson, K. (1982). ILIAD: Interactive language instruction assistance for the deaf (BBN Report No. 4771).

- Beeman, W. O. (1988). Intermedia: A case study of innovation in higher education. Final Report to the Annenberg/CPB Project. Providence, RI: IRIS, Brown University. Bruce, B., & Rubin, A. (in press). Electronic Quills: A situated evaluation of using computers for teaching writing in classrooms.
- Hillsdale, NJ: Erlbaum. Collins, J. L., & Sommers, E. A. (Eds.) (1989). Writing on-line: Using computers in the teaching of writing.
- Upper Montclair, NJ: Boynton-Cook. Daiute, C. (1985). Writing and computers. Reading, MA: Addison-Wesley.
- Elbow, P. (1973). Writing without teachers. London: Oxford University Press. Goldenberg, E. P., & Feurzeig, W. (1987). Exploring language with Logo. Cambridge, MA: The MIT Press. Graves, D. H. (1982). Writing: Teachers and children at work. Exeter, NH: Heinemann.
- Handa, C. (Ed.) (1990). Computers and community: Teaching composition in the twenty-first century.
- Portsmouth, NH: Boynton-Cook. Hillocks, G. (1986). Research on written composition: New directions for teaching. Urbana, IL: National Conference on Research in English.
- Knapp, L. R. (1986). The word processor and the writing teacher. Englewood Cliffs, NJ: Prentice-Hall.
- Levin, J. A., Boruta, M. J., & Vasconcellos, M. T. (1982). Microcomputer-based environments for writing: A writer's assistant. In A. C. Wilkinson (Ed.), Classroom computers and cognitive science (pp. 219-232). New York: Academic Press.
- McConkie, G. W., & Zola, D. (1985). Computer aided reading: An environment for developmental research. Paper presented at the Society for Research on Child Development, Toronto, Canada. Bruce Roles for Computers
- Marcus, S., & Blau, S. (1983, April). Not seeing is relieving: Invisible writing with computers. Educational Technology, 11, 12-15.
- Dede, C. J. (1987, November). Empowering environments, hypermedia and microworlds. Computing Teacher, 14, 20-24, 61.
- Cambridge, MA: Bolt, Beranek & Newman. Batson, T. (1988, February). The ENFI Project: A networked classroom approach to writing instruction. Academic Computing 2 (5), 32-33, 55-56.
- Levy, D. M. (1988, December). Topics in Document Research. Paper presented at the ACM Conference on Document Processing Systems, Santa Fe, NM. Marcus, S. (1982, March). Compupoem: CAI for writing and studying poetry. Computing Teacher, 9, 28-31.