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UAE EFL TEACHERS' PERSPECTIVES ON THE BARRIERS HINDERING TECHNOLOGY INTEGRATION IN CYCLE 2 CLASSROOMS

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Declaration of Original Work

I, Fatima Muhayer Hamad Al-Darmaki, the undersigned, a graduate student at the United Arab Emirates University (UAEU), and the author of this thesis entitled "*UAE EFL Teachers' Perspectives On The Barriers Hindering Technology Integration In Cycle 2 Classrooms*", hereby, solemnly declare that this thesis is an original research work that has been done and prepared by me under the supervision of Dr. Abdurahman AlMeklafi, in the College of Education at UAEU. This work has not been previously formed as the basis for the award of any academic degree, diploma or a similar title at this or any other university. The materials borrowed from other sources and included in my thesis have been properly cited and acknowledged.

Student's Signature_____ Date _____

Abstract

The present study aims at investigating the UAE EFL teachers' perspectives on the barriers hindering technology integration in cycle 2 classrooms. To study the perceptions more deeply, quantitative method was employed to collect the data from (n=180) cycle 2 EFL teachers. This study aims on investigating UAE EFL teachers' perspectives on the barriers hindering technology integration in cycle 2 classrooms. This study using questionnaires for data collection with the intent for generalizing from a sample to a population. To overcome these barriers, EFL teachers suggested conducting practical professional development programs to integrate technology. Second, make sure of the availability of computer hardware and software for use while teaching and learning. Third, spreading the culture of technology integration in curriculum. Finally, motivation and encouragement of students and teachers to integrate technology. The study gains its significance due to the sacristy of local research; it is hoped that this study will close the gap between ADECs' plans and goals of integrating technology and the real barriers hindering teachers from using technology in their daily teaching instruction.

Keywords: Barriers, technology integrating and English as a Foreign Language (EFL).

Title and Abstract (in Arabic)

منظور معلمي اللغة الإنجليزية في دولة الامارات العربية المتحدة حول معوقات استخدام التكنولوجيا في صفوف لحلقة الثانية

الملخص

سعت هذه الدراسة إلى التحقق من منظور معلمي اللغة الإنجليزية في دولة الإمارات العربية المتحدة حول معوقات استخدام التكنولوجيا في مادة اللغة الإنجليزية لصفوف الحلقة الثانية، حيث تم توظيف إستبانه لجمع البيانات من ١٨٠مشاركاً من معلمي اللغة الإنجليزية في الحلقة الثانية بمدينة العين، كما قدم المعلمون عدت مقترحات للتغلب على هذه المعوقات وقد تم تقسيمها إلى أربعة نقاط أساسية هي: أولاً تنظيم برامج تنمية مهنية تطبيقية لإستخدام التكنولوجيا في الفصول، ثانياً التأكد من توفر الأجهزة والبرامج وجاهزيتها للإستخدام أثناء التعليم والتعلم، ثالثاً نشر ثقافة توظيف التكنولوجيا في المناهج الدراسية، رابعاً تشجيع المعلمين والطلاب على توظيف التقنيات الحديثة في عملية التعليم والتعلم، من المرجوا أن تقلل هذه الدراسة الفجوة بين خطط وأهداف مجلس أبوظبي للتعليم لإستخدام التكنولوجيا في الميدان التربوي وبين المعوقات الواقعية التي تعيق إسخدام المعلمين للتكنولوجيا في طرق تدريسهم اليومي.

الكلمات المفتاحية: معوقات، إستخدام التكنولوجيا، اللغة الإنجليزية كلغة أجنبية.

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Dedication

To

The soul of My Father

My Mother

My Husband

My Children

My brothers and sisters

With Love and Gratitude

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List of Abbreviations

ADEC	Abu-Dhabi Educational Council
CALL	Computer-Assisted Language Learning
EFL	English as a Foreign Language
UAE	United Arab Emirates

Chapter 1: Introduction

1.1 Overview

We live in a digital age where technology permeates all aspects of our daily life. We use technology everywhere we go from home to work, to hospitals, airports and similar we do at schools. Current students use technology since their earliest years and became part of their identity. Brown (2002) stated that "today's digital kids think of information and communications technology (ICT) as something akin to oxygen: they expect it, it's what they breathe, and it's how they live" (p. 70). Therefore, school should be equipped with technologies and teachers must be up to date with the latest technologies and applications to meet their students' needs and expectations.

In the last few years, technology has become so widespread in schools, and plays an important role in foreign language learning because of its advantages as a teaching-learning tool. Recently, using computers has a most positive impact on language learning; particularly the improvement in performance was widely investigated in various countries (Zhao, 2003; Altun, 2015; Ibrahim 2011).

Technology facilitates the storage, transmission, and retrieval of information in multimedia on an individualized and interactive basis (Romano, 2003). It is a vital way in terms of communicating information. Also, it is a means of improving English language teaching (Liontas, 2002; Rilling, Dahlman, Dodson, Boyles & Pazvant, 2005). The advantages of computer-assisted instruction (CAI) derived from the presentation of instructional material that allows for interactivity and immediacy and can dynamically adapt to the specifics of a given user's pattern of responses. With the focus on

developmental processes and learning outcomes, students can benefit from the features of computer-based learning systems (Kerr, 1996).

Many significant studies have been conducted on the technology integration into classroom teaching to complement and modify the pedagogical practices (Hennessy et al., 2005). Due to integration of technology advantages in the field of education, countries consider technology integration as a potential tool for change and innovation in education and so make investments in technology integration (Eurydice, 2001; Papanastasiou and Angeli, 2008). For instance, the United Arab Emirates (UAE) government spent high rates of its budget on integrating technology. Therefore, Abu-Dhabi Educational Council (ADEC) in the UAE attempted to set up computer laboratories and provide internet connection in schools as well as the latest technologies in the educational field.

Since the establishment of ADEC in 2005, a reform in the educational system has started with a promise of serving high quality teaching and learning practices. ADEC mission is "to produce world-class learners who embody a strong sense of culture and heritage and are prepared to meet global challenges" (ADEC Official Website, 2015). Therefore, ADEC is determined to increase the standards of education in the UAE to meet the international standards. It is moving schools towards bilingual context (Arabic and English) and technology integration (ADEC Policy Manual, 2012).

Moreover, ADEC has initiated "The Information & Communication Technology Division" which supports all stakeholders in the educational system to reach their potential goals, accomplish the best results and "enable the organization's goals to transform education in the Emirate of Abu Dhabi to the highest international standards" (ADEC Official Website, 2013).

Therefore, ADEC has equipped schools with the latest technology needed to achieve its mission. Modern schools in Abu-Dhabi region are equipped with the latest technologies from wireless internet connection, computer laboratories, classroom computers, tablets, smart boards, educational software, latest hardware, and many more to help both teachers and students successfully integrate technology in their daily teaching and learning practices. In addition, ADEC has started e-learning policy as part of its public schools (p-12) policy manual. It is stated that e-learning is an essential part of delivering ADEC curriculum where teaching and learning are empowered by electronic technologies and in a student-centered learning experience (ADEC, 2014).

Although academic planners are increasingly encouraging the use of technology in schools in the UAE, there are barriers that are preventing teachers' from integrating technology in English Language classrooms. For example, Dowes (2001) emphasized that problems arise when teachers are expected to implement changes in what may well be adverse circumstances. Due to the technology benefits in education, identifying the barriers to the integrating technology in school would be an essential step to improve the quality of teaching and learning process.

There are number of barriers that hinder technology integration. According to Flores (2002), teachers face many barriers in their quest to incorporate technology like time scheduling for technology use, administrative support and equity. Earle (2002) also pointed out some barriers to the integration of technology in the classroom such as access, time, support, resources, training, forces attitudes, beliefs, practices, and resistance. As a result, many studies have been conducted to investigate barriers to the integration of technology in education (Al-Alwani, 2005 & Gomes, 2005). Therefore,

this study aims at investigating UAE EFL teachers' perspectives on the barriers hindering technology integration in cycle 2 classrooms.

1.2 Statement of the Problem

Despite the fact that ADEC planned for technology integration, equipped schools with modern technologies and trained teachers to use these technologies in their teaching instructions, we lack a significant research in ADEC to measure the integrating level of these technologies in the classrooms within the confines of teaching instructions. Research should focus on the teachers view points and feedback regarding technology integration in their daily teaching instructions since they are the "change engine" for all ADEC plans.

Teachers in ADEC schools in the United Arab Emirates (UAE) still face some difficulties in integrating technology in the EFL environment. Badri, M., Al Rashedi, A., Yang, G., Mohaidat, J., & Al Hammadi, A. (2014) concluded that ADEC teachers' level of technology readiness is moderate despite the fact that ADEC is spending high rate of its finances on equipping the schools with modern technologies. The researcher believed that this might be due to several barriers. Therefore, this study investigates UAE EFL teachers' perspectives on the barriers hindering technology integration in cycle 2 classrooms.

1.3 Purpose of the Study

Teachers' attitude, concern, perceptions and personal believes affect their decision of integrating technology in their teaching instruction and classrooms (Mollaei & Riasati, 2013). Therefore, it is very important to investigate teachers' perspectives on the barriers that hinder them from integrating technologies in their teaching practices. Therefore, the

purposes of this study are to investigate UAE EFL teachers' perspectives on the barriers hindering technology integration in cycle 2 classrooms**.** To fulfill the purpose of this study, the study tried to find answers for the following questions :

1. What are major barriers do EFL teachers encounter while integrating technology in Al-Ain cycle 2 schools from EFL teachers' perspective?
2. What are other barriers hindering technology integration from the teachers' viewpoints?
3. How might EFL teachers overcome these barriers that are hindering them from integration technology?

1.4 Significance of the Study

In the context of the United Arab Emirate, few studies have addressed teachers' perspective regarding integrating technology barriers in EFL classrooms. Iran (2011) in his dissertation titled "A Study on Educational Technology in Dubai Challenges and Suggested Solutions" addressed the barriers hindering teachers and students from integrating technology. Yet, the context of his paper is different since it is covering Dubai's government and private schools which are following the Ministry of Education curriculum and regulations. In Abu-Dhabi region though (the context of this paper) the educational system is following ADEC which has its own educational system, curriculum and regulations.

It's hoped that this study will provides researchers with instruments, action procedures, and experimental findings for use in future research. It may help the decision makers in ADEC to overcoming the barriers of using technology effectively in EFL classrooms in order to achieve the best learning and teaching outcomes. Also, it is hoped

to help effectively plan for the future technology integration and implementation in the field.

1.5 Limitation of the Study

This study was conducted with a small sample of participants in Al-Ain Cycle 2 schools. In addition, it was carried out in the school year 2013-2014. Thus, the study is limited only to some schools in Al-Ain city in the UAE and in one school year. A wider sample will give more representation for the whole Emirates' population to compare the barriers faced by teachers in the Ministry of Education vs. ADEC. Another limitation may be that the participants were only the teachers and not including students as well as administrative staff.

1.6 Definitions of the Key Terms

Barriers: Antonacci (2002) defines barriers as the obstacles faced by teachers while integrating technology in their instructional classes. He identifies these barriers as the following categories: financial barriers, availability of computer hardware and software barriers, technical and theoretical knowledge barriers, acceptance of technologies barriers, time and place barriers administration support barriers, teachers' professional development program barriers.

Technology Integrating: Hew and Brush (2007) defined technology integrating as the use of computer devices as desktops computers, laptops, handheld computers, software, internet and tablets in K-12 schools for instructional purposes.

English as a Foreign Language (EFL): Gilby (2011) defined EFL as teaching English to students whose first language is not English and they most often learn English in their country of origin.

1.7 Organization of the Study

The present study consists of five chapters. The first chapter introduces the problem of the study, and its importance in the field of education, and it will discuss the plan of the study for the research.

The second chapter will contain a review of literature that will discuss constructivism as a theoretical frame of the study and its importance, its application to language learning and its values and technology integration. Also, it will state the changing roles of teachers and learners as well as teacher's perception of technology integration and the role of technology in EFL classroom and its impact on learners. Then, it will cover the teachers' perception of technology integrating barriers in EFL classrooms such as; financial barriers, availability of computer hardware and software barriers, technical and theoretical knowledge barriers, acceptance of technologies barriers, time and place barriers, administration support barriers and teachers' professional development program barriers. The chapter will introduce similar studies and dissertations which focused on barriers hindering technology integrating. The third chapter discuss the methodology that the researcher use and implement in her study, which includes the participants, design of the study, the instrument that the researcher use, and group sampling. The forth chapter identifies the main barriers of integrating technology in EFL classrooms from teachers' perspective in Al-Ain cycle 2 schools. The fifth chapter discusses those results and concludes with offering some recommendations

or suggestions by the researcher on different ways to overcome barriers that hinder EFL teachers from integrating technology effectively in Al-Ain preparatory schools.

Chapter 2: Review of the Literature

2.1 Introduction

The main purpose of this chapter is to review studies that deal with educational issues related to the barriers of integrating technology in EFL classrooms in Al-Ain Cycle 2 schools at the United Arab Emirates (UAE). A study of the literature related to EFL teachers' perceptions of has been very beneficial to this research study and provides some useful insights which helped to illuminate the issues discussed in this study. This chapter is divided into two sections. The first one reviews the theoretical background in relation to technology integration while the second deals with the recent studies, master theses and doctoral dissertations which have looked at the issues more deeply.

2.2 Theoretical Framework

2.2.1 Constructivism as a Theoretical Frame of the Study

Constructivism emphasizes the learner-centered approach and it often asks students to negotiate through complex cognitive constructs, thus it relates to knowledge construction and learning. So constructivism focuses on knowledge construction, not knowledge reproduction. In a learner-centered class, learners take an increasingly active role in their learning while teacher play a guiding role thus achieving controlled independence (Hoven, 1997). For example, Jonassen, (1991) claimed that the most important component of constructivist theory is to focus a child's education on authentic tasks which have real-world relevance and utility, that integrate those tasks across the curriculum and provide appropriate levels of difficulty or involvement.

Many theorists have contributed to the development of constructivism such as John Dewey, Jean Piaget, Bruner, Vygotsky and Papert. Their theories constitute the

beginning of the constructivist learning process by focusing on how learning is processed and structured. Also, Constructivism was developed through their works. All of them have common theme i.e. "knowledge". They believe that it is considered dynamic and constantly changing so learning is an active process which involves the learners personal interpretations created through experience. Constructivism, stated simply, contemplates how the learner constructs knowledge in a meaningful way. Constructivism emphasizes the responsibility of learning lies within the student while the teacher acts as a facilitator of learning.

It is a belief that one constructs knowledge from one's experiences, mental structures, and beliefs that are used to interpret objects and events. Constructivist learning theory is described as the idea that suggests that students need to be presented with information, and uniquely make the learning that occurs their own (Thurmond,1999). Constructivism is based on two foundational ideals: students learn by actively constructing their own knowledge and students learn best when they are engaged in the learning process through project-based, problem-solving, or inquiry-based activities (Pitler, 2007).

2.2.2 Importance of Constructivism

Berns & Erikson, (2001) claimed that constructivism helps students in problem-solving, developing critical thinking skill. Also, it concentrates on the learner rather than focusing on the subject matter to be taught (Meehan, Holmes & Tangnes, 2001). Finally, Palm (2004) argues that he link between constructivism and globalization is strong and emphasizes that cultural constructivist theories stress the impact of modern media and communicative technology.

In Education, Constructivism is led by the ideas of Jean Piaget and his theories of the four childhood stages of development. The theories of Constructivism are founded on the belief that "the child, at first directly assimilating the external environment to his own activity, later, in order to extend this assimilation, forms an increasing number of schemata which are both more mobile and better able to inter-coordinate" (Piaget, 1955). Led by Piaget's theory, Constructivists that currently practice education believe more in learning by doing. If a child is able to experiment for himself, the learning will be more profound. The overall findings support that constructivist teaching methods resulted in deeper understanding, higher self-efficacy and better scholastic learning (Nie & Lau, 2010).

2.2.3 Application of Constructivism to Language Teaching

Language is a social activity and requires a social approach to learning so foreign language learners need active and meaningful interaction to practice and question the language that they are attempting to learn. Constructivist thinking argues to make real world based problems, particularly easy within the language learning classroom as words and vocabulary all hold a meaningful and practical application of communication. Learners will construct meaning based on interaction and dialogue within a community. Atkinson (2002) has argued that many linguistic theories has reduced the linguistic elements to words or symbols, devoid of any social meaning and or connection.

On the other hand, the learners in the language classroom should have the ability to see themselves as able to accomplish something because it will increase their motivation. In a social constructivist classroom, the social aspect of the classroom provides more confidence and more motivational meaning for the students, as they are actively working within a community to construct knowledge.

2.2.4 Constructivism Values and Technology Integration

A theoretical link has been made between constructivism and information processing technologies. For example, Thompson (1999) argues that the students use computer tools, learning is enhanced. Several researches emphasize the importance of using computer as an instrument of students empowerment (Hyslop- Margison, 2004 and Tehart, 2003). Furthermore, several studies show that learner centeredness can be facilitated by using technology in learning (Dupin-Bryant, 2004 & Machnaik, 2003).

The constructivist theory states that students are given tools to construct their own knowledge. Constructivist learning wants the educators to adopt the idea that each learner will construct, obtain, and interpret their own knowledge differently. Constructivism is an active process and allows the students to make sense of their world (Adams, 2006).

Constructivists believe that knowledge is constructed socially; using language and everyone has different social experiences resulting in multiple realities (Kanuka & Anderson, 1999). This is important when maintaining a constructivist classroom while integrating technology. Using computers entails active learning, and this change in practice will eventually foster a shift in society's beliefs toward a more constructivist view of education.

2.3 Role Changes for Teachers and Students

The teacher became a "facilitator, a resource person and a counselor rather than the only authority and decision-maker. The teachers' role in the new era of technology is not only to transmit new knowledge, but to give students tools to acquire knowledge and recognize the value of what they see in books and software as well as on the Internet.

While integration of CALL (Computer-Assisted Language Learning) into a foreign language program, the teachers become guides as they construct the activities students are to do and help them as students complete the assigned tasks. So the teacher interacts with students primarily to facilitate difficulties in using the target language. Teacher presence is very important to students when doing CALL activities. Teachers should be familiar enough with the resources to be used to anticipate technical problems and limitations. Students need the reassuring and motivating presence of a teacher in CALL environments. Encouraging students to participate and offering praise are deemed important by students. Most students report preferring to do work in a lab with a teacher's or tutor's presence rather than completely on their own.

On the other hand, the classroom became more learner-centered, that is, learners were able to make their decisions and became responsible for their work more independently. Students should be active in order to use CALL effectively. They must negotiate meaning and assimilate new information through interaction and collaboration with someone other than the teacher. Learners must also learn to interpret new information and experiences on their own terms. However, because the use of technology redistributes teachers' and classmates' attentions, less-able students can become more active participants in the class because class interaction is not limited to that directed by the teacher. Moreover more shy students can feel free in their own students'-centered environment. This will raise their self-esteem and their knowledge will be improving. If students are performing collaborative project they will do their best to perform it within set time limits.

2.4 Advantages of Integrating Technology in EFL Classroom

The use of computer technology in EFL classrooms has many advantages for developing the EFL learners' language skills. The use of computer presents the EFL learners with gateway to various activities for developing their language skills.

First, the use of computer as a listening tool is claimed to be one of the more important learning tools for enhancing EFL students' listening skill. It allows students to learn independently and to receive immediate feedback upon the completion of tasks (Hoven, 1999).

Second, the use of computer technology, with internet, can also be helpful for learning, improving, practicing and assessing speaking skill. Many social networking sites like Skype, Nimbuzz, Yahoo and Facebook etc allow this kind of audio as well video talk, in addition to IM (instant messaging) service. This kind of online talk, with native speakers of English, has been advocated, as very useful tool for improving speaking proficiency as well as pronunciation by the scholars like Payne and Whitney (2002).

Third, the use of computer technology can contribute a lot in developing EFL learners' reading comprehension skill and other sub-skills related to it as well. Using computers, with the use of internet provides a variety of current and authentic reading materials compared to potentially dated reading material sourced from textbooks (Kasper, 2000).

Fourth, another pedagogical benefit of the use of computer technology is the argument that such use is one of the most effective tools to teach writing. The study by Cunningham (2000) concluded that his students found that his writing class was more

productive when he used word processing software with his students. He surveyed 37 EFL students in his writing class to study the students' attitudes towards using computers in their writing. 88% of students indicated that they had improved their writing skills whilst using word processing. These students indicated that using a word processor during the writing process helped them to concentrate on certain aspects of their writing, for example: grammar, vocabulary and the organization or structure of their text. Similar results were also reported by Kasper (2000) which highlight the useful role of the use of computer technology in developing writing skill of EFL learners.

Fifth, the use of computer, with internet, is effective not only for teaching and learning foreign language like English but also for testing and assessment purpose. The use of computer, to assess and test EFL learners, ensures correct assessment of their language ability. Many scholars like Douglas (2006); Dandonoli (1989); and Stansfield (1990) etc. have advocated this use of computer technology in the filed of foreign language assessment and testing. Sixth, motivation is a significant factor that influences the success of foreign language learning.

2.5 Technology Integration and its Impact on Students and Teachers

A number of researchers have explored technology integration projects worldwide and reported positive impact on teaching and learning for teachers using technology (e.g., Holinga, 1999; Guha, 2000; Sandholtz, 2001). For example, Guha (2000) reported that ficant differences and positive correlations between teachers' present computer training, level of comfort, and computer usage in the classroom as compared to their previous training, comfort level, and usage. Manzo's (2001) study found that many of the students who are drawn to Electronic Arts Class were struggling in most of their

other classes. Once they saw what they could do with technology, they began to appreciate the importance of doing well in all subjects. Similarly, Sherry et al. (2001) studied the WEB Project. Their findings of a survey assessing the grant's impact on student achievement suggest that teachers should emphasize the use of meta-cognitive skills, application of skills, and inquiry of learning as they infuse technology into their academic content areas.

2.6 Teacher's Perception of Technology Integration

According to Atkins and Vasu (2000), teachers' attitudes or concerns have a significant influence on the use of computers in the classroom. For example, Lam (2000) also emphasizes that teachers' personal beliefs of the advantages of using technology for language teaching influence teachers' decision regarding technology use. Similarly, Kim (2002) points out that critical factors affecting successful integration of technology into the classroom are associated with teachers themselves, such as teachers' perceptions and attitudes. She adds that teachers' perceptions and attitudes toward teaching and technology can be regarded as a facilitating or inhibiting factor, giving them more confidence or a major barrier of technology use.

Redmond, Albion and Maroulis (2005) also reported that teachers' personal backgrounds such as personal confidence, interests in using ICT and willingness to try something different are significant factors that might promote ICT integration in the classroom. However, Egbert, Paulus and Nakamichi (2002) assert that a positive attitude toward computer technology does not guarantee that teachers will be able to use the technology in the classroom.

Jeong (2006) emphasizes that the role of teachers in EFL settings is more crucial than ever before because teachers are able to motivate students and try to create language learning environments which are non-threatening, meaningful and affectively supportive by using Web technology. If language teachers have a variety of positive teaching and learning experiences in using computers, they are likely to be more confident and skillful in implementing CALL in their own classrooms. Therefore, teacher development programs should be provided for language teachers to deal with issues of using computers (Jung, 2001; Lee & Son, 2006; Son, 2002; Suh, 2004) and gain competent skills in managing computer-based tasks and activities in the classroom (Johnson, 2002; Oh & French, 2007). As CALL can be enriched by teachers, teachers' views on CALL implementation are crucial. Considering that CALL activities should be integrated into the existing curriculum according to learners' levels of language and computer literacy, teachers need to explore the full potential of CALL programs and utilize them creatively in the classroom.

2.7 Teachers' Perception of Technology Integration Barriers in EFL Classrooms

A number of researchers conducted studies investigating the barriers of technology integration in EFL classrooms. (e.g., Flores 2002; Earle 2002; Brinkerhof 2006; Sherry et al., 2001; Hong and Koh, 2002). For example. According to Flores (2002), teachers face many barriers in their quest to incorporate technology. In addition to time scheduling for technology use and administrative support, equity is another important issue. The introduction of technology is particularly hard when there are few resources. Also, Earle (2002) pointed out some barriers to the integration of technology in the classroom including both restraining forces that are extrinsic to teachers such as access, time, support, resources, and training and forces that are intrinsic such as

attitudes, beliefs, practices, and resistance. More recently, Brinkerhof (2006) pointed out that barriers are grouped into four main categories: resources, institutional and administrative support, training and experience, and attitudinal or personality factors. The obstacles to implementing CALL and technology have been identified in the previous literature as well. In the study undertaken by Park & Son (2009), teachers perceived several external factors such as lack of time, lack of computer-based facilities, rigid textbooks and curricula, and lack of administrative support as important limitations of using technology. Internal factors, including lack of teachers' computer knowledge and their perceptions, were also other types of perceived limitations.

In Atai and Dashtestani's (2011) study, several barriers to the use of the Internet in Iranian EAP courses including slow speed of the Internet, inadequate facilities at universities, and technical problems were found. Some other studies have explored the attitudes of teachers toward some specific aspects of technology in EFL and educational contexts such as blogs, the Internet, and multimedia. These types of technology have frequently been researched in the previous literature. For instance, Sun (2010) reported on a study on challenges in including blogs in teacher educationprograms in higher education in Taiwan. It was depicted that pre-service teachers had positive attitudes toward the integration of blogs and found blogs useful tools. The findings of (Oh & French, 2007; Park & Son, 2009; Rakes & Casey, 2000; Shin & Son, 2007; Son, Robb, & Charismiadji, 2011) have shown that there is a close link between EFL teachers' attitudes, their confidence level and competence in using computers.

Teachers who may be committed to integrating computer technology in the classroom may find the process challenging due to the barriers that exist. Some have classified these as either external (first order) or internal (second order) barriers

(Snoeyink and Ertmer 2001). First order barriers include lack of equipment, unreliability of equipment, lack of technical support and other resource-related issues. Second-order barriers include both school-level factors such as organizational culture and teacher-level factors such as beliefs and attitudes about teaching and technology and openness to change.

2.7.1 Financial Barriers

Technology requires a large amount of money. Money to purchase the newest and most up to date computers, the latest hardware/software, and on-site specialist to train personnel and keep computers working are limited. For schools and teachers with limited budgets, this may seem to be an insurmountable issue.

2.7.2 Availability of Computer Hardware and Software Barriers

Many classrooms suffer from few computers, slow computers, limited internet connectivity, broken hardware, or incorrect software. A lack of appropriate hardware and software makes technology integration extremely difficult. Without adequate hardware, software, internet access, and the like, teachers and media specialists may find it difficult to truly integrate technology. Even when computers are available, they are less meaningful if they do not have a variety of relevant and up-to-date software and a relatively fast internet connection (Harwood & Asal, 2008).

2.7.3 Technical and Theoretical Knowledge Barriers

Teachers may lack knowledge in different ways like lack of skills and expertise in using technology and the lack of pedagogical knowledge in using technology appropriately. So some teachers do not understand how to use technology or they may

struggle with how to use it to improve instruction. Also, they have not sufficient knowledge of technology-related-classroom management. Although the rules and procedures established in a traditional classroom can apply in a technology-integrated one, there are additional policies that must be included and adapted once classrooms incorporate technological tools (Lim, Teo, Wong, Khine, Chai & Divaharan, 2003). For example, a media specialist might have to introduce rules such as how many pages one can print, how to properly use MP3 players or limits on how long each student can use a computer. If educators find it too cumbersome to manage a class that is utilizing technology, they will simply avoid its use.

2.7.4 Acceptance of Technology Barriers

The decision of whether and how to use technology in the curriculum ultimately depends on individual teachers themselves and the beliefs they hold about technology (Ertmer, 2005). In one study, students expressed concern that it often appeared that their teachers did not understand that technology plays a significant role in students' lives outside of school. These students believed that if teachers had a better understanding of this, they would bring more technology into the classrooms. In other words, teachers' attitudes about student use of technology can serve as a significant barrier to its integration. Byond their feelings regarding the technology tools themselves, the integration of digital tools into the curriculum is also shaped by the teachers' beliefs. Researchers have found that technology implementation is directly determined by the educational philosophies and pedagogy of the classroom teacher (Grant, Ross, Wang, Poner, & Wilson, 2004).

2.7.5 Time and Place Barriers

To apply technology EFL environment successfully, it requires a large amount of time for production and preparation. Teachers have reported that technology requires more of their time to deal with student misbehavior when using technology (Bauer & Kenton, 2005; Lim & Khine, 2006;Wachira & Keengwe, 2010) or to plan for and learn to use it (Al-Senaidi, Lin, & Poirot, 2009; Clark, 2006; Lim & Khine, 2006). Teachers stated that they did not have the time to invest in learning to use or to develop specific technology activities for classroom use. They cited increasing accountability demands, such as the urgency of meeting curricular benchmarks and preparing students for the state tests as the reasons that make it simply too hard for them to find the time to explore, experiment with and incorporate technology use as a regular part of their instructional practice. Using technology was seen as additional work, as one teacher noted, ''we are just too busy to do anything extra.''

2.7.6 Administration Support Barriers

When principals (leadership) are unsupportive or uninformed about technology usage in the classroom, students are less likely to utilize any type of digital tools. This is often because principals hold the purse strings and, as such, have the power to finance different technology efforts. More commonly, however, leaders that are uninterested in technology will simply place focus elsewhere. If a principal places a strong emphasis on, for example, writing skills, technology integration can and does go by the wayside.

Administrations must schedule their days very particularly, incorporating time for reading instruction and foreign languages. So they should leave little time for technology. When schools do not take time to create comprehensive technology plans,

teachers, students and other school members are confused about how and when to appropriately use technology. Having no concrete plan in place serves as a barrier to educator and student usage of the internet and other forms of technology.

2.7.7 Teachers' Professional Development Program Barriers

Training students and teachers and administrators in the disciplines necessary for appropriate computer use becomes a primary responsibility of schools with ubiquitous computing. Training can be a barrier to technology integration when it lacks connection to actual classroom practice or focuses solely on technical skills (Bradshaw, 2002; Hinson, LaPrairie, & Heroman, 2006; Mouza, 2009; Wells, 2007).

Beggs (2000) found that one of the top three barriers to teacher's use of ICT in teaching students was he lack of training. Ozden, (2007) claimed that the main problem with the implementation of new ICT was the in sufficient amount of in-service training programs.

2.8 Related Studies

2.8.1 Studies Related to the Barriers of Using Technology in Education.

Kopcha, (2012) examines 18 elementary school teachers' perceptions of the barriers to technology integration (access, vision, professional development, time, and beliefs) and instructional practices with technology after two years of situated professional development. Months after transitioning from mentoring to teacher-led communities of practice, teachers continued to report positive perceptions of several barriers and were observed engaging in desirable instructional practices. Interviews suggest that the situated professional development activities helped create an environment that supported teachers' decisions to integrate technology. Implications for teacher professional development and technology integration are discussed in

conjunction with the strengths and limitations of the study. Another study conducted by Wachira & Keengwe (2011) reported on primary technology integration barriers that mathematics teachers identified when using technology in their classrooms. Suggestions to overcome some of these barriers are also provided.

Bingimlas (2009) conducted a study that provided a meta-analysis of the relevant literature that aimed to present the perceived barriers to technology integration in science education. The results revealed that teachers had a strong desire for to integrate ICT into education. But they encountered several barriers like lack of confidence, lack of competence, software and hardware barriers, effective professional development, sufficient time, technical support and lack of access to resources. The study provided information and recommendations to those responsible for the integration of new technologies into science education.

2.8.2 Studies Related to Using Technological Devices in EFL Environment

Alzu'bi, (2012) conducted a study aimed at investigating the impact of CALL strategy (Smart-board) on public and private universities students' achievement in English. It attempted to answer the following questions: What is the effect of using Smart-board on English language skills compared with conventional method?

To answer the question of the study, the researcher used a program based on CALL (Smart-board) for the experimental group. A number of students in public or private universities – English department will be purposefully chosen in the 2nd semester of the academic year 2012. The participants of the study consist of two assigned sections. The experimental group will be taught according to Smart-board; while the control group was taught according to the conventional way. The researcher prepares general achievement test as the instrument of this study. To establish the

validity for the test, the method of content validity will be used. The expected results revealed that the achievement of reading, writing, speaking, and listening of the students in the experimental group significantly improved. The study also proposed a number of recommendations and suggestions for future research.

Alzu'bi, (2010) conducted a study aimed at investigating the impact of CALL strategy (The Internet) on the King Saud University students' grammar achievement in English. It attempted to answer what is the effect of using internet on grammar compared with conventional method.

To answer the question of the study, the researcher used a program based on CALL (on line sites) for the experimental group. Thirty male students in Almajma'a college – English department were purposefully chosen in the 2nd semester of the academic year 2007/2008. The participants of the study consisted of two assigned sections. The experimental group was taught according to CALL strategy (using internet); while the control group was taught according to the conventional way (Lecture Method).The researcher prepared grammar achievement test as the instrument of this study. To establish the validity for the test, the method of content validity was used. The results revealed that the achievement of grammar of the students in the experimental group significantly improved. The study also proposed a number of recommendations and suggestions for future research. This study focused on the students' performance when in this paper the researcher focused on teachers' perspective. Yet, it prove that integrating technology improve the students' performance in English which supports my study.

Baki (2010) investigated the effects of using vocabulary learning programs in mobile phones on students' English vocabulary learning. The mixed-method research

design with sixty students studying in the Undergraduate Compulsory Preparatory Program of a public university located in the Black Sea region of Turkey was used. Results indicated that using mobile phones as a vocabulary learning tool is more effective than one of the traditional vocabulary learning tools.

Jou (2008) conducted a study aimed at examining whether the email can be utilized as an effective communicative language teaching environment in Taiwan for reading and writing interaction, exploring if EFL elementary school-aged students involved in the email projects are stronger in their motivation/confidence in language learning, investigating the EFL students' opinions about the email keypal project in the EFL and cultural learning, and highlighting the EFL instructor' perceptions to the email keypal project. To summarize, the quantitative findings showed that the email keypal project improved the EFL students' reading and writing performance. Participating in the keypal project also elevated the EFL students' levels of motivation and confidence in using English. Other quantitative results highlighted the effectiveness of the project in promoting English and cultural learning. Furthermore, qualitative findings showed a preference by the EFL teacher to use email as a method of helping younger students be successful in their English learning.

To provide an effective and flexible learning environment for English learning, Chen and Hsu (2008) carried out a study aimed at adopting the advantages of the mobile learning to present a personalized intelligent mobile learning system (PIMS) which can appropriately recommend English news articles to learners based on the learners' reading abilities evaluated by the proposed fuzzy Item Response Theory (FIRT). In addition, to promote the reading abilities of English news, the unknown or unfamiliar vocabularies of individual learner can also be automatically discovered and retrieved from the reading

English news articles by the PIMS system according to the English vocabulary ability of individual learner for enhancing vocabulary learning. Currently, the PIMS system has been successfully implemented on the personal digital assistant (PDA) to provide personalized mobile learning for promoting the reading ability of English news. Experimental results indicated that the proposed system provides an efficient and effective mobile learning mechanism by adaptively recommending English news articles as well as enhancing unknown or unfamiliar vocabularies' learning for individual learners.

Brown (2008) conducted a study aimed at re-evaluating the mobile phone as a portable computer tool and investigated how ninth-grade reading students could improve vocabulary building. This mobile learning study determined whether appropriately designed frontloading techniques improved comprehension and produced a significant difference between students who used mobile phones versus students in a traditional non-digitized delivery. It also examined an increase in motivation by students using mobile phones. This study used a descriptive quantitative method to determine how much, if any, the use of mobile phones improved reading vocabulary for the test group, and an exploratory qualitative method to determine whether the use of the mobile phone created a motivational interest to continue to study. Findings revealed an increase in vocabulary comprehension when ninth-grade average students used appropriately designed vocabulary frontloading techniques delivered via mobile phone. These finding prove that integrating technology into a language classes is improving the performance of the students which was covered earlier in the literature review in this paper.

2.9 Summary of the Literature Review

Most of the studies have been conducted on the effect of technological devices on English language skills and components so there are few studies conducted on those barriers. Although there are studies conducted on barriers faced by teachers, but for the researcher's knowledge there are no studies that have been conducted on barriers of using technology in EFL environment in the UAE schools context. Also, these studies focused on the learners' performance whereas this study focused on the teachers' perspective towards barriers hindering them from integrating technology in English language classroom. Moreover, most of the studies focused on high school and university setting whereas in this study the focus is on preparatory school teachers. As a result, the researcher conducts the present study on barriers to integrating technology in EFL classrooms in Al-Ain Cycle 2 Schools.

Chapter 3: Methodology

Introduction

This chapter aims to provide information of the research method used in this study in order to find out barriers to integrating technology in EFL classrooms in Al-Ain C2 schools. It covers the research design, procedures, population and the instrument of the study. It will also describe the validity and reliability of the research instrument and provide explanation of the statistical procedures used to analyze the data.

3.1 Research Questions

This study investigated barriers hindering EFL teachers in Al-Ain cycle two schools from integrating technology in their classrooms. The three research questions, that guided this study, are as follows:

1) What are major barriers do EFL teachers encounter while integrating technology in Al-Ain cycle 2 schools from EFL teachers' perspective?

2) What are other barriers hindering technology integration from the teachers' viewpoints?

3) How might EFL teachers overcome these barriers that are hindering them from integration technology?

3.2 Methods and Procedures

This study using questionnaires for data collection with the intent for generalizing from a sample to a population. Survey research is defined as "collecting data to test hypotheses or to answer questions about people's opinions on some topics or

issues. A survey is an instrument to collect data that describes one or more characteristics of a specific population (Gay, Mills & Airasian, 2008, 175).

This is a survey study that employs a questionnaire as a research instrument to collect data from grade 6-9 teachers in the academic year 2014 in Al-Ain cycle 2 schools. Gay, Mills.& Airasian (2008) stated that the quantitative method depends mainly on numerical data collection and analysis obtained from a large number of participants by a questionnaire.

After reviewing the literature and related research; master theses and doctoral dissertations as well as ADEC professional standards for teachers, the research methodological instrument has been developed for this research study. A jury of referees from the United Arab Emirates University and Abu Dhabi Education Council were asked to revise and measure the validity of the research instrument; questionnaire (see appendix D). They edited, re-write, deleted and suggested items. Then, this instrument was piloted on a small group of participants from different schools. After that, it was revised in the light of referees' comments and the feedback of participants' of pilot questionnaire. After that, a new version of the questionnaires was developed and available for implementation.

The researcher got an official permission to carry out the study from Abu Dhabi Education Council. The procedure is that the department of the curriculum usually reviews any questionnaire or research instrument to ensure that such things would not cause any inappropriate impact to the field. In addition, ADEC- Al-Ain Educational Office sent an official letter to all the schools to facilitate the work of the researcher. Finally, once the permission was obtained, 400 questionnaires were distributed for 20 schools. The 180 questionnaires were return. When the questionnaires were returned the responses coded according to the 5 point Likert five scale categories to fit the answers in

the SPSS (Statistical Package of Social Sciences) for the questionnaire's data analysis. The data collected through two open-ended questions were analyzed by the content analysis technique.

3.3 Participants

The population of the study consists of both female and male EFL teachers in Al-Ain Education Office. The study includes cycle 2 teachers in public and private schools. There are also 53 private international and Arabic private schools; 51 public schools include cycle two since most private schools have all the cycles. The total of the schools is 130 private and governmental schools. For EFL teachers, was estimated by the total number of the teachers is about 720 according to the officials of teachers' Affairs in AL Ain Educational Office; they claimed that there are teachers teach more than one cycle since most schools have three cycles such as the remote schools and private schools.

3.4 Sampling

The participants include 180 teachers who are teaching English language in Al Ain public and private schools. Teachers were chosen from 26 private and governmental schools. They are both male and female; they are also Arab bilingual or English native speaking teachers. They are also "a subgroup of the target population that the researcher plans to study for the purpose of making generalizations about the target population" (Creswell, 2007). It is very beneficial to go through some demographic information as it might help in shedding some light on answering the research questions relating to the barriers of technology integration.

Table 1 shows that the percentage of female teachers is 55% (n=99) while the male teachers are 45% (n=81) and this is due to the teachers in private teachers are

Table 1: Participants' Gender (n=99)

	Frequency	Percent	Valid Percent	Cumulative Percent
Male	81	45.0	45.0	45.0
Female	99	55.0	55.0	100.0
Total	180	100.0	100.0	

preferred to be female due to financial reasons; in addition, the number of girls 'school is higher than the boys' schools.

Table 2 shows that about 11% of EFL teachers were native speaking teachers, Emirati teachers are 5% only and 83% were Arab bilingual EFL teachers.

Table 2: Participants' Nationalities (n=180)

	Frequency	Percent	Valid Percent	Cumulative Percent
Emirati	9	5.0	5.0	5.0
Arabs	141	78.3	78.3	83.3
English Native speaker	30	16.7	16.7	11.7
Total	180	100.0	100.0	100.0

Table 3 shows that about 23% are below thirty; while about 30% are above forty. About 50% of the teachers are in the thirties and they are between the two categories.

Table 3: Participants' Age Information (n=180)

Age	Frequency	Percent	Valid Percent	Cumulative Percent
-30	41	22.8	22.8	22.8
31-40	86	47.8	47.8	70.6
41-50	46	25.6	25.6	96.1
above 50	7	3.9	3.9	100.0
Total	180	100.0	100.0	

Table 4 shows how the teachers estimate their ICT knowledge and skills. It is clearly shown that the percentage of the teachers who evaluate themselves as advanced is abo 20 % while about 80% evaluate themselves as either beginners or intimidate.

Table 4: *Participants' ICT Abilities (n=180)*

	Frequency	Percent	Valid Percent	Cumulative Percent
Beginners	59	32.8	32.8	32.8
Intermediate	83	46.1	46.1	78.9
Advanced	38	21.1	21.1	100.0
Total	180	100.0	100.0	

Table 5 shows how the participants frequently use technologies; 46% of teachers are using it on daily base, 43% are using it weekly, 5% are using it monthly, 4% are using occasionally when needed and finally around 1% never use technologies.

Table 5: *Participants' Frequent Use of ICT (n=180)*

	Frequency	Percent	Valid Percent	Cumulative Percent
Daily	83	46.1	46.1	46.1
Weekly	79	43.9	43.9	90.0
Monthly	9	5.0	5.0	95.0
Occasionally	8	4.4	4.4	99.4
Never	1	.6	.6	100.0
Total	180	100.0	100.0	

3.5 Research Design

The researcher used probability sampling technique that is the selection of schools from the population so that they are representative of the population (Creswell, 2007). The sampling technique the researcher used is simple random by selecting a sample which consists of 26 schools from the population so all the 130 schools have an equal chance of being selected ; and the researcher used systematic sampling by choosing every "5nth" school in the population until the desired sample size is achieved (Creswell, 2007). The next step was to sample all the English teachers in the 26 schools and returned back 180 copies of the questionnaires. Non-probability sampling was used to sample all the participants (English teachers) since they were available and fit the characteristics the researcher wants to study.

3.6 Research Instruments

There is the instrument used in this study which was developed to figure out teachers' barriers do EFL teachers encounter while integrating technology in Al-Ain Cycle Two schools from EFL teachers' perspectives. The questionnaire covers three parts as the following: Part one provides the demographic data about the participants such as type of teacher, school, experience, educational degree and gender of school members, etc (See appendix A). Part two includes 35 statements the participants need to respond to. They divided under seven categories (1) financial barriers, (2) availability of ICT resources barriers, (3) knowledge of using technology barriers, (4) beliefs about technology efficacy barriers, (5) time and place efficacy barriers, (6) support from administration barriers and (7) training and professional development support barriers. Each category has five statements. It an adoption of a five-point Likert scales. According to the five-point scale, 5 refers to 'Always', 4 'Usually', 3 'Often' 2'Sometimes', and 1

'Never' (See appendix B). The last part is two open ended questions; the first question asks for any other barriers that prevent EFL teachers from integrating technologies that teachers believe they are not covered in the questionnaire statements (See appendix C). Question two is for any given suggestions from teachers to overcome barriers to use technology in EFL classrooms. According to Johnson and Christensen (2013) open-ended questions can provide rich information about the topic being searched since they are written in the participants' inner words and natural language and categories.

3.7 Validity

Validity is defined by Creswell (2007) as "an evidence to demonstrate that the test interpretation of scores matches its proposed use". The validity of my instrument comes with the process that it passed through to be used in the research study. The questionnaire passed through a good validation by reviewing from experts and professionals who gave their valuable comments about the statements.

The questionnaire statements were developed and modified according to their valuable comments. Finally, the questionnaire was ready to be distributed to schools.

3.8 Reliability

The reliability is defined by Creswell (2007) as "scores from measuring variables that are stable and consistent. The reliability of the study was achieved through including sections in the questionnaire. For example; the questionnaire used both closed statements and an open ended question to ensure more valid answers. The researcher used Cronbach's alpha which is the most common measure of scale reliability to measure the internal consistancy. It was important to stand at the degree of the reliability of participants' responses to judge the consistency of their answers. Cronbach's Alpha was found (.75) for the whole questionnaire and it ranged between (.68) and (.86) for all the other items as shown on table 6. It is acceptable for all the items.

Table 6: Cronbach's Alpha Reliability Statistics

	Score	No
All Items	.75 .75.75	35
Financial Barriers	..86	5
Availability of Computer Hardware and Software	0.88	5
Technical and Theoretical Knowledge	0.75	5
Acceptance of Technologies	0.82	5
Time and place	0.82	5
Administration Support	0.68	5
Teachers' PD Program	0.79	5
Total	4.74	35

3.9 Data Analysis

The data obtained from the teachers' questionnaires part 2 that consists of 35 lakart-scale were analyzed throughout descriptive statistics and the data were entered to (SPSS 20.00) Statistical Package for the Social Sciences. The maximum mean score for each area was 5 (Always), and the minimum 1(Never). The data were classified into six categories, financial barriers, availability of computer hardware and software, acceptance of technologies, time and place, administration support, teachers' professional development program (PD). The data were summarized in tables. The data analysis of the open question was carried out into two steps coding and classifying.

3.10 Ethical Consideration

The use of anonymity to ensure confidentiality and to prevent any kind of privacy invasion was adopted by the researcher. Thus, participants were given numbers to use in the study so as not to make their performance public to prevent any kind of harmful feelings some of them might feel. In addition, all participants were asked to join this study willingly and voluntarily without any kind of force.. The participants were told by

the researchers that they had the right not to complete the questionnaire if they like. In addition, permission was issued by Abu Dhabi Education Council to carry out the study.

3.11 Conclusion

This chapter has described in details the research methodology employed to collect the necessary data. The design of questionnaire was one of the major parts of this research since it is the medium of the information and data gathering. The data analysis and findings of the survey will be discussed in the next chapter.

Chapter 4: Results

Introduction

The purpose of this research is to investigate the barriers to integrating technology as seen from the EFL teachers' perspectives—involved in integrating technology into EFL programs at school and how to overcome those barriers in Al-Ain Cycle 2 schools at the United Arab Emirates (UAE). To study the perceptions more deeplyfrom180 participants through utilizing quantitative method to collect the data, the study also attempts to look specifically at the barriers of integrating technology. The chapter is divided into sections. The first one addresses the research questions. Then for each research question, data is organized and written in essays and tables. The next section includes a summary that sums up the main results and discusses them in terms of other related studies to clarify the entire picture. These results are organized and displayed in tables in order to address the research questions. The results and answers of the following research questions will be covered in this chapter:

1) What are major barriers do EFL teachers encounter while integrating technology in Al-Ain cycle 2 schools from EFL teachers' perspective?

2) What are other barriers hindering technology integration from the teachers' viewpoints?

3) How might EFL teachers overcome these barriers that are hindering them from integration technology?Analysis of the Research Question # 1

Q1: What are major barriers do EFL teachers encounter while integrating technology in Al-Ain cycle 2 schools from EFL teachers' perspective?

Through the collected data, it is shown that teachers face different barriers that hindering them from integrating technology in EFL classrooms cycle two schools in Al-Ain city. The results shows that the highest barrier faced by teachers while integrating technologies is beliefs about technology efficacy barriers (M= 3.64). Secondly comes knowledge of using technology barriers (M= 3.46). Thirdly is time and place efficacy barriers (M= 3.24). Fourthly, support from administration barriers (M= 2.97). Fifthly, training and professional development support barriers (M= 2.91). Sixthly, the financial barriers (M 2.85). Lastly, the availability of ICT resources barriers (M 2.78).

Table 7: Financial Barriers

Name	Financial Barriers	Mean Score
F1	Funding is provided for technology in EFL programs.	2.98
F2	Funding for EFL programs supports the web-based activities.	2.84
F3	There is funding for EFL teachers on technology training.	2.66
F4	Funding supports the maintenance of computer hardware and software.	2.93
F5	Funding provides computer labs in EFL programs.	2.82
FT	Total mean	2.85

Table 7 shows that the financial barriers total mean score is (M= 2.85) that is classified under the category "sometimes" and the barriers range between the mean score 2.66 and 2.93.

Table 8: Availability of ICT Resources Barriers

Name	Availability of ICT Resources Barriers	Mean score
A1	I use a computer lab for language teaching.	2.66
A2	I access EFL software from lab or library at my school.	2.5
A3	My school integrates the web into EFL curriculums.	2.84
A4	Internet access is available to EFL classrooms.	3.06
A5	There is technology based materials for EFL teachers.	2.84
AT	Total mean	2.78

Regarding the availability of ICT resources barriers, the results seem very close to the financial barriers and it is reasonable to be close since the availability of computer hardware and software depends on funding. The table shows that the total mean score of the availability of computer hardware and software is (M= 2.78) that is mostly classified under the category "sometimes" and the items range between the mean score 2.5 and 3.06.

Table 9: Knowledge of Using Technology Barriers

Name	Knowledge of Using Technology Barriers	Mean Score
K1	I adapt technology skills in teaching EFL.	3.35
K2	I intend to advance my knowledge on integrating current technologies i my teaching instructions.	3.48
K3	I use web-based interaction sites as a learning tool.	3.62
K4	I use PowerPoint or multimedia as a teaching tool.	3.53
K5	Using computer-based materials, I provide content addressing specific English language learners' needs.	3.31
KT	Total mean	3.46

For the knowledge of using technology barriers, it is shown clearly that the mean score of this category is higher than the previous ones; the financial barriers and availability of software and hardware. Tables 9 show that the total mean score of technical and theoretical knowledge, is (M-= 3.46) that is mostly classified under the category "often" and the items range between the mean score 3.31 and 3.62.

Table 10: Beliefs About Technology Efficacy Barriers

Name	Beliefs About Technology Efficacy Barriers	Mean Score
B1	Computers help me save a lot of time on preparing lesson plans.	3.74
B2	I think the modern technology inspires English language learners.	3.65
B3	I enjoy teaching EFL through technology.	3.68
B4	I feel free to learn the new technology skills for teaching EFL.	3.62
B5	Using technology in my EFL classroom offers opportunities for better language practice.	3.51
BT	Total mean	3.64

Regarding the Beliefs about technology efficacy barriers, the mean score is (M= 3.64) of the results is the highest score of the seven categories which is not so high.

Table 11: Time and Place Efficacy Barriers

Name	Time and Place Efficacy Barriers	Mean Score
TP 1	Class time is too limited for using technology.	3.03
TP 2	I expect the technology to save me time on the long run.	3.43
TP 3	I find it very difficult to schedule a visit to the computer lab due to it's busy schedule.	3.13

TP 4	The computer lab is located far away from the classrooms which make moving to it a time consuming.	3.02
TP 5	Having computers and internet connections in my EFL classroom make it easier to integrate technology.	3.61
TPT	Total mean	3.24

For the time and place efficacy barriers, the mean scores range between 3.02 and 3.13 while expecting the technology to save me time on the long run; and having computers and internet connections in my EFL classroom make it easier to integrate technology; the mean scores range higher 3.46 and 3.61 respectively. Table 11 shows that the total mean score of the time and place efficacy barriers is (M= 3.26).

Table 12: Support from Administration Barriers

Name	Support from Administration Barriers	Mean score
S1	Teachers receive adequate administrative support to integrate technology into classroom practices.	3.12
S2	Our school has a well-developed technology plan that guides all technology integration efforts.	3.17
S3	Administrators in my school include evaluating integration of technology in their observation visits.	3.24
S4	Administrators in my school do not understand the potential contribution of computer technology.	2.78
S5	There is no computer technician in my school.	2.54
ST	Total mean	2.97

Regarding the administration support, the total mean score of all the five items is (M= 2.97) that is located nearly under the category "often" The first three items (3.12; 3.17; 3.24) are a little higher range the last two ones (2.78; 2.54).

Table 13: Training and Professional Development Support Barriers

Name	Training and Professional Development Support Barriers	Mean score
T1	I have received adequate training to incorporate technology into my teaching instruction.	3.14
T2	The PD program in my school groups the teachers according to their level of competence in using technology.	2.72
T3	My PD coach visits my EFL classroom to observe and assess technology integration in order to plan future PD session according to my needs.	2.79
T4	The PD program in my school enables teachers to integrate technology into the curriculum to improve the students achievement.	2.86
T5	Teachers in my school seek assistance and coaching on integrating technology from their colleagues as part of their PD.	3.06
TT	Total mean	2.91

Considering the Teachers' Professional Development Program (PD), the total mean score of all the five items is (M= 2.91) that is located nearly under the category "often". This result is nearly similar to administration support results.

Q2: What are other barriers hindering technology integration from the view point of teachers?

The other barriers as the open question asked the respondents; about 43 participants out of 180 only responded to the question, but unfortunately their responses were repletion of the same items mentioned in the Lakart type questions. The responses were gathered and classified into codes; technical support, time and place; availability of up to date technology, technology acceptance and method of teaching

About 10 out of 43 respondents claimed the time limitation is a barrier besides the class size and high student population in class. Around 10 out of 43 respondents viewed that the lack of professional computer technician is another barrier. Also, 9 out of 43 respondents stated that the limited access to the internet and web sites either by ADEC or schools besides the unavailability of up to date technologies like tablets ,smart boards, laptops for teachers. Also, 9 out of 43 respondents claimed the technology acceptance by some teachers is a barrier. Finally 4 out of 43 respondents thought that the traditional method of teaching is a barrier.

In conclusion, teachers encounter other barriers that hindering them from integrating technology in their EFL classrooms. They consider time limitation, the class size (student number) and lack of professional computer technician in school as the highest other barriers. Second come limited access to the internet and web sites by ADEC and technology acceptance by some teachers. Lastly, they found that traditional method of teaching is a barrier for integrating technology in their EFL classrooms.

Q3: How might EFL teachers overcome these barriers that are hindering them from integration technology?

The participants who responded to these questions are about 54 out of 180 The open question is how to overcome barriers. The responses were collected and coded also according to the responses. After the codes were generated; they were divided into themes after in-depth reading and relating the similar themes and categories to answer the research question. The themes were classified as follows; conducting practical professional development programs to integrate technology; the availability of computer hardware and software; motivation and encouragement of students and teachers; spreading the culture of technology integration in curriculum. All responses were categorized under the four main themes.

The highest category includes 50 % of the responses stated that there is a vital necessity for conducting practical professional development programs to integrate technology; the 27 out of 54 respondents focused on the practicality of professional training to integrate technology in classrooms; they also claimed that the professional development can be done through seminars, inter-visitation and intra-visitation, and exchanging practical experience and expertise in the field.

Regarding the second theme , the availability of computer hardware and software, 35% of responses claimed that the schools should be equipped with the computer hardware and software including smart boards, computers, data show projectors besides access to the internet ; 19 out of 54 respondents claimed that the unavailability of computer hardware and software hinder the technology integration so the school should be provided with the technological resources including hardware and software; and access to the internet to overcome the barriers of technology integration. For the third theme which is motivation either for the teachers or the students; 10 out of 54 respondents (18%) called for motivating the teachers by increasing their salaries and grant them incentives while encourages students by providing them with enjoyable programs to create a magnet environment conducive for leaning and having fun.

For the fourth theme which is ; spreading the culture of technology integration in curriculum; 8 out of 54 respondents (15%) called for spreading the digital culture and integrating the technology in teaching English through authentic context especially in the listening and speaking skills.

Finally, we can summarize that EFL teachers believe that to overcome these barriers that are hindering them from integrating technology in their classrooms via four main suggestions. First, conducting practical professional development programs to integrate technology. Second, make sure of the availability of computer hardware and

software for use while teaching and learning. Third, spreading the culture of technology integration in curriculum. Finally, motivation and encouragement of students and teachers to use and integrate technology in their daily instructions.

Chapter 5: Discussion, Conclusion and Recommendation

Introduction

This chapter presents a summary of the research problem, purpose and questions as well as methodology and its findings, and discusses implications of the study in detail. Suggestions and recommendations are offered for all stakeholders who are working and involving in the field of education, Abu Dhabi Education council and Ministry of Education. Decision makers would be able to use these recommendations in their strategic planning, future plans of equipping schools with modern technologies and designing professional development programs for school teachers. Before concluding the chapter, limitations of the study are acknowledged and recommendations for further research are stated.

5.1 Summary of the Major Findings

Q1: What are major barriers do EFL teachers encounter while integrating technology in Al-Ain cycle 2 schools from EFL teachers' perspective?

Through the collected data, it is shown that teachers face different barriers that hindering them from integrating technology in EFL classrooms cycle two schools in Al-Ain city. The results shows that the highest barrier faced by teachers while integrating technologies is beliefs about technology efficacy barriers (M= 3.64). Secondly comes knowledge of using technology barriers (M= 3.46). Thirdly is time and place efficacy barriers (M= 3.24). Fourthly, support from administration barriers (M= 2.97). Fifthly, training and professional development support barriers (M= 2.91). Sixthly, the financial barriers (M 2.85). Lastly, the availability of ICT resources barriers (M 2.78).

Q2: What are other barriers hindering technology integration from the view point of teachers?

Teachers encounter other barriers that hindering them from integrating technology in their EFL classrooms. They consider time limitation, the class size (student number) and lack of professional computer technician in school as the highest other barriers. Second come limited access to the internet and web sites by ADEC and technology acceptance by some teachers. Lastly, they found that traditional method of teaching is a barrier for integrating technology in their EFL classrooms.

Q3: How might EFL teachers overcome these barriers that are hindering them from integration technology?

We can summarize that EFL teachers believe that to overcome these barriers that are hindering them from integrating technology in their classrooms via four main suggestions. First, conducting practical professional development programs to integrate technology. Second, make sure of the availability of computer hardware and software for use while teaching and learning. Third, spreading the culture of technology integration in curriculum. Finally, motivation and encouragement of students and teachers to use and integrate technology in their daily instructions.

5.2 Discussion

This study aims to investigate the barriers hindering EFL teachers from integration technology in their classrooms in order to overcome these barriers and achieve the maximum benefits of technology integrating in EFL teaching. Since technology integrating in education provide an endless access to different resources of knowledge (Lam & Lawrence, 2002).

5.2.1 Research Question 1 Discussion

Regarding the first question that what are major barriers that hindering EFL teachers from integrating technology in Al-Ain cycle 2 schools, one of the major reasons is beliefs about technology efficacy barriers. How the teachers evaluate their ICT

knowledge and skills. It is clearly shown that the percentage of the teachers who evaluate themselves as advanced is about 20 % while about 80% evaluate themselves as either beginners or intimidate. This point is a very important and gives an indication that they EFL teachers are unconfident in integrating technology since most of them do not own advanced knowledge and capabilities of educational technology. This point is also corrected with another result that showed more than half of teachers were not using ICT in daily basis. This might occur due to the teachers' ability level. Some researchers like Tsoulos (2009) believe that "teachers' technological competence and level of comfort with computer technology also play a role in teachers' attitudes and willingness to integrate technology into their instruction". Also, in another study by Riasati, Allahyar and Tan (2012) teachers feel anxious while using technology in their classrooms because they are afraid of failure due to their lack of competence in using technology.

The second part is the financial barriers that are considered a very significant point since it affecting most other issues like the ICT infrastructure and professional development programs, resources. In fact, more than half of the participants (EFL teachers) stated that there are financial barriers in both public schools and private schools. Regarding public schools, ADEC is equipping the schools with the needed educational technologies from computers, smart boards, educational CDs and many more. Whereas in privet schools the owners are the one who decide what technologies they will provide and how much of their investment will go to purchasing technology.

As mentioned previously the availability of computer hardware and software is correlated to the financial barriers and it is reasonable to be close since the availability of computer hardware and software depends on funding. The score is very similar and about 55% of the participants stated there was a barrier in the availability of computer hardware and software which is strange since the UAE is a technology rich environment.

Schoepp (2010) in a similar study found that although the UAE education system is rich with technology which consider the foundation for integrating technology in teaching and learning, yet it is very important to evaluate the current plan of technology integration and plan the future one.

In another study by Gilakjani, Leong and Ismail (2013) they stated that the change in the computer-based technologies in the past ten years is extremely fast and it is very hard for schools to stay up to date with the tech industry updates. In the past five years computers and computer software were the latest trend in educational technologies, nevertheless they are so outdate since the tablets replaced them with their fast growing applications. Therefore, it is very hard for schools to stay up to date with the latest technologies which keep changing year after another and once school administration owned new technology tools a new one will emerge. Ali (2014) in similar study in Al-Ain school concluded that the UAE is keen on present technology tools for all students since their early stages at schools to create a shortcut from the present to the future progress.

For technical and theoretical knowledge, it was a little bit higher than the financial barriers and availability of software and hardware in term of mean score and it is nearly close to how the teacher evaluate their abilities in technological skills (20%). The percentage of teachers who "always" and "usually' have technical and theoretical knowledge about 26%. This is an indication that about third quarter or more of the EFL teachers are still lacking the sufficient technical and theoretical knowledge. Such situation is added to other barriers that hinder the effectiveness of technology integration in classroom. These findings are similar to the results of Almalki and Williams (2012) who stated that similar number of teachers know the potential of ICT, show low

competence in technology integration and focuses on narrow range of technology applications.

Regarding the acceptance of technologies, though the mean score (3.64) of the results is the highest score of the seven categories, the percentage of the participants who select "always" and "usually" is about 20% and 40% selected " often"; whereas, 40% selected " sometimes" and "never". The acceptance of technologies is a good factor and it might help in the process of technology integration but it is no enough if the other factors hinder. What is more important is the practical use and usage of technologies in classroom. Even the mean score is a little bit higher than other factors but it is still a need to exert extra effort to spread the culture of real technology integration in curriculum and instruction. Tafazoli and Golshan (2014) suggested in their research that language teachers should be inlighted with the rich environment technology create in their classrooms and that they have to consider it as a "vital supplementary tool" in language classes. It provides their students with better interactive opportunity of language learning than the traditional language teaching setting.

Regarding the time and place for using technology, the total mean scores is 3. 24 but it is beneficial to discuss each item separated as some statements should be reversed for the purpose of analysis. The participants perceived that time is too limited for using technology and they expect the technology to save more time on the long run. This is an indication that there is a barrier but it can be overcome in the long run; these responses are promising but give an insight that the process of integration is not fully understood and it needs to be improved and enhanced. The other items like location of the computer lab and the availability of computers and internet connections are also a barrier and closely related to the first part discussed previously. A round one third of the EFL teachers "always" and "usually' have viewed time and place as a barrier. This finding is

similar to the finding of Hani (2014) who concluded that some teachers might think that integrating technology might be time consuming since some students might think it's a game. Yet, by time and explanations from teacher it will save time because of the increase in participation as the class shift from teacher-center to student-center.

For the administration support, the total mean score is 2.97 and it is similar to other barriers and there is about half of EFL claimed that there is no sufficient administrative support like technical technician who can support the process. According to the researcher's observation as a teacher most schools do not have technician. Also, some teachers believe that their administration do not support their efforts to integrate technology in their classrooms and through their instruction plans. Alharbi (2014) find that administrators and policymakers should find solutions to recognise teaching loads and provide teachers with sufficient time to learn, use and integrate technology in their daily practise. Also, Raman and Yamat (2014) concluded that teachers should be trained, motivated, encouraged by the administration to integrate technology in their instruction. They added that the school administration should play an active role in reducing the burdon and workload on teachers so that they will have the time to adopt new technologies in their classrooms.

Considering the Teachers' Professional Development Programs (PD), the total mean score of all the five items is 2.91 that is located nearly under the category "often". This category received the third lowest score after financial barriers and the availability of hardware and soft ware Table 8 shows that percentage of teachers who respond by "always" and "usually' have viewed professional development as a barrier is about 50%. The professional development programs are not sufficient and it can be discussed with the point that only 20% of the teachers evaluated themselves as advanced and most other teachers are intimidate or beginners. Thus, the professional development programs do

not meet the needs of EFl teachers in term of equality and quantity and it is a real barrier. Davidson, Richardson and Jones (2014) concluded that the need for professional development plan has increased because of the constant request for technology integration in classrooms. They added that teachers' PD programs must be planned with hands-on activity and must be long term training with peers since it create a positive environment for the teachers to achieve the maximum benefits.

5.2.2 Research Question 2 Discussion

In conclusion, teachers encounter other barriers that hindering them from integrating technology in their EFL classrooms. They consider time limitation, the class size (student number) and lack of professional computer technician in school as the highest other barriers. Second come limited access to the internet and web sites by ADEC and technology acceptance by some teachers. Lastly, they found that traditional method of teaching is a barrier for integrating technology in their EFL classrooms.

5.2.3 Research Question 3 Discussion

The third research question regarding how to overcome these barriers from the EFL teachers' perspective is closely connected with the first one that tackled the major barriers of technology integration and it resulted in another question which is how to overcome these barriers from the EFL teachers' perspective. The major factors of overcoming barriers of technology integration are conducting practical professional development programs to integrate technology; the availability of computer hardware and software; motivation and encouragement of students and teachers; spreading the culture of technology integration in curriculum.

The highest category includes 50 % of the responses stated that there is a vital necessity for conducting practical professional development programs to integrate technology; the 27 out of 54 respondents focused on the practicality of professional

training to integrate technology in classrooms; they also claimed that the professional development can be done through seminars, inter-visitation and intra-visitation, and exchanging practical experience and expertise in the field.

Regarding the second theme , the availability of computer hardware and software, 35% of responses claimed that the schools should be equipped with the computer hardware and software including smart boards, computers, data show projectors besides access to the internet ; 19 out of 54 respondents claimed that the unavailability of computer hardware and software hinder the technology integration so the school should be provided with the technological resources including hardware and software; and access to the internet to overcome the barriers of technology integration.
For the third theme which is motivation either for the teachers or the students; 10 out of 54 respondents (18%) called for motivating the teachers by increasing their salaries and grant them incentives while encourages students by providing them with enjoyable programs to create a magnet environment conducive for leaning and having fun.
For the fourth theme which is ; spreading the culture of technology integration in curriculum; 8 out of 54 respondents (15%) called for spreading the digital culture and integrating the technology in teaching English through authentic context especially in the listening and speaking skills.

5.3 Recommendations and Implications

By the end of the current study and based upon the findings and the conclusion, a group of recommendations and suggestions are given in order to over come barriers to integrating technology. The suggestions are grouped in four main stakeholders in the education field so that all of them will work hand by hand towards best practises in

technology integration. These four main stakeholders are ADEC, administration, EFL teachers and students.

First of all, through the educational reform in Abu-Dhabi region, ADEC has started building many new schools according to international standard and equipped with the latest technologies. Yet, there are some schools (public and privet) suffer from the poor infrastructure of their buildings. It's suggested to continue with their plan to place all the old building with new modern ones that support technology integration. These modern schools must have computer labs, smart boards, internet connections, tablets with educational applications downloaded, hardware and software aligned with the curriculum and administration software as well.

Secondly, administrators play a major role in implementing any change and integrating any technology. It's their role to create electronic channels to communicate with teachers, parents and students either via school website or the school social media. This will help to spread the technology acceptance culture among all its members since they are using it to communicate and socialize. Also, they are suggested to provide teachers with the needed educational technologies like CDs, DVDs, e-books etc. and make them easy to access for teachers and students anytime. Moreover, they are suggested to hire ICT technical supporter at the school day to provide help and support at any time needed by any school member. Moreover, administrator should reduce the load from teachers so that they can exchange visits and learn from competent teachers in technology to increase their performance. Finally, administrators should praise and evaluate teachers' integration of technology during their observations and visits to the classrooms. They are also in need to have time to plan technology integration across curriculum. This practise will help the school members who are actively integrating

technology in their instruction to continue and play their role in spreading the digital culture.

Thirdly, it is recommended for teachers to in roll in professional development programs to improve their performance and to get familiar with the latest technologies and applications in education. Also, both male and female teachers must receive training section in order to enhance their performance. Finally, teachers are encouraged to obtain ICDL or IC3 license to make sure they master the basic knowledge needed to incorporate technology in their classrooms.

Fourthly and lastly, student should be aware of the importance of technology integration inside the classroom. Some students think that technology is only for fun and games. Therefore, such students tend to miss use the technology inside the classroom and lose track of the learning task. That's why they need to take responsibility in teaching their peers how to effectively use technology inside school. Also, some student might cause damage to the school hardware that why they need to be educated on how to respect public properties.

5.4 Limitations and Recommendations for Further Research

This current study is limited to the year 2013-2014 and a certain geographical area, Al Ain city of The UAE. It is also involved only Cycle 2 EFL teachers. Further research studies are needed to replicate this study or initiate other studies to include all the cycles an all schools of Emirate of Abu Dhabi, the UAE and other countries. Other studies are needed to investigate the perception of principals, academic advisors students, and parents.

5.5 Conclusion

Throughout the findings of this present study, EFL teachers show reasonable perception about the barriers of technology integration and how to overcome them. There are a lot of barriers for technology integration; though these barriers received different responses but they are still hindering the process of full integration. These barriers can be summarized as follows; the financial barriers, the availability of hardware and software, time and place, teachers' technological efficacy, technology acceptance, motivation, lack of effective professional development program and administrative support. For overcoming these barriers, EFL teachers suggested initiating effective and practical professional development programs that meet the needs and requirement, increasing extrinsic and intrinsic motivation, and build infrastructure of technology.

Bibliography

Abu-Dhabi educational council ADEC. (2015). Retrieved from https://www.adec.ac.ae/en/AboutADEC/Pages/MissionVision.aspx

Abu-Dhabi educational council ADEC. (2014). ADEC public schools (P-12) policy manual. ADEC publication. Abu-Dhabi. Retrieved from: https://www.adec.ac.ae/en/MediaCenter/Publications/p-12%20Policy%20manual%202014-15%20-%20ENG/HTML/files/assets/common/downloads/publication.pdf

Abu-Dhabi educational council ADEC. (2013). Retrieved from: https://www.adec.ac.ae/en/AboutADEC/OrganizationStructure/ES/Support_Services/Pages/Get-to-know-us.aspx

Abu-Dhabi educational council ADEC. (2012). Policy manual 2012-2013. Retrieved from https://www.adec.ac.ae/en/MediaCenter/Publications/ADEC_PolicyManual_EN_2012-13/index.html#/56-57/

Adams, P. (2006). Exploring social constructivism. Educational Technology Research and Development, 3(13), 243-257.

Al-Alwani, A. (2005). Barriers of integrating information technology in Suadi Arabia science education. Doctoral dissertation, the University of Kansas, Kansas.

Alharbi, H. (2014). Towards successful implementation of ICT in education. The West East Institute. Retrieved from http://www.westeastinstitute.com/wp-content/uploads/2014/05/Hanaa-Eid-Al-harbi-Full-Paper.pdf

Ali, S. (2014). Multimedia use in UAE education context. The Global Summit on Education: 393- 406.

Almalki, G, & Williams, N. (2012). A strategy to improve the usage of ICT in The Kingdom of Saudi Arabia primary school. International Journal of Advanced Computer Science and Applications: 3 (10), 42-49.

Al-Senaidi, S., Lin, L., & Poirot, J. (2009). Barriers to adopting technology for teaching and learning in Oman. Computers & Education, 53(3), 575–590.

Altun, M. (2015). The integration of technology into foreign language teaching. International Journal on New Trends in Education and Their Implications: 6(1), 22-27.

Alzu'bi, M (2012). The Role of the Smart- board in Improving English Language Skills in Jordanian Universities. 10th European Conference on e-Learning.

Alzu'bi, M (2010). The Effect of the Internet on King Saud University Students' Grammar Achievement. Journal of Human Sciences: 45.

Antonacci, D. (2002). Integrating Technology into Instruction in Higher Education. University of Missouri-Kansas City. Retrieved from: http://associations.missouristate.edu/assets/mohighedweb/IS-TechnologyIntegrationinHigherEducation.pdf

Atai, M. R., & Dashtestani, R. (2011). Iranian English for academic purposes (EAP) stakeholders' attitudes toward using the Internet in EAP courses for civil engineering students: promises and challenges. Computer Assisted Language Learning, 26(1).

Atkins, N. E., & Vasu, E. S. (2000). Measuring knowledge of technology usage and stages of concern about computing: A study of middle school teachers. Journal of Technology and Teacher Education, 8(4). 279-302.

Atkinson, D. (2002). Toward a Sociocognitive Approach to Second Language Acquisition. Modern Language Journal, 86(4), 525-545. Retrieved from Academic Search Premier database.

Badri, M., Al Rashedi, A., Yang, G., Mohaidat, J., & Al Hammadi, A. (2014). Technology readiness of school teachers: An empirical study of measurement and segmentation. Journal of Information Technology Education: Research, 13, 257-275. Retrieved from http://www.jite.org/documents/Vol13/JITEv13ResearchP257-275Badri0616.pdf

Baki E. (2010). A Comparison Of Undergraduate Students' English Vocabulary

Learning: Using Mobile Phones And Flash Cards. TOJET: The Turkish Online Journal of Educational Technology . 9, (3).

Bauer, J., & Kenton, J. (2005). Toward technology integration in the schools: why it isn't happening. Journal of Technology and Teacher Education, 13(4), 519–546.

Beggs, T. (2000). Influences and barriers to the adoption of instructional technology. Mid-south Instructional Technology Conference Murfreesboro, TN.

Berns R.& Ericson, B.(2001). Contextual teaching and learning: preparing students for a new economy. Retrieved from http://www. Nccte.com

Bingimlas, K.(2009). Barriers to the successful integration of ICT in teaching and learning environments: A review of literature. Eurasia Journal of Mathmatics, Sciences & Technology Education, 5(3) 235-245.

Bradshaw, L. K. (2002). Technology for teaching and learning: strategies for staff development and follow-up support. Journal of Technology and Teacher Education, 10(1),131–150.

Brinkerhof, J. (2006). Effects of a long-duration, professional development academy on technological skills, computer self efficacy, and technology integration beliefs and practices. Journal of Research on Technology in Education, 39 (1), 22-44.

Brown, J. S. (2002). **Learning In The Digital Age**. Retrieved from http://www.johnseelybrown.com/learning_in_digital_age-aspen.pdf

Brown, L. (2008). Using Mobile Learning to Teach Reading to Ninth-Grade Students. Capella University. Published Dissertation.

Chen, C. & Hsu, S. (2008). Personalized Intelligent Mobile Learning System for Supporting Effective English Learning. Educational Technology & Society, 11 (3), 153-180.

Clark, K. (2006). Practices for the use of technology in high schools: a Delphi study. Journal of Technology and Teacher Education, 14(3), 481–499.

Creswell, J. W. (2007). *Qualitative inquiry and research design: Choosing among five approaches*. CA: Sage Publications. Retrieved from

https://is.vsfs.cz/el/6410/zima2013/B_KV/um/Creswell_2007_Qualitative_Inquiry_and_Research_Design__Choosing_among_Five_Approaches__2nd_edition.pdf

Cunningham, K. (2000). "Integrating CALL into the writing curriculum." The Internet TESL Journal, 6(5). Retrieved from http://iteslj.org/Articles/Cunningham-CALLWriting

Dandonoli, P. (1989). "The ACTFL Computerized Adaptive Test of Foreign Language Reading Proficiency." Modern Technology in Foreign Language Education: Application and Projects. Edited by F. Smith Lincolnwood. IL: National Textbook.

Davidson, L., Richardson, M., & Jones, D. (2014). Teachers' perspective on using technology as an instructional tool. Research in Higher Education Journal: 24. Retrieved from http://www.aabri.com/manuscripts/141892.pdf

Douglas, Carol A. Chapelle and Dan. (2006). Assessing language through computer technology, Cambridge: Cambridge University Press.

Dowes, L.(2001). What stops teachers using technology? **Issues in teaching using ICT**(pp61-79).London: Routledge.

Dupin-Bryant, P. (2004). Variables related to interactive television teaching style. International Journal of Instructional Technology and Distant Learning, 1(4) 3-14.

Earle, R. S. (2002). The Integration of instructional technology into public education: promises and challenges. Educational Technology, 42 (1), 5-13.

Egbert, J.L., Paulus, T. M., & Nakamichi, Y. (2002). The impact of CALL instruction on classroom computer use: A foundation for rethinking technology in teacher education. Language Learning & Technology, 6, 108-126. Retrieved from http://llt.msu.edu/vol6num3/egbert/

Ertmer, P. A. (2005). Teacher pedagogical beliefs: The final frontier in our quest for technology integration? Educational Technology Research and Development,

53(4), 25–39.

Eurydice. (2001). Basic indicators on the incorporation of ICT into European Education Systems: Facts and figures. 2000/01. Annual Report. European Commission Directorate General for Education and Culture: Brussels.

Flores, A. (2002). Learning and teaching mathematics with technology. Teaching Children Mathematics, 8 (6), 308-325.

Gay, L.R.; Mills, G. E.& Airasian, P. W. (**2008**). *Educational Research: Competencies for Analysis and Application*. New Jersey, Pearson.

Gilakjani, A., Leong, L., & Ismail, H. (2013). Teachers' use of technology and constructivism. Modern Education and Computer Science: 4, 49-63.

Gilby, C. (2011). Teaching English as a foreign language. Edge Hill University. Retrieved from http://www.edgehill.ac.uk/careers/files/2013/07/CC-16-TEFL.pdf

Gomes, C.(2005). Integrating of ICT in science teaching : A study performed in Azores, Portugal. Recent Research Developments in Learning Technologies.

Grant. M., Ross. S, Wang. W., Potter. A., & Wilson. Y. (2004). Riverdale elementary "learning without limits" 2003-2004 evaluation report. Memphis. TN: Center for Research in Educational Policy.

Guha, S. (2000). A Comparative analysis of present and preferred situations of elementary grade teachers in using computers for classroom instruction, ERIC Document Reproduction Service No. ED440089.

Harwood, P. & Asal, V. (2008). Educating the first digital generation. Westport, CT: Praeger.

Hani, N. (2014). Benefits and barriers of computer assisted language learning and teaching in the Arab world: Jordan as a model. Theory and Practice in Language Studies: 4 (8), 1609-1615.

Hennessy, S., Ruthven, K., & Brindley, S. (2005). Teacher perspectives on integrating

ICT into subject teaching: Commitment, constraints, caution, and change. Curriculum Studies, 37 (2), 155–192.

Hew, K. & Brush, T. (2007). Integrating technology into K-12 teaching and learning: current knowledge gaps and recommendations for future research. Educational Technology Research and Development: 55, 223-252.

Hinson, J., LaPrairie, K., & Heroman, D. (2006). A failed effort to overcome tech barriers in a K-12 setting: what went wrong and why. International Journal of Technology inTeaching and Learning, 2(2), 148–158.

Holinga, M. J. (1999). Project LINCOLN: improving and enhancing student learning. Learning and Leading with Technology, 26 (7), 54-80.

Hong, K., & Koh, C. (2002). Computer anxiety and attitudes toward computers among rural secondary school teachers: AMalaysian perspective. Journal of Research on Technology in Education, 35 (1), 27-46.

Hoven, D. (1999). "A model for listening and viewing comprehension in multimedia environments." Language Learning & Technology, Vol. 3 (1): 88 – 103.

Hoven, D.(1997). Improving the management of flow of control in computer- assisted listening comprehension tasks for second and foreign language learners. Unpublished doctoral dissertation, University of Queensland, Australia.

Hyslop- Margison, E. (2004). Technology, Human agency, and Dewey's constructivism. Australasian Journal of Educational Technology: 20(2) 137-148.

Ibrahim, W. (2011). The effect of computer-enhanced learning through the use of Asynchronous discussion on improving writing and student perception of technology-mediated environment. Research Journal Specific Education: 21, 725-750.

Iran, H. (2011). *A Study on Educational Technology in Dubai Challenges and Suggested Solutions* (Doctoral dissertation). Retrieved from http://bspace.buid.ac.ae/bitstream/1234/66/1/70010.pdf

Jeong, K.-O. (2006). Promoting communicative language teaching in EFL context: An English writing course mediated through the Web. English Language Teaching, 18(3), 47-68.

Johnson, B., & Christensen, L. (2013). *Educational Research: Quantitative, Qualitative, and Mixed Approaches*. CA, Sage Publications.

Jou, Y. (2008). The Effect Of Email Keypal Project On The Enhancement Of Reading And Writing Performance Of Elementary School-aged EFL Students In Taiwan. Published Dissertation: Alliant International University. San Diego.

Jung, Y. S. (2001). Toward an effective EFL teacher development program focusing on multimedia and the Internet. English Teaching, 56(4), 141-162.

Kanuka, H., & Anderson, T. (1999). Using constructivism in technology-mediated learning: Constructing order out of the chaos in the literature. Radical Pedagogy, 1(2). Retrieved from http://radicalpedagogy.icaap.org/content/issue1_2/02kanuka1_2.html

Kasper, L. F. (2000). "New technologies, new literacies: Focus discipline research and ESL learning communities." Language Learning & Technology, 4 (2) 109 – 128. Retrieved from http://llt.msu.edu/vol104num102/kasper/default.html

Kerr, S.T. (1996). Visions of sugarplums: The future of technology, education, and the school: Technology and the future of schooling. Chicago: Chicago University Press.

Kim, H. (2002). Teachers as a barrier to technology-integrated language teaching. English Teaching, 57(2), 35-64.

Kopcha, T. (2012). Teachers' perceptions of the barriers to technology integration and practices with technology under situated professional development. Computers & Education 59 (2012) 1109–1121.

Lam,Y. (2000). Technophiliacs, technophobia: A preliminary look at why second-language teachers do or do not use technology in their classrooms. Canadian

Modem Language Review, 56(3), 389-420.

Lam, Y., & Lawrence, G. (2002). Teacher-student role redefinition during a computer-based second language project: Are computers catalysts for empowering change? Computer Assisted Language Learning, 15 (3), 295-315.

Lee, S., & Son, J.-M. (2006). The use of ICT in Korean middle school English classrooms: Practices and challenges. English Language Teaching, 18(1), 49-73.

Lim, C. P., & Khine, M. (2006). Managing teachers' barriers to ICT integration in Singapore schools. Journal of Technology and Teacher Education, 14(1), 97–125.

Lim, C. P., Teo, Y. H., Wong, P., Khine, M. S., Chai, C. S., & Divaharan, S. (2003).

Liontas, J. I.(2002). CALL media digital technology: Whither in the new millennium? CALICO Journal, 19 (2), 315-330.

Johnson, E. M. (2002). The role of computer-supported discussion for language teacher education: What do the students say? CALICO Journal, 20(1), 59-79. Creating a conducive learning environment for the effective integration of ICT: Classroom management issues. Journal of Interactive Learning Research, 14(4), 405–423.

Jonassen, David H. (1991). Evaluating constructivistic learning. Educational Technology, 31, 28-33.

Machnaik, J. (2002). Investigating the effect(s) of technology integration on teaching practices that may lead to the development of a community learners. Saskatoon, Canada: Saskatchewan University.

Manzo, K. K. (2001). Academic record. Education Week, 20(35), 22-35. Washington.

Meehan, S.; Holmes, B. & Tangnes, B (2001). Who wants to be a teacher? An exploration of the theory communal constructivism and the chalk face. Teacher Development, 5(2), 177-190.

Mollaei, F., & Riasati, M. (2013). Teachers' Perceptions of Using Technology in Teaching EFL. International Journal of Applied Linguistics & English Literature, 2 (1), 13-22.

Mouza, C. (2009). Does research-based professional development make a difference? A longitudinal investigation of teacher learning in technology integration. Teachers College Record, 111(5), 1195–1241.

Nie, Y., & Lau, S. (2010). Differential relations of constructivist and didactic instruction to students' cognition, motivation, and achievement. Learning & Instruction, 20(5), 411-423. doi:10.1016/j.learninstruc.2009.04.002.

Oh, E., & French, R. (2007). Pre-service teachers' perceptions of an introductory instructional technology course. CALICO Journal, 24(2), 253–267.

Ozden, M.(2007). Problems with science and technology education in Turkey.Eurasia Journal of Mathmatica Science, and Technology education,3(2),157-161.

Papanastasiou, E. C., & Angeli, C. (2008). Evaluating the use of ICT in education: Psychometric properties of the survey offactors affecting teachers teaching with technology (SFA-T3). Educational Technology & Society, 11(1), 69-86.

Park, C. N., & Son, J.-B. (2009). Implementing computer-assisted language learning in the EFL classroom: Teachers' perceptions and perspectives. International Journal of Pedagogies and Learning, 5(2), 80–101.

Payne, S., & Whitney, P.J. (2002). "Developing oral proficiency through synchronous CMC: Output, working memory and inter language development." CALICO Journal 20 (1): 7-32.

Piaget, J. (1955). The construction of reality in the child. London: Routledge.

Raman, K., Yamat, H. (2014). Barriers teachers face in integrating ICT during English lessons: a case study. The Malaysian Online Journal of Educational Technology: 2 (3), 11-19.

Riasati, M., Allahyar, N., & Tan, K. (2012). Technology in Language Education: Benefits and barriers. Journal of Education and Practice, 3 (5), 25-30.

Rilling S.; Dahlman A.; Dodson;C.; Boyles, C.& Pazvant,O.(2005). Connecting CALL theory and practice in preservise teacher education and beyond: Processes and products. CALICO Journal, 22(2), 213-135.

Pitler, H., Hubbell, E., Kuhn, M., & Malenoski, K. (2007). Using technology with classroom instruction that works. Alexandria, VA: ASCD.

Rakes, G. C., & Casey, H. B. (2000). An analysis of teacher concerns toward instructional technology. Retrieved from http://www.ed.uiuc.edu/IJET/v3n1/rakes/index.html

Redmond, P., Albion, P. R., & Maroulis, J. (2005, March). Intentions and Reality: Pre-service teachers' ICT Integration during Professional Experience. Paper presented at the 16th International Conference of the Society for Information Technology & Teacher Education (SITE 2005), Phoenix, USA.

Romano, M.T.(2003). Empowering teachers with technology: Making it happen. Oxford, UK: Scarecrow Press.

Sandholtz, J. H. (2001). Learning to teach with technology: A Comparison of teacher development programs. Journal of Technology and Teacher Education, 9, (3), 349.

Schoepp, K. (2010). Barriers to technology integration in a technology-rich environment. Learning and Teaching in Higher Education: Gulf Perspectives, 2, 1-24.

Sherry, L., Bilig, S., Jesse, D., & Acosta, D. W. (2001). Assessing the impact of instructional technology on student achievement. T.H.E. Journal, 28 (7), 40-43.

Shin, H.-J., & Son, J.-B. (2007). EFL teachers' perceptions and perspectives on Internet assisted language teaching. CALL-EJ Online, 8(2). Retrieved from http://www.tell. is.ritsumei.ac.jp/callejonline/journal/8-2/h-js_j-bs.html

Snoeyink R, Ertmer P (2001) Thrust into technology: how veteran teachers respond. J Educa Technol Syst 30(1):85–111

Son, J.-B., & Robb, T., & Charismiadji, I. (2011). Computer literacy and competency: a survey of Indonesian teachers of English as a foreign language. CALL-EJ, 12(1), 26–42.

Son, J.-B. (2002). Computers, learners and teachers: Teamwork in the CALL

classroom. English Language Teaching, 14(2), 239-252.

Spires, H., Lee, J., Turner, K., & Johnson, J. (2008). Having Our Say: Middle Grade Student Perspectives on School, Technologies, and Academic Engagement. Journal of Research on Technology in Education, 40(4), 497-515.

Stansfield, C. (ed.). (1986). Technology and language testing. Washington DC: TESOL Publications.

Suh, S. (2004). Technology training and English language teacher education in Korea. Proceedings of CLASIC 2004, Singapore, 1040-1048.

Sun, Y. C. (2010). Developing reflective cyber communities in the blogosphere: A case study in Taiwan higher education. Teaching in Higher Education, 15(4), 369–381.

Tafzoli, D., & Golshan, N. (2014). Review of computer-assisted language learning: History, merits & barriers. International Journal of Language and Linguistics: 2 (5-1), 32-38.

Tehart, E. (3003). Constructivism and teaching. Journal of Curriculum Studies, 35(1), 25-44.

Thompson, H. (1999). The impact of technology and distance education. Educational Technology and Society,2(3), 25-40.

Thurmond, AnnMarie. (Ed.). (1999). Constructivism and Constructionism. Retrieved from http://online.sfsu.edu/~foreman/itec800/finalprojects/annmariethurmond/home.html

Tsoulos, D. (2009). Integrating Computer Technology in the Second Language Classroom: A Window into teachers' experiences. Massachusetts Institute of Technology. Retrived from http://web.mit.edu/comm-forum/mit6/papers/Tsoulos.pdf

Wachira, P.& Keengwe, J. (2011). Technology Integration Barriers: Urban School Mathematics Teachers Perspectives. J Sci Educ Technol (2011) 20:17–25. DOI

10.1007/s10956-010-9230-y

Wachira, P., & Keengwe, J. (2010). Technology integration barriers: urban school mathematics teachers perspectives. Journal of Science Education and Technology, 20(1), 17–25.

Wells, J. (2007). Key design factors in durable instructional technology professional development. Journal of Technology and Teacher Education, 15(1), 101–122.

Zhao, Y. (2003). Recent Developments in Technology and Language Learning: A Literature Review and Meta-analysis. CALICO Journal, 21 (1), p-p 7-27.

Appendix A

Background Information

Barriers of Integrating Technology in EFL classrooms in Al-Ain Cycle 2 Schools

SECTION 1: Mark one answer ONLY for each of the following questions:

1. Gender:

□ Male □ Female

2. I am:

□ Emirati □ Arab □ English Native Speaker

3. I belong to the following age group:

□ under 30 years

□ 30 – 39 years

□ 40 – 50 years

□ over 50

4. My highest educational degree is best described as:

□ Diploma □ Bachelor □ Masters □ Doctorate

5. How many years have you been teaching English language:

□ Less than 5 years

□ 5-9 years

□10-14 years

□15-19 years

□ More than 20 years

6. How often do you use technology in planning, teaching, grading, etc:

□ Daily □ Weekly □ Monthly □ Occasionally □ Never

7. How many years have you been using technology in teaching English language:

□ Less than 5 years

□ 5-10 years

□11-15 years

□ More than 15 years

8. Evaluate your experience in using technology:

□ Beginner

□ Intermediate

□ Expert

Appendix B
Barriers hindering EFL teacher from integrating technology in Al-Ain questionnaire

SECTION 2: Tick one answer ONLY for each of the following questions:

Always = 5, Usually = 4, Often = 3, Sometimes = 2, and Never = 1.

	Financial Barriers	Always	Usually	Often	Sometimes	Never
		5	4	3	2	1
1.	Funding is provided for technology in EFL programs.					
2.	Funding for EFL programs supports the web-based activities.					
3.	There is funding for EFL teachers on technology training.					
4.	Funding supports the maintenance of computer hardware and software.					
5.	Funding provides computer labs in EFL programs.					
	Availability of Computer Hardware and Software					
6.	I use a computer lab for language teaching.					
7.	I access EFL software from lab or library at my school.					
8.	My school integrates the web into EFL curriculums.					
9.	Internet access is available to EFL classrooms.					
10.	There is technology based materials for EFL teachers.					
	Technical and Theoretical Knowledge					
11.	I adapt technology skills in teaching EFL.					
12.	I intend to advance my knowledge on integrating current technologies in my teaching instructions.					
13.	I use web-based interaction sites as a learning tool.					
14.	I use PowerPoint or multimedia as a teaching tool.					
15.	Using computer-based materials, I provide content addressing specific English language learners' needs.					
	Acceptance of Technologies					
16.	Computers help me save a lot of time on preparing lesson plans.					
17.	I think the modern technology inspires English language learners.					
18.	I enjoy teaching EFL through technology.					
19.	I feel free to learn the new technology skills for teaching EFL.					
20.	Using technology in my EFL classroom offers opportunities for better language practice.					

	Time and place					
21.	Class time is too limited for using technology.					
22.	I expect the technology to save me time on the long run.					
23.	I find it very difficult to schedule a visit to the computer lab due to it's busy schedule.					
24.	The computer lab is located far away from the classrooms which make moving to it a time consuming.					
25.	Having computers and internet connections in my EFL classroom make it easier to integrate technology.					
		Always	Usually	Often	Sometimes	Never
	Administration Support	5	4	3	2	1
26.	Teachers receive adequate administrative support to integrate technology into classroom practices.					
27.	Our school has a well-developed technology plan that guides all technology integration efforts.					
28.	Administrators in my school include evaluating integration of technology in their observation visits.					
29.	Administrators in my school do not understand the potential contribution of computer technology.					
30.	There is no computer technician in my school.					
	Teachers' Professional Development Program (PD)					
31.	I have received adequate training to incorporate technology into m teaching instruction.					
32.	The PD program in my school groups the teachers according to th level of competence in using technology.					
33.	My PD coach visits my EFL classroom to observe and assess technology integration in order to plan future PD session accordin to my needs.					
34.	The PD program in my school enables teachers to integrate technology into the curriculum to improve the students achieveme					

35.	Teachers in my school seek assistance and coaching on integrating technology from their colleagues as part of their PD.					

Appendix C
Open ended questions

SECTION 3: Open-ended Questions

1. In your opinion, what are other barriers that prevent EFL teachers from integrating technologies in their curriculum and instructions and not mentioned above?

2.From your teaching experience, do you have any suggestions to overcome barriers of using technology in EFL classrooms?

Appendix D

Names of Jurors of the Survey

Names of Jurors	Position
Dr. Abdulrahman Almekhlafi	Assistant Professor- Department of C & I
Dr. Christopher Morrow	Assistant Professor- Department of C & I
Abdul-Fattah Ahmed	English supervisor - ADEC
Alia Al-Dhaheri	English language teacher
Hamda Al-Kutbi	English language teacher
Samia Mohammed	English language teacher