

# **BARRIERS TO CALL PRACTICES IN AN EFL CONTEXT: A CASE STUDY OF PREPARATORY YEAR ENGLISH COURSES**

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## **ABSTRACT**

*The present study attempts to find out the practical barriers to technology integration in an Arab EFL scenario, particularly in the context of Preparatory Year English courses. The practical barriers to CALL practices are multifaceted and vary according to contexts. In this mixed method study, 50 ESL teachers were surveyed using a 5-point Likert-scale questionnaire. The questionnaire focused on the pedagogical, technological, personal and administrative barriers to CALL integration in an EFL context. In addition, 21 teachers participated in the focus group discussion. Overall, the survey results found that the barriers influencing CALL integration in the study context were moderate. However, lack of administrative support, inadequate training, and absence of suitable materials were found as significant barriers to CALL integration. The focus group discussion reiterated the issues and suggested practical solutions for maximization of CALL practices. The study suggests a holistic administrative approach to solve the barriers to CALL integration.*

## **KEYWORDS**

*Barriers to technology, CALL, EFL*

## **1. INTRODUCTION**

The advantages of Computer-assisted Language Learning (CALL) may be universally accepted, but how effective it can be in the actual teaching-learning process is a question posed in many institutions of the developing countries. CALL may not be a new phenomenon for the advanced countries, but CALL integration in many English as Foreign Language (EFL) contexts of the developing countries face practical barriers. Even in the institution where the technological infrastructure is believed to be adequate, most teachers are found to be complacent with traditional chalk and talk method and the changes in instructional practices using technologies are very slow due to various levels of teacher's acceptance of e-learning tools. Language teaching with digital technologies has not been transformed and many teachers have been reluctant to acknowledge this extended understanding of literacy (Lotherington & Jenson, 2011).

The barriers to the use of innovations are understandable. However, teachers need to be convinced of the value of CALL applications in EFL. It is becoming a reality that today's effective teaching requires effective technology use. However, research suggests that educational institutions have yet not achieved high levels of effective technology use even in technologically advanced countries (Kozma, 2003; Mueller et al., 2008; Smeets, 2005; Tondeur, van Braak, & Valcke, 2007). Further, technologies used in many parts of the world are not capable of facilitating student learning, as they simply support lecture-based instruction and do not enhance student-centred pedagogy (Cuban, Kirkpatrick, & Peck; 2001; Law-less & Pellegrino, 2007; Zemelman, Daniels, & Hyde, 2005). The present study attempts to find out the practical barriers to technology integration in an Arab EFL scenario, particularly in the context of Preparatory Year

Programme (PYP) English courses. In addition, it provides practical suggestions to maximize the benefits of technology in EFL.

## **2. BARRIERS TO CALL PRACTICES**

The practical barriers to CALL practices are many and varied, and these limitations make it impossible to implement everything in the short amount of time allowed for CALL (Hatasa, 1999). For effective implementation and appreciation of CALL, along with right perceptions, teachers need support (Levy, 1997). Even though experts in the field (Levy 1996; Hubbard 1996) have suggested extensive guidelines, there appears to be a lack of training within language teacher preparation, which negatively affects CALL practices in many institutions. As Samuel and Zitun, (2007) views, 'the extent to which teachers are given time and access to pertinent training to use computers to support learning plays a major role in determining whether or not technology has a major impact on achievement.' (P. 10).

Some researchers have suggested that lack of adequate teacher training poses a challenge to technology-enhanced instruction (Egbert & Thomas 2001). Some teachers feel uncomfortable using educational technology in their classrooms because they are not well prepared for technological problems; therefore, teachers tend to view CALL classes less favorably (Chambers & Bax, 2006). It is also found that sometimes new users of technology lack the ability to use language learning technologies timely and appropriately (Clark & Gorski, 2001), that results in undesirable activities. Teachers' technological competency has been an issue in CALL barriers in many parts of the world. This lack of technical skills has been identified among pre-service and in-service teachers. Sometimes the ranges in teachers' Information and Communication Technology (ICT) competency make teacher training complicated (Murray, 1998). Most often, trainings lack follow up activities and retraining that is required when new technologies and materials become available (Northrup & Little 1996). Clark & Gorski (2001) consider the digital divide the most widely recognized factor influencing access to technology is EFL communities that are generally built on a multicultural mode.

Another challenge to technology integration is teachers' inhibitions. Some teachers are not intrinsically motivated to use technology and react negatively to situations that require them to use technology (Egbert & Thomas 2001). Many teachers do not have favourable attitudes toward the effectiveness of educational technology even though it is viewed often as an effective instruction strategy (Akbaba & Kurubacak, 1999). These teachers stop to continue using technology in a pedagogic manner once training has ceased. Butler-Pascoe (1995) observes that technology-training programs often incorporate funding that allows participants to have access to resources for the duration of the course or some limited time that follows. Once these resources become unavailable, the teachers often neglect to continue practicing the technology related skills they have learned, which shows little impact of teacher training programs on how teachers think about and implement technology in the classroom (Feiman-Nemser & Remillard 1996). Another serious issue is that though some teachers' beliefs regarding technology integration are quite positive, each step they take to the actual implementation of technology is slow and narrow (Chambers & Bax, 2006; Meskill, et.al. 2002). Similarly, some other explanations regarding insufficient CALL training are lack of funding to expand programs, too many other issues that require attention, and a wide spread belief that those who are interested in CALL will simply "pick it up" (Kessler, 2006).

Egbert, et al. (2002) studied the use of CALL by teachers who had completed a CALL course. As the findings suggested, despite being confident and capable with the technologies, teachers were not likely to implement these newly learned practices due to a number of other factors. These

impediments included time, curricular and administrative restrictions as well as an insufficient amount of resources. Lack of resources are categorized into hardware, software, time and technical, emotional and curricular. Sometimes, when the introductory project is complete, the resources are no longer available, thus leaving the faculty in a position that discourages use of technology (Barnes 1997). Likewise, Kessler's (2007) study concluded that professionals who either have a Master's in TESOL (Teachers of English to Speakers of Other Language) degree or are involved in TESOL graduate education feel confident about CALL in general. However, they do not feel confident that they could create CALL-based materials. In addition, they are less confident of making appropriate decisions regarding CALL implementation. Thus, many teachers do not fully make CALL a promising tool in language education due to some pedagogical concerns and practical problems.

Ertmer (1999) categorizes the barriers that negatively influence teachers' decisions to use technology and subsequent behaviors teachers might encounter as first-order or second-order barriers. They can be understood as follows:

Thus, *first-order barriers* to technology integration are described as being extrinsic to teachers and include lack of access to computers and software, insufficient time to plan instruction, and inadequate technical and administrative support. In contrast, *second-order barriers* are intrinsic to teachers and include beliefs about teaching, beliefs about computers, established classroom practices, and unwillingness to change. While many first order barriers may be eliminated by securing additional resources and providing computer skills training, confronting second-order barriers requires challenging one's beliefs systems and the institutionalized routines of one's practice. Thus, in terms of technology integration, this may require reformulating basic school culture notions regarding what constitutes content and content coverage, what comprises learning and engaged time, and even, what behaviors define 'teaching.' (p.48).

As Mahdi (2013) suggested, for CALL normalisation to be occurred in an EFL context, five major issues should be addressed, i.e., personal, technical, pedagogical, socio-cultural, and institutional. Hani (2014) found that the most significant barriers to CALL in Jordan were: (1) inadequate number of computers, (2) technical problems, (3) insufficient teacher training, (4) lack of time, and (5) high cost. According to Hedayati & Marandi (2014), the obstacles in implementing CALL in language classrooms could be classified into three categories: teacher, facility, and learner constraints. Lin, Huang & Chen (2014) investigated barriers to the adoption of ICT by language teachers. According to the findings, the most critical barriers to these teachers' adoption of ICT were insufficient support and insufficient time for developing technology-driven pedagogy and activities. Studying on EFL teachers' perceptions on blended learning situations, Mohsen and Shafeeq (2014) categorized the barriers into three: teachers' incompetency in IT, students' incompetency in IT, and technical problems. Tour (2015) conducted a study to find a solution to the slow transfer from the traditional mode of pedagogy to technology enhanced learning. The study found that the participants' digital literacy practices were shaped by digital mindsets, in relation to the questions that explored how teachers used digital technologies and what influenced their practices. Thus, studies on barriers to technology integration have produced different dimensions in different contexts. Considering the lack of a consolidated theoretical framework on barriers to CALL integration in EFL, especially in the context of PYP English courses, this study attempts to explore EFL teachers' perceptions of barriers to technology integration.

### **3. METHODOLOGY**

#### **3.1. PARTICIPANTS**

50 EFL teachers at university level were selected as a sample of this study. They were teaching English skills at PYP, Najran University. As the number of EFL instructors was limited, the researchers selected all the population as a sample of the study.

#### **3.2. INSTRUMENTATION**

The main purpose of this study is to investigate the barriers to CALL practices in PYP English courses. Instrumentation is divided into two: quantitative instrumentation and qualitative instrumentation. During the quantitative phase, a manual survey was used to gather data from the participants. The survey was constructed by the researchers. Two professors in Applied Linguistics first reviewed the survey instrument and some items were modified while some others were merged together. The survey was piloted with an exploratory sample of fifteen ESL teachers. Final survey questionnaire was developed through the long processes of literature review, expert reviews, and pilot test. It contained two sections. Section A on background information contained 12 items and section B on barriers to CALL integration contained 16 items. First five items in section A of the survey asked participants to answer their background information with five closed-ended questions, namely name, e-mail, job title, age group, and years of teaching English. The next seven questions in section A were checklists of the participants' ICT/CALL awareness and experiences. The purpose of these items was to identify the participants' ICT accessibility at home/workplace. In addition, it is intended to understand the participants' experience with CALL practices. Section B included 16 questions, using a 5-point Likert scale (5 = Strongly Agree, 4 = Agree, 3 = Neutral, 2 = Disagree, 1 = Strongly Disagree), on barriers to CALL integration in ELT. These items were focused on the perceived barriers to CALL integration in ELT, which include pedagogical, technological, attitudinal and administrative points of view. The researchers established internal consistency for the 16 items included in Section B of the questionnaire using Cronbach's Alpha reliability, and the overall value for alpha of the 16 items was 0.98, which is very high.

In the qualitative phase, data were collected through focus group discussion. A workshop was conducted by the researchers to discuss the barriers to technology integration. A team of 21 teachers participated in the discussion. They were divided into three groups and each group was assigned a particular area in the form of questions. After the discussion, the group leaders presented the themes in front of the participants, followed by comments by the participants.

### **4. RESULTS AND DISCUSSION**

Demographic data of the survey participants are provided in Table 1. Since the survey was conducted in a boys' campus, only male EFL teachers participated in the survey. In terms of age, four participants (8%) were between 20 and 30 years old, thirty (60%) were between 30 and 40 years old, sixteen (32%) were between 40 and 50 years old. With regard to teaching experience, out of 50 participants, eight (16%) were teaching English for a period of less than five years. Twenty-two (44%) participants had a teaching experience of 5 to 10 years, six (12%) were teaching for 10 to 15 years, eight (16%) were teaching for 15 to 20 years, and six (12%) had a teaching experience of more than twenty years.

Table 1:Demographic Data of the Participants

	Period	%	Period	%	Period	%
<b>Age group</b> (Years)	20-30:	8	30-40:	60	40-50:	32
<b>Experience</b> (Years)	Less than 5:	16	5-10:	44	10-15:	12
	15-20:	16	More than 20:	12		

Table 2 reports the participants ICT/CALL awareness and experiences. In general, the participants were not satisfied with the ICT facilities at their workplace. 84% of the participants would like to see more ICT facilities in the college. 60% of the participants attended a formal training course in technology-enhanced language teaching. However, only 40 % of them had attended a training in Computer-assisted Language Learning (CALL) at their college. Participants, in general, did not support the idea that some people are too old to learn how to use a computer and the Internet. 92% of them thought that it is not a matter of age. The participants' perceptions of the CALL were positive. 76% of them thought that using IT tools and the Internet is a good way to teach/study a foreign language. In addition, 92% of the participants viewed the Internet as a useful tool in teaching students about the culture of the language they are studying. 56% of them supported the idea that ICT and the Internet should be used and applied in all areas of education.

Table 2 :Participants' ICT/CALL Awareness

Are you satisfied with the Information and Communications Technology (ICT) facilities at your college?	
<input type="checkbox"/> I would like to see more ICT facilities in my college	84%
<input type="checkbox"/> I would like to see fewer ICT facilities in my college	00%
<input type="checkbox"/> I have access to computers at my school, but I would like to see them upgraded	16%
<input type="checkbox"/> I have ICT facilities, but I do not know how to use them well	00%
Have you ever attended a formal training course in technology-enhanced language teaching?	
<input type="checkbox"/> Yes	60%
<input type="checkbox"/> No	40%
Have you ever attended a training in Computer-assisted Language Learning (CALL) at your college?	
<input type="checkbox"/> Yes	40%
<input type="checkbox"/> No	60%
Do you think some people are too old to learn how to use a computer and the Internet?	
<input type="checkbox"/> Yes, I think some people are too old	08%
<input type="checkbox"/> No, I don't think it's a question of age	92%

Is using IT tools and the Internet a good way to teach/study a foreign language?	
<input type="checkbox"/> Yes, it is a good way to teach/study a language	76%
<input type="checkbox"/> No, it is a bad way to teach/ study a language	00%
<input type="checkbox"/> I do not know enough about the subject	24%
Can the Internet be useful in teaching students about the culture of the language they are studying?	
<input type="checkbox"/> Yes	92%
<input type="checkbox"/> No	00%
<input type="checkbox"/> I don't know	08%
Do you think ICT and the Internet should be used and applied in all areas of education?	
<input type="checkbox"/> Yes, it's a good idea	56%
<input type="checkbox"/> No, it's a bad idea to use computers in all areas of education	04%
<input type="checkbox"/> Computers are useful, but face-to-face contact is the best way of teaching	36%
<input type="checkbox"/> I am not sure	04%

To answer the research question, "What are the barriers to CALL practices in preparatory year English courses?", descriptive statistics have been calculated to indicate the means, standard deviation, and frequency of the participants' responses to the survey. To interpret the level of means, the authors applied Siti Rahaya and Salbiah's (1996) model of explaining means. It is summarized in Table 3. Table 4 reports the descriptive statistics of the survey.

Table 3:Score category breakdown adopted from Siti Rahaya and Salbiah (1996)

Means	Corresponding level
1.0 - 1.80	Very low
1.81 - 2.60	Low
2.61 - 3.40	Moderate
3.41 - 4.20	High
4.21 - 5.0	Very high

Table 4 shows percentage of the responses, mean, and standard deviation of the participants' perceptions of the barriers to CALL integration. The mean scores ranged from 1.84 to 3.48. The total mean of the 16 statements is 2.71, indicating that the overall mean of the statements is *moderate*. This shows that the participants, in general, had mixed responses to the statements. It is interesting to note that while the participants agreed to some factors that play as barriers to effective CALL integration, they did not agree to some other factors. The only item that got high mean was item 11 (Strongly Agree + Agree= 52%,  $M=3.48$ ). Most participants thought that the existing training opportunities were inadequate to integrate ICT/CALL into the given EFL context. Other items which got significant agreement were item number 8 (Strongly Agree + Agree=32%,  $M=3.22$ ), 12 (Strongly Agree + Agree=42%,  $M=3.28$ ), and 14 (Strongly Agree + Agree=38%,  $M=3.12$ ). This shows that teachers had concerns regarding students' access to inappropriate materials. As the scores in item 12 shows, the participants did not have proper administrative support to integrate ICTs in teaching. In addition, there is lack of technical support or advice at the workplace. All other items got low or moderate mean, which shows that the participants in general did not agree to the statements. The results show that the teachers are confident and updated to use technology in language teaching. However, there emerged barriers from the point of view of training, availability of adequate resources, and administrative support.

Table 4: Descriptive Statistics of the Survey

Statement	Percentage %					M	SD
	SA	A	N	D	SD		
1. I think computers are too expensive to use in education	6	8	22	48	16	2.40	1.05
2. We do not have enough computers at our college.	2	34	22	30	12	2.84	1.09
3. Computers at our college are outdated.	0	26	30	36	8	2.74	0.94
4. I do not have knowledge in using ICTs.	4	8	12	58	18	2.22	0.97
5. We do not have good CALL software in the local market.	2	18	56	24	0	2.98	0.71
6. I face difficulty in using computers.	0	4	10	52	34	1.84	0.76
7. Internet access is not easily available at my workplace.	0	34	28	30	8	2.88	0.98
8. I am concerned about students' access to inappropriate materials.	6	26	52	16	0	3.22	0.79
9. I think teachers do not have time to use computers or the Internet.	0	4	22	54	20	2.1	0.76
10. I think students do not have time to use computers or the Internet.	0	8	14	58	20	2.1	0.81
11. I think the training opportunities are inadequate to integrate ICTs in teaching English	8	44	36	12	0	3.48	0.81
12. I do not have administrative support to integrate ICTs in teaching.	10	32	34	24	0	3.28	0.95
13. I do not have enough pedagogical knowledge regarding the ways to integrate ICT into EFL.	0	12	32	48	8	2.48	0.81
14. There is lack of technical support or advice at my workplace.	4	34	32	30	0	3.12	0.89
15. There is lack of motivation by colleagues/superiors regarding technology integration.	2	16	42	38	2	2.78	0.81
16. Most teachers at my college do not want to change from the traditional methods.	2	22	36	36	4	2.82	0.89

Findings of the study support the view of Egbert et al. (2002), "it is not due to a lack of confidence or interest in CALL that teachers do not use CALL activities; rather, it is due to a lack of time, administrative or curricular restrictions, or lack of resources" (p. 122). As reported by the participants, they faced more first-order barriers (Ertmer, 1999), which are extrinsic to teachers such as lack of access to computers and software, insufficient time to plan instruction, and inadequate technical and administrative support. This is a positive sign as these barriers may be eliminated by securing additional resources and providing computer skills training (Ertmer, 1999). The administrative/ training areas were significant barriers to the given CALL context.

This is in the line of some previous studies (Chambers & Bax, 2006; Clark & Gorski, 2001; Egbert & Thomas 2001).

In this study, the focus group discussion answered three questions related to EFL teachers' perceptions of barriers to CALL integration. The questions included "What CALL practices are you currently using in your workplace?", "What are the main barriers to CALL practices in PYP English Course delivery?", and "How can CALL practices be maximized in an EFL context?" The data were analyzed based on the coding process. Any words or sentences relating to the teachers' perceptions of barriers to CALL were coded, conceptualized, and categorized until the categories were saturated.

**CURRENT USE OF CALL.** The participants used personal computers (PCs) and speakers in their actual classroom teaching. Some of them used projectors. Most of them were using Blackboard, a learning management system, to upload materials and assignments for the students. In addition, they were using university Edugate System for attendance registry and marks entry. In general, the use of CALL applications was limited in nature though they were aware of the various CALL applications that can be used for language learning. However, the teachers' familiarity with the technology did not reflect in their actual classroom practice. This is in the line of Egbert et al. (2002), who found that despite being confident and capable with the technologies, teachers were not likely to implement these newly learned practices due to a number of other factors. Some previous studies (Chambers & Bax, 2006; Meskill et al. 2002) have pointed similar issues, that is, though some teachers' beliefs regarding technology integration are quite positive, each step they take to the actual implementation of technology is slow and narrow. As Ertmer (2005) stated, real technology integration happens when it is effectively applied to a curriculum and to the students' learning. When it comes to the actual practice, the link between knowledge of technology and actual practice is missing. Though the teachers possessed *perceived usefulness*, it is assumed that they lacked *perceived ease of use* (Davis, et al. 1989).

**BARRIERS TO CALL.** The most important barrier, according to the participants, is lack of sufficient technology in classroom and faculty's offices. It includes the availability of updated PCs and proper Internet connections in the classroom. As found in the survey, these issues are related to the administration. In addition, in the line of the survey questionnaire, the participants reiterated that lack of proper training is a significant barrier. Along with lack of training, non-availability of relevant resources that support the syllabus to be covered is a serious issue. All these major issues are repetitions of the findings in the survey. As the discussion pointed out, lack of administrative support is related to economic aspect of CALL. However, there were many instances when the available resources were not utilizable because of administrative lapses. The focus group discussions did not deny some other issues like teachers' technophobia. In addition, a few teachers still doubt the effectiveness of technology integration. The participants, in general, preferred a blended learning situation in which both traditional and technology integrated modes are judiciously used. Though teachers were confident of their ICT skills, they perceived lack of training as a barrier to integrate CALL in actual teaching-learning process. The current facilities at the workplace are not sufficient to integrate CALL in ELT. Previous studies (Mahdi, 2013; Hani, 2014) have found similar issues in CALL integration. This suggests the necessity of well-equipped classrooms, and the administrators need to address such issues. Teachers feel CALL lessons time-consuming in the absence of adequate ICT facilities. Another issue is related to the suitability of the commercial CALL packages to the students' level. As Kessler (2007) concluded, even trained teachers do not feel confident that they could create CALL-based materials. The only solution is to rely on available materials or CALL packages. However, the teachers become less confident of making appropriate decisions regarding CALL implementation (Kessler, 2007), which will naturally lead to a non-CALL situation.



**MAXIMIZING CALL PRACTICES.** The participants' suggestions to maximize CALL practices were directly related to the barriers they faced. Most of these barriers are first-order barriers (Ertmer, 1999). Firstly, sufficient technology, both hardware and software, should be available to teachers as well as students. In addition, both teachers and students require updated training programmes whenever new technology is available. Administrators should maintain adequate technical staff to support the faculty. As suggested by some researchers (Northrup & Little 1996), follow up activities and retraining are required when new technologies and materials become available. As suggested by Hubbard & Levy (2006), the production of training and support materials directly oriented towards classroom teachers is an important area that needs to be addressed. This study endorses previous studies that suggested importance of training in implementing CALL (Samuel & Zitun, 2007). In the line of previous research, the focus group discussion view that teachers need to be familiar with a variety of information regarding basic computer, hardware, software and lab operation in order to make informed decisions regarding CALL use (Chapelle & Hegelheimer, 2004).

## 5. CONCLUSION

Although The EFL Teachers In This Study Were Aware Of The Benefits Of CALL Technology To Improve Students' Language Skills, Their Actual Practice Was Limited In Nature. In Addition, It Is Found That The Current Facilities In The EFL Context Under The Study Were Not Sufficient For Adequate Technology Integrated Language Teaching. Teachers' Pedagogical And Technological Concerns Need To Be Addressed By The Administrators. As Lack Of Administrative Support Has Been A Recurring Theme In Many Previous Studies, Educational Administrators Need To Equip The Workplace Of Our Time In Such A Way That Enhances Easy CALL Integration In EFL Contexts. Timely Administrative And Technical Support Is Essential To Integrate CALL In Actual Teaching-Learning Process. Lack Of Training Plays An Important Barrier, So Continuous And Comprehensive Training Programmes Need To Be Planned. In Addition, Some Teachers Have Concerns Regarding Students' Access To Inappropriate Materials And Deviation From The Objectives Of The Course. This Shows The Administrators And Policymakers Need To Concentrate On Creation Of Suitable Courseware. The Study Reiterates The Need For A Holistic Approach At The Institutional As Well As Inter-Institutional Levels To Successfully Implement Technology Enhanced EFL Practices. Acknowledgements

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