Perceptions and Attitudes toward Using CALL in English Classrooms among Saudi Secondary EFL Teachers

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Reporting on data collected from a survey of Secondary EFL teachers in Saudi Arabia, this study is an analysis of the perceptions and attitudes held in regard to the use of computer assisted language learning (CALL) in English classrooms. Background data as well as attitudes were collected from 183 male and female respondents from a pool of 250 randomly selected secondary level teachers in Riyadh. The results, determined after descriptive as well as statistical analysis, indicated a positive correlation between a teacher's attendance during training, both for computer as well as CALL, and a positive attitude toward the use of IT approaches to learning in the Saudi classroom. Recommended actions include specialized training for EFL teachers who are required to integrate CALL into regular classroom instruction. Training programs should additionally be cognizant of other needs that may emerge through applied staff feedback exercises.

1. Introduction

1.1 Importance of Attitudes

The aim of the research at hand was to discover the perceptions and attitudes of secondary English as a Foreign Language (EFL) teachers toward the use of Computer Assisted Language Learning (CALL) in English classrooms in Saudi Arabia. Many factors, including student age, teacher age, and presence or absence of the teacher during training, can contribute to or distract from the success of a newly introduced teaching method. The successful implementation of a pedagogical tool, such as the inclusion of information technology (IT) in the classroom, is contingent upon the methods and practices of the educator who uses it. The attitude of the teacher towards the tool or approach affects the way it will be used and implemented. The increasing inclusion of technologically advanced teaching tools is requiring a shift in the epistemology of today's teachers.

Teaching approaches like CALL can vary considerably in implementation and efficacy. One explanation of such variation is in the resistance of educators to progressive approaches that are imported from other academic environments (Bain & McNaught, 2006). Approaches like CALL depend also on the level of comfort an educator feels with regard to computers and advanced technology (Carballo-Calero, 2001). Older teachers may feel

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unprepared to use such approaches in the classroom if they are inexperienced with the technology. Even if the will to use imported teaching tools is present, some educators are unable to properly augment the tool to their particular classroom (Bain & McNaught, 2006). These and other attitudes that may be expressed by the teacher will inadvertently be transmitted to the students. Transmission of such negative attitudes can sometimes be the deciding factor in the efficacy of a new teaching initiative.

1.2 Computer Use in Saudi Arabia

The use of IT in Saudi Arabia has broadened considerably in the last three decades. First used by the Ministry of Education, computers served as a tool to store and process information related to student records, teachers, and administrators. Students also used computers at this time to prepare assignments and write reports. In time, computers were incorporated into teaching regimes to assist in course preparation, document production, book creation, management, and other related teaching activities. The use of computers also proliferated in the hard sciences in support of scientific experiments. From the early 1990s, the Ministry of Education introduced computer literacy programs as a compulsory subject in the secondary stage curriculum. After the successful introduction of two courses, a third course was specifically introduced for business administration students. The Ministry of Education provided all secondary schools with a computer lab and training courses were held in the labs for select teachers (Al-Aqeely, 2001). More recently, the Ministry of Education expanded the program and began equipping primary schools with computer labs as well. However, due to shortage of teachers and trained maintenance staff, this initiative was discontinued.

In support of English courses, the Ministry began developing supplementary e-learning materials for students and teachers. Some private companies developed additional software for the secondary school English curriculum that included exercises and other supporting tools (Bedaiwi, 2007). Today, education in Saudi Arabia is facing huge reforms as King Abdullah pursues a new academic endeavor, "Tatweer". This project will include the re-qualification of teachers and educators, curriculum development, and conscientious development of the school environment. Within this project, 400,000 male and female teachers of different subjects will be provided IT training, laptops will be given to distinctive teachers as an incentive, schools will be equipped with data projectors, smartboards will be provided, schools will be connected by a communication network, and servers and databanks of e-learning courses will be constructed (Ministry of Education, 2007).

1.3 Importance of the Study

Efficacy of a new teaching approach is irreducibly tied to the epistemological beliefs and practices of the teacher. By encouraging teachers to reflect on their experiences and the challenges they face, decision makers can better ensure productive use of new technological innovations in education. The infusion of IT tools into education in general, and English classes more specifically, is controlled by decision makers in the Ministry of Education in Saudi Arabia. Collection of the perceptions and attitudes of the teachers who use such tools, followed by careful analysis, is an important step in the assessment and modification of the teaching initiative. Careful monitoring and evaluation of the needs and experiences of EFL teachers will assist decision makers

as they develop methods to use IT more effectively in the education system. Such tracking will further help in the development of future initiatives.

1.4 Study Goals

As stated, the study at hand investigated Saudi secondary EFL teachers' attitudes and perceptions toward using computers in their English classrooms. Specific study goals included:

1. Collection of the attitudes of Saudi secondary EFL teachers.
2. Analysis of the differences in attitudes that may occur between male and female teachers.
3. Review of the effects of other factors on the attitudes of teachers.
4. Understanding the implications of the infusion of IT tools into English language classrooms in Saudi Arabia and suggestions for improvement.

1.5 Questions

1. What are the Saudi EFL teachers' attitudes towards using computers in their English classrooms?
   - Are there any differences in teachers' attitudes according to computer training attendance?
   - Are there any differences in teachers' attitudes according to their use of their school's computer lab?
   - Are there any differences in teachers' attitudes according to attendance in CALL training programs?
2. What are the Saudi EFL male teachers' attitudes towards using computers in their English classroom?
3. What are the Saudi EFL female teachers' attitudes towards using computers in their English classroom?
4. Are there any differences between the two genders in terms of their attitudes toward using computers in their English classrooms?
5. Are there any differences between the two genders in terms of training, use of the school's lab, and CALL training?

2. Literature Review

An attitude is defined as "a relatively enduring organization of beliefs, feelings, and behavioral tendencies towards socially significant objects, groups, events or symbols" (Hogg & Vaughan, 2005, p. 150). In the educational environment, attitudes harbored and expressed by teachers as well as students play an important role in the achievement of educational objectives. Specifically with regard to the use of new innovations in the classroom, traditional teaching methods are being forced to accommodate what are sometimes incommensurate information technologies. The opinions and attitudes of teachers play a prominent role in educational interaction as well as instructional choices and as such are fundamental in examining the outcome of technological integration in the classroom (Albion & Ertmer, 2002; Pajares, 1992; Becker, Ravitz, & Wong, 1999). In fact, teachers' attitudes toward IT have been found to be among the most critical variables in predicting the successful use of technology during educational activities (Becker *et al.,* 1999).

Research to date has identified several variables that correlate to teachers' attitudes toward IT, including available teaching models, level of support of school authority figures in the area of IT integration (Zapata, 2004), undergraduate teaching preparation (Becker *et al.,* 1999), teaching experience, financial support, and access to technology training (Saye, 1998). Several studies have determined there is a positive relationship between technology training and teachers' attitudes (Becker *et al.,* 1999). Particularly important to this study, training can significantly impact the ways in which a teacher embraces IT tools in the classroom. In an examination of teaching styles and IT integration in Italy, results "appeared to indicate that both personal theories of teaching and the level of competence with ICT play a major role in how teachers implement ICT and in their perception of their own and their pupils' motivation" (Gobbo & Girardi, 2001, p. 63).

In contrast, a study carried out by Veen (1993) that described the daily pedagogical practices of four teachers in the midst of implementing information and communication technology (ICT) in their classrooms in a Dutch secondary school, found that the most important factor effecting teachers' use of ICT was teachers' beliefs regarding what should be taught and the way it should be taught. Computer related technical skills were found to be less important than skills related to the teachers' competence in managing activities and communicating lessons (Veen, 1993).

It is suggested that in Education courses, student teachers must be given the opportunity to become acquainted with newly introduced technologies. Mcalister *et al.* (2005), in their study of student teachers' use of computers to teach mathematics, found that overall attitudes towards using computers were very positive, although many of them had limited experience with computers. The conclusion of Mcalister *et al.* (2005) was that more training and support in IT should be given to schools as well as teachers, and more value should be placed on the teacher as a role model for students.

Some research has found that often teachers do not have positive attitudes toward technology, although they might view the technology as an effective instructional strategy (Clark, 2000). Employing Engeström's theoretical approach to a study on teachers' attitudes towards collaborative learning environments, Kollias *et al.* (2005) tracked the dimensions of the learning activity system that are most affected by changes in innovation and that relate directly to attitudinal shifts among teachers. Findings of the team included reflections on the changing division of labor (such as increased demands on the teacher requiring technical knowledge), increased preparation, and articulation of long term goals (Kollias *et al.,* 2005). Kollias and colleagues found that encouraging positive teacher attitudes toward technological innovation was a key factor in enhancing computer integration, and also for avoiding teacher resistance to innovation.

Teachers who reportedly value the integration of technology alter their teaching in order to better incorporate IT approaches (Cox *et al.,* 1999). Software availability and teacher willingness to use the software can have positive effects on adoption of IT in the classroom (Clariana, 1992; Sepehr & Harris, 1995). Interactive venues and discussion boards can help teachers to learn with technology instead of solely using the technology to teach (Coniam, 2002; Ducate & Arnold, 2006). Additionally, educators who report a strong commitment to learning as well as their own professional development have been found to integrate IT tools more readily (Hadley & Sheingold, 1993; Becker *et al.,* 1999).

In conducting research on teachers' perceptions and attitudes, the teacher must be viewed

holistically as a part of the greater education environment. In her review of Engeström's activity theory, Zapata (2004) suggests that researchers abandon the position of viewing teachers as isolated practitioners and focus rather on the system in which knowledge and meaning are constructed. By focusing on the dialectical aspects of collective learning, Engeström emphasized that actions, thoughts, and feelings cannot be separated from the interactive human environment in which they occur. The experience of the instructor within the networks of activity in which they participate can influence the degree to which they are receptive to innovation. It is thus important to note that the relationships between attitudes and practices cannot be readily defined as beliefs are interconnected in ways that are not always easy to anticipate (Bain & McNaught, 2006).

Teachers, as the essential fulcrum of knowledge transference, are unfortunately seldom included in the development of new pedagogical approaches. Although the educational policies of many countries have embraced technology as a crucial element of the modern classroom, systematic efforts to document and to explore teacher' attitudes towards such innovations has not been conducted. This exclusion of teachers in instructional design is particularly noted in the field of second language instruction (Zapata, 2004). She suggested that "even though there has been considerable research on teachers' beliefs and perceptions of the use of instructional technology in elementary, middle, and high school classes in subjects other than foreign languages, the area of CALL remains mostly unexplored" (2004, p. 340).

In summary of Delcloque's review of research conducted to date on the CALL approach, Stephen Bax (2003) states sources on the subject can be categorized into two types, those properly researched accounts and interpretive accounts that are more subjective (Delcloque, 2000). Bax argues the former (Levy, 2000; Ahmad *et al.,* 1985) are mostly a collection of facts and as such are a surface review rather than an in-depth analysis. The second type, however, (Warschauer, 2000) offers more substantive analysis through the description of three phases of CALL identified as behavioristic, communicative, and integrative. Although the paradigms are not easily identified chronologically, they do however provide a framework for differentiating between the various perspectives educators and administrators may take when considering the CALL approach.

In seeking to analyze CALL in the Saudi classroom, the research at hand provides an analysis of the integrative phase of CALL as opposed to the behavioristic or communicative phases described by Bax (2003). In seeking to understand why CALL varies significantly in implementation and success, Zapata (2004) suggests differences are sometimes attributable to institutional differences between educational facilities. The institutional policies that govern a given language department dictates the ways in which approaches like CALL will be conceptualized and integrated. The extent to which the teaching community is involved in the implementation of CALL, training provided to teachers, and financial support for the program, are also tied to institutional policies (Zapata, 2004). As Bax suggests, CALL is not fully normalized as of yet and "most people in language education would recognize that CALL does have a relative advantage (now that the communicative potential can at least be realized through web technology), but we are still at the stage where the majority of teachers are nervous of it" (Bax, 2003, p. 25).

As explored above, teachers' attitudes play a decisive role, be it positive or negative, in the educational environment. As such, the attitudinal position of the teacher is a fundamental aspect in an analysis of the outcome of technological integration. Pertinent to this study, access

to and attitude toward technology training is viewed to correlate to the integrative success of approaches such as CALL. While research has found that although some teachers do not have positive attitudes toward technology, they may still view the technology as an effective instructional strategy. As discussed, the experience of the instructor within the network of administrative activity can influence the degree to which they are receptive to innovation. In regard to Saudi English teachers, an understanding of a teacher's experience with school resources such as computer training, CALL training, and computer labs, will assist in determining how positive attitudes towards CALL are fostered. Institutional policies, such as support for and extent of training offered to secondary English teachers, is considered an important factor in the integrative success of the CALL approach.

3. The study

3.1 Research Design

The survey undertaken was intended to provide a descriptive analysis of the attitudes of secondary EFL teachers in Saudi Arabia. A descriptive research design such as this can provide useful information about the distribution of a wide range of characteristics and of relationships between such characteristics. According to Gall, Borg, and Gall (1996), "the purpose of a survey is use questionnaires to collect data from participants in a sample about their characteristics, experiences, and opinions in order to generalize the findings to a population that the sample is intended to represent" (p. 289).

3.2 Participants

The participants of this study were 183 male and female EFL teachers at the Secondary stage schools in Riyadh city. The group was composed of 105 male teachers and 78 female teachers. The total EFL teacher population in Secondary schools in Riyadh is 436 male teachers and 430 female teachers. As there is little variability in the teacher population and less than 100% returns were expected for the questionnaire, a total of 250 male and female teachers were originally targeted for the study sample. Cluster sampling was utilized to identify the sample group by dividing the Riyadh Directorate for Boys Education and the Directorate for Girls Education into five supervision centers: North, South, East, West, and Centre. Following this division, 25 questionnaires were distributed for each supervision center, male and female. The percentage of returned questionnaires is sufficient at 84% for male teachers and 62.4% for female teachers. Poor response among the female teachers is acknowledged and is attributed to data collection constraints within the Girl's Directorates.

3.3 Research Tools

Dörnyei indicated that questionnaire data is the most common type of data collected in attitudes studies (2001). Questionnaires are simple to administer and provide researchers with quantitative data.

For this study, statements were composed concerning teachers' attitudes toward using computers to assist in teaching English language courses. The statements were either positive/favorable or negative/unfavorable towards the objects of interest. Containing two parts, the questionnaire elicited biographical and background data first and secondly questioned teach-

ers' attitudes toward using computers to teach English. Twenty four items, some positively and others negatively worded, were used to assess the teachers' affective reaction to computer use in teaching English. The questionnaire was piloted and the pilot results helped in modifying the questionnaire. The questionnaire were evaluated by four academic professors specialized in EFL, CALL, and IT for content and face validity. A reliability analysis was computed for the questionnaire. The reliability results were (Cronbach's alpha) 0.884 for all the questionnaire items and 0.9122 for the attitudes items. It was felt that the reliability estimates were very high and acceptable.

3.4 Data Collection and Analysis Procedures

Data collection was conducted in the school setting, employing normal procedures, and on a regular school day during the second semester of 2006. Data analysis was conducted in accordance with the research questions, all of which were concerned with the teachers' attitudes towards using computers in teaching English as a foreign language. Frequency, descriptive analysis tests, and mean scores were used to measure the teachers' attitudes and to provide a picture of the population under study. T-tests for independent samples were used to test the differences between the participants according to their attendance during computer training, use of the school's computer lab to teach English, and attendance during special training in CALL. The T-tests also were used to measure the differences that occurred between male and female teachers in their attitudes toward using computers to teach English. The study results are reported below.

4. Study Results

As seen in Tables 1 and 2 below, biographical data collected indicated the sample population of Secondary school English teachers who participated in the questionnaire was majority male with a frequency of 57 percent and mostly in the age range of 26 to 35 with a frequency of 44.8 percent. Female teachers accounted for 42.6 percent of respondents. The second most common age range was 36 to 45 years with a frequency of 37.2 percent. There were 18 participants aged less than 26 years and two participants aged more than 55 years.

Table 1. Distribution of the sample according to sex

Sex	Frequency	%
Male	105	57.4
Female	78	42.6
Total	183	100

Table 2. Distribution of the sample according to age group

Age group	Frequency	%
less than 26 yr	18	9.8
26–35 yr	82	44.8
36–45 yr	68	37.2
46–55 yr	13	7.1
More than 55	2	1.1
Total	183	100

The majority, 64.1 percent, of female respondents earned a B.A. from an Art college, while only 36.2 percent of male respondents received the same degree (see Table 3). An equal portion of male respondents received a B.A. from an Education college. As seen in Table 4, the majority of respondents, 56.2 percent of males and 73 percent of females, had more than 10 years of experience.

Table 3. Distribution of the sample according to qualification

Level	Male		Female	
	Frequency	%	Frequency	%
BA Teachers' colleges	17	16.2	-	-
BA Art college	38	36.2	50	64.1
BA Education college	38	36.2	25	32.1
Other	12	11.4	3	3.8
Total	105	100	78	100

Table 4. Distribution of the sample according to years of experience

Level	Male		Female	
	Frequency	%	Frequency	%
less than 6 yrs	28	26.7	13	16.7
6-10 yrs	18	17.1	8	10.3
11-15 yrs	21	20.0	31	39.7
more than 15 yrs	38	36.2	26	33.3
Total	105	100	78	100

When questioned about training received, the majority of male respondents (54.3 percent) indicated they had attended a computer training program, while a minority of female respondents (47.4 percent) attended computer training (see Table 5). However, when asked specifically about CALL training, only 15.2 percent of male respondents and 6.4 percent of female respondents had attended CALL training (see Table 6). In relation, only 6.7 percent of male and 15.4 percent of female respondents use the computer lab for teaching English (see Table 7).

Table 5. Distribution of the sample according for the question: "Have you ever attended a computer training program?"

Level	Male		Female	
	Frequency	%	Frequency	%
No	48	45.7	41	52.6
Yes	57	54.3	37	47.4
Total	105	100	78	100

Table 6. Distribution of the sample according to the question: "Have you ever attended a CALL training?"

Level	Male		Female	
	Frequency	%	Frequency	%
No	89	84.8	73	93.6
Yes	16	15.2	5	6.4
Total	105	100	78	100

Table 7. Distribution of the sample according to the question: "Do you use the school lab for teaching English?"

Level	Male		Female	
	Frequency	%	Frequency	%
No	98	93.3	66	84.6
Yes	7	6.7	12	15.4
Total	105	100	78	100

To answer the main research question, (What are the Saudi EFL teachers' attitudes toward using computers in their English classroom), table 8 shows a descriptive analysis results indicating positive attitudes were held by the Saudi EFL teachers toward using computers with general mean score of (3.91) and standard deviations (0.56). Table 8 also shows that both males and

females hold positive attitudes toward using computers at their English classroom with mean scores (3.82) and (4.04) respectively.

Table 8. General mean scores for the attitudes item

Scale	Level	N	Mean	SD
The scale (attitudes)	All sample	183	3.91	0.56
	Male	105	3.82	0.64
	Female	78	4.04	0.41

In analysis of the question pertaining to computer course attendance by teachers, T-test results for independent samples show that there are significant differences among the participants in their attitudes towards using computers when compared to their attendance in computer training programs. As seen below in Table 9, the t-value was (−4.26) with P level (0.000) in favor of those who attended computer training programs. For statistical analysis of each item in the survey please see Appendix A.

Table 9. The differences in attitudes across entire sample according to computer course attendance

Scale	Level	N	Mean	SD	t-value	Sig.
The scale (attitudes)	Not attended	89	3.7397	.61057	−4.26	0.000**
	Attended	94	4.0767	.45098		

** Significant level at 0.01

Furthermore, as seen in Table 10, T-test results show that there are significant differences among the study participants in their attitudes toward the use of computers and use of school computer labs for teaching English. The results are in favor of those who use the computer labs to teach English with t-value (−3.122) and P level (0.002).

Table 10. T-test results of the differences across the entire sample according to their use of computer labs to teach English

Scale	Level	N	Mean	SD	t-value	Sig.
The scale (attitudes)	There is no computer lab	48	3.701	0.497	−3.122	0.002**
	There is a computer lab	135	3.988	0.563		

** Significant level at 0.01

However, regarding the research question as whether attitudes differ in relation to CALL training programs, the T-test results for independent samples show that there are no significant differences between the study participants in their attitudes toward using computers according

to their attendance of a CALL training program (see Table 11). The t-value was (−0.258) and the P level was (0.97) which is bigger than 0.05.

Table 11. T-test results of the differences across the entire sample according to their attendance of CALL programs

Scale	Level	N	Mean	SD	t-value	Sig.
The scale (attitudes)	Did not attend a CALL training program	162	3.909	0.560	−0.258	0.97
	Did attend a CALL training program	21	3.942	0.564		

As the research questions of this study are additionally concerned with male teachers' attitudes towards using computers in their English classroom versus female attitudes, the gender of respondents is indicated in Tables 12 and 13. As seen in Table 12, T-test results for independent samples show that there are significant differences between male and female teachers of English who participated in this study in their attitudes toward using computers to teach English. The female participants show more positive attitudes than male participants with t-value of (−2.793) and P level of (0.006).

Table 12. T-test results of the difference between male and female participants in their attitudes towards using computers in teaching English

Scale	Level	N	Mean	SD	t-value	Sig.
The scale (attitudes)	Male	105	3.82	0.63	−2.793	0.006**
	Female	78	4.04	0.41		

** Significant level at 0.01

However, T-test results show that there are no significant differences between male and female teachers in regard to attendance to computer training, use of computer labs at the school, and attendance to CALL training (see Table 13 below).

Table 13. The T-test results of the differences between male and females in attendance to computer training, using computer labs, and attendance to CALL training

	Level	N	Mean	SD	t-value	Sig.
Have you ever attended a computer training program?	Male	105	1.54	0.50	0.914	0.36
	Female	78	1.47	0.50		
Do you use the school lab for teaching English?	Male	105	1.13	0.50	−1.921	0.056
	Female	78	1.31	0.73		
Have you ever attended a CALL training program?	Male	105	1.30	0.72	1.860	0.064
	Female	78	1.13	0.49		

5. Discussion

Returning to the main research questions which intend to develop an understanding of the relationship between attitudes and computer training, CALL training, and use of computer labs, the study results indicate that those participants who attended computer training programs reported more positive attitudes towards technology in the classroom. Training programs are naturally designed to raise skill levels among teachers and foster positive attitudes towards computers and as such are an invaluable piece of the overall integration of technological tools in the classroom. Similar to the work of Galanouli, Murphy, and Gardner (2004) in their consideration of teachers' perceptions of computers during the New Opportunities Fund (NOF) training offered to UK teachers, the research at hand mostly found positive attitudes towards IT tools in the classroom reported among participants. The NOF study, with a larger participant pool of 900 teachers yielded over 450 responses, found that NOF training had some success in increasing teachers' confidence in using computers in class and in turn an overall positive attitude was fostered (Galanouli, Murphy, & Gardner, 2004). Such a study can be extrapolated to other teaching contexts in which IT approaches such as CALL have been implemented. The results of the NOF study taken in relation to the correlations drawn between training and positive attitudes in this study indicate that positive attitudes regarding technology are correlated to confidence in using computers.

As the schools of Saudi Arabia have expanded to include numerous new computers and related equipment, there is a need to ensure that more than just the appearance of the educational landscape is evolving. The adoption of the new complementary teaching approaches such as CALL must grow in tandem with technological advances as these advances are not likely to recede anytime soon. Although CALL training in particular was not found to correlate to a positive attitude, it is worthwhile to note that similar percentages of teachers who attended CALL training use school computer labs. Such findings indicate that teachers with greater exposure to training programs are more likely to incorporate computers into their pedagogical routines. Similarly, Willis and McNaught (1996) found that although teachers who participated in their study held positive attitudes towards the use of technology in education, they were nonetheless not confident in their ability to use IT tools and did not think that the training programs they participated in prepared them to use technology in truly effective ways. As found in this study,

general computer training was not enough to adequately ensure the likelihood that teachers would use school computer labs for language instruction. It is likely that through more training, the participants of this study would develop more confidence regarding the use of computers in the classroom, and in turn be more likely to report the need for an approach like CALL.

As educational facilities in Saudi Arabia are gender segregated, results of study were held separate according to male and female respondents in order to determine if there were notable differences regarding computer use and training attendance in the classroom. In answer to the research questions regarding gender, results of the study indicated that a greater percentage of female than male teachers held more positive overall attitudes towards technology in the classroom. However, significant differences between male and female teachers in regard to attendance to computer training, use of computer labs at the school, and attendance to CALL training were not found. Existing literature on gender differences in relation to the use of IT in the classroom indicates that females place greater emphasis on the communication aspects of ICT and on the interaction it encourages (Volman & van Eck, 2001), which could explain the more greatly reported positive attitude among females in this study. The differences identified in this study are also likely attributable to factors outside the scope of this project and warrant follow-up at a future date.

Positive attitudes toward CALL are an important finding as it indicates that with additional training, teachers may begin to feel more confident that the computers are an asset. A study that focused on the use of information and communication technology (ICT) in the teaching of numeracy and literacy in primary schools found that teachers who successfully made use of ICT also had positive attitudes towards it (Moseley and Higgins, 1999). Teachers who have positive attitudes towards ICT itself will be positively disposed towards using it in the classroom. It is expected the same would be found in Secondary level English language classrooms in Saudi Arabia.

More thorough exploration of the human aspects of technological advancement in the classroom was beyond the scope of this study which is primarily concerned with teacher training. Additional studies could be carried out in follow up to this study to further explore the ways in which the confidence and training exposure of the participants changes over time. A study carried out by Cox *et al.* (1999) examining factors related to the uptake of ICT in teaching, showed that teachers who were already regular users of ICT have more confidence in using ICT, perceive it to be useful for their personal work and for their teaching, and plan to extend use in the future. Although Cox's study was limited with a sample of only 44 male and 28 female computer-using teachers, the results are nonetheless interesting to consider in light of the findings of this study. The relative newness of computer integration in the English classroom in Saudi Arabia may contribute to the slightly more negative attitudes on the usefulness of the technology.

Recognition by educational boards of the power and influence of teacher's beliefs can assist policy makers in understanding how to approach the process of modernizing the classroom (Albion & Ertmer 2002). As seen in Syria, a country also investing in new technology initiatives in education, attitudes of high school English as a Foreign Language (EFL) toward ICT are overall positive (Albirini, 2006). As indicated by Albirini, optimism toward the use of technology in the Syrian classroom is not solely the result of the novelty of such advancements. It seems the participants of Albirini's study truly accepted the underlying rational for the introduction of ICT

and in turn considered computers valuable in bringing about improvements in the classroom and school at large (Albirini, 2006, p. 384). While the novelty of computers in the English classroom in Saudi Arabia is likely to bring out mixed opinions on the use of IT tools, 56.8 percent of respondents strongly agreed that the CALL approach more readily drew the attention of the students. Greater student interest will likely encourage the teachers to continue embracing IT in the classroom in order to optimally facilitate learning.

6. Conclusion and Recommendations

Positive attitudes toward the use of computers in the English language classroom reported by Saudi secondary teachers were found to correlate to computer training and use of computer labs. Although females held more positive attitudes overall, other differences regarding attendance during training and use of computer labs were not noted between genders. As found in similar studies, in-service and pre-service training can help to achieve positive attitudes and successful implementation of technology driven initiatives such as CALL.

In order to more coherently engage the attitudes of EFL teachers towards the use of CALL in the classroom, it is recommended that training be developed that is based upon teachers' unique learning needs, specific content areas, and individual characteristics of the students who are the ultimate beneficiaries of new innovation. In the absence of such considerations, CALL training for EFL teachers is merely a secondary activity that has little relevance to the intellectual or emotional needs of the teachers and students. As noted previously, further research is warranted regarding the ways in which the confidence and training exposure of the participants changes over time.

Teachers should also be afforded the opportunity to discuss their opinions as they develop their own approaches toward the integration of technology into the curriculum. Staff development programs in support of teachers in the process of orienting to technological advances in EFL classes also must be considered if learning is to be meaningful and effective. Particularly, if budgetary adjustments are to be made in order to support a greater implementation of the CALL approach in the Saudi secondary classroom, teachers will be a tremendous asset in ensuring lasting changes in attitudes toward technology use. The fostering of such attitudes must be attained in parallel to ongoing professional development agendas.

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Appendix

Frequencies and percentages, means and standard deviations for responses of the study population towards using computer (entire sample)

Items	Strongly agree		Agree		Not sure		Disagree		Strongly disagree		Mean	SD
	Freq.	%	Freq.	%	Freq.	%	Freq.	%	Freq.	%		
Using computer helps in teaching English Language in attracting the attention of students	104	56.8	52	28.4	23	12.6	3	1.6	1	0.5	4.39	0.81
Using computer facilitates teaching English Language for the teacher	85	46.4	75	41.0	19	10.4	3	1.6	1	0.5	4.31	0.77

Items	Strongly agree		Agree		Not sure		Disagree		Strongly disagree		Mean	SD
	Freq.	%	Freq.	%	Freq.	%	Freq.	%	Freq.	%		
Using computer helps in teaching English Language in raising the students attainments of academic matter	67	36.6	72	39.3	39	21.3	5	2.7	-	-	4.10	0.83
Teaching by using computer helps in facilitating the subjects of English Language to the students	86	47.0	62	33.9	31	16.9	4	2.2	-	-	4.26	0.82
Using computer in teaching English Language affects the role of the teacher negatively	55	30.1	74	40.4	37	20.2	10	5.5	7	3.8	3.87	1.03
It is possible to use computer in teaching English language by all teachers of English language	40	21.9	54	29.5	58	31.7	24	13.1	7	3.8	3.52	1.09
Using computer in teaching English language is one of the effective means of teaching	90	49.2	70	38.3	20	10.9	3	1.6	-	-	4.35	0.74
Using computer in teaching English Language is not costly	15	8.2	55	30.1	42	23.0	65	35.5	6	3.3	3.04	1.06
I prefer to use computer in teaching English Language	43	23.5	110	60.1	11	6.0	17	9.3	2	1.1	3.96	0.88
Using computer in teaching English language complicates the educational process	36	19.7	96	52.5	30	16.4	11	6.0	10	5.5	3.75	1.02
Using computer in teaching English language improves the capabilities and skills of the teacher	58	31.7	90	49.2	25	13.2	8	4.4	2	1.1	4.06	0.85
Using computer in teaching English language is considered a waste of time	73	39.9	76	41.5	18	9.8	11	6.0	5	2.7	4.10	0.99
Using computer in teaching English language helps the teacher to give the student the correct information within a short time and quickly	77	42.1	69	37.7	25	13.7	10	5.5	2	1.1	4.14	0.93
Using computer in teaching English language leads to uselessness of the English teacher	56	30.6	75	41.0	44	24.0	3	1.6	5	2.7	3.95	0.93

Items	Strongly agree		Agree		Not sure		Disagree		Strongly disagree		Mean	SD
	Freq.	%	Freq.	%	Freq.	%	Freq.	%	Freq.	%		
Using computer in teaching English language helps in saving money and effort of the teacher	30	16.4	77	42.1	40	21.9	33	18.0	3	1.6	3.54	1.02
I look forward to have using computer in teaching English language as obligatory	33	18.0	72	39.3	26	14.2	40	21.9	12	6.6	3.40	1.20
Computer helps teachers of English language in producing various educational media	73	39.9	83	45.4	16	8.7	7	3.8	4	2.2	4.17	0.90
Using computer helps in enforcing the English language learning of students	55	30.1	94	51.4	22	12.0	6	3.3	6	3.3	4.02	0.92
Using computer helps increasing enthusiasm and effectiveness of student to lean English	46	25.1	100	54.6	31	16.9	3	1.6	3	1.6	4.00	0.80
I enjoy using the computer when teaching English language	50	27.3	72	39.3	48	26.2	9	4.9	4	2.2	3.85	0.95
I am sure that using computer will help students having difficulties in learning English	33	18.0	73	39.9	61	33.3	15	8.2	1	0.5	3.67	0.89
Using computer in teaching English language gives more roles to teachers of English language	30	16.4	80	43.7	59	32.2	13	7.1	1	0.5	3.68	0.85
Using computer in teaching English language will fail as the language labs previously failed	46	25.1	72	39.3	44	24.0	14	7.7	7	3.8	3.74	1.04
I don't see any need for using computer in English Language	65	35.5	81	44.3	22	12.0	8	4.4	7	3.8	4.03	1.00
General mean											3.91	0.56