

# **ATTITUDES OF STUDENTS AT SAUDI ARABIA'S INDUSTRIAL COLLEGES TOWARD COMPUTER-ASSISTED LANGUAGE LEARNING (CALL)**

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## **Abstract**

This paper identified attitudes toward CALL of students studying English as a foreign language (EFL) at industrial colleges in Saudi Arabia. Seventy students who were enrolled in the orientation year of an English program were chosen to participate in this study by expressing their attitudes toward CALL. Standardized and local instruments were used along with interviews and observation techniques to collect data.

The results of the study revealed that students had positive attitudes toward CALL. Looking at the daily hours students spend using a computer, a slight correlation was found between this variable and the students' attitudes toward CALL. Other variables, such as students' background knowledge of English, ownership of a computer, and their computer knowledge, were found to be irrelevant to their attitudes toward CALL. These results were in line with previous research conducted by Al-Shammari (2007), Alrumaih (2004), and Almekhlafi (2006). The results reinforced conclusions about CALL revealed by researchers, such as Chen (2003), Chikamatsu (2003), Egbert (2005) and Levy (2005), who found that it helps students learn better and more independently, and gives them the ability to have more control of their learning and to have more opportunities to practice English.

## **1. Introduction**

CALL has recently become a focus of researchers who believe that computers are an effective teaching aid. Westerners were the first to adopt this practice, and now it is being accepted by practitioners in the rest of the world, including those in the Middle East. In Saudi Arabia industrial colleges are a part of the governmental sector, and they use English as a medium of instruction. CALL was implemented in 2006 in English programs presented to students during the preparation or orientation year. Students in the orientation year are those who have recently finished secondary schools, and have entered the industrial colleges for a two-year higher education program. Students must take an English course for one year prior to declaring a major. The orientation year is mainly devoted to English courses with a minor concentration on other subjects, such as maths and physical education.

To my knowledge, no previous studies have been conducted to explore the attitudes toward CALL of students in English programs offered by industrial colleges in Saudi Arabia. Understanding the students' attitudes will assist the industrial colleges in understanding the nature of the students' requirements in such English programs and how they can enhance these programs for the students in the preparatory year.

## 2. Literature review

Before starting reviewing literature on CALL, it is valuable to give some definitions about CALL along with highlighting some points about the benefits which stand behind CALL. Definitions in particular give details on how researchers define CALL as a term used in the learning process.

Previous researchers have come up with slightly differing definitions of CALL. Egbert (2005), for example, defined CALL as "using computers to support language teaching and learning in some way" (p. 4). Her definition covers all language skills with no exception. Beatty (2003) understood CALL as "any process in which a learner uses a computer and, as a result, improves his or her language" (p. 7). Similarly, Levy (1997), stated that CALL is "the search for and study of applications of the computer in language teaching and learning" (p. 1).

As far as the benefits of CALL are concerned, Frommer (1998) argued that CALL benefits learners by:

- exposing students to larger quantities of text, images, and authentic materials;
- increasing time on task in an efficient way; and
- allowing students to assume responsibility for their own learning.

Additionally, Cubillos (1998) cited further benefits of CALL, stating that it can

- facilitate vocabulary learning;
- increase students' awareness of language structure through more sophisticated error-feedback programs;
- support reading and writing development;
- help teachers keep track of students' processing of language;
- facilitate students' exploration of the target culture;
- enhance motivation.

Son (2002) stated that various kinds of approaches to CALL development and use have been attempted by language teachers, including English as second/foreign language

(ESL/EFL) teachers. While they have expanded their views of CALL through a number of research studies on the effectiveness of CALL, they have tried to investigate specific ways that CALL provides better learning and facilitates the learning process.

There is a universal belief in computers as a key factor in the learning process (Ayres, 2002; Bayraktar, 2002; Charischak, 2000; Chikamatsu, 2003; Cushion & Dominique, 2002; Egbert, Paulus, & Nakamichi, 2002; Fenfang, 2003; Jung, 2002; Nesselhauf & Tschichold, 2002; Robert, 2002; Schwienhorst, 2002; Vrtacnik, Sajovec, Dolnicar, Pucko, Glazar & Brouwer 2000). According to Almekhlafi (2001, as cited in Robert, 2002), the use of computers to assist learners in their language studies has increased phenomenally over the past decade.

Although CALL is a new aid for those teaching English, researchers have found that it helps students learn better and more independently, while giving them the ability to have more control of their learning and more opportunities to practice English (Almekhlafi, 2006; Egbert, 2005). Many of those involved in teaching foreign languages, particularly English, have clearly proven the importance of CALL for those learning and teaching foreign languages (Lee and VanPatten, 2003; Fotos and Browne, 2004; Gravetter and Wallnau, 2007).

In general, students learning any subject are very interested in using computers as an aid. Moreover, as Levy (2005) stated, computers are not intended only for students but also for teachers, without whose assistance this aid cannot be fully utilized. Researchers have found that teachers' attitudes toward the introduction of CALL were positive, reinforcing the role of computers as an essential aid in learning a foreign language (Lin and Miller, 2005).

Both Egbert (2010) and Palaigeorgiou, Siozos, Konstantakis and Tsoukalas (2005) wrote that CALL is a technique that adds an interesting atmosphere for students learning a foreign language and that it has a direct impact on a whole range of language acquisition skills. This is also the opinion expressed by Pennington (2004) and Purushotma (2005), who claim that CALL is now regarded as the latest influence on teaching and learning. The most interesting point revealed by these authors is that CALL eliminates the barriers between teachers and students. According to the argument of Snowman and Biehler (2006), CALL makes the learning process easier since the barrier between teachers and students is considered to be one of the factors resulting in the students' failure to learn a foreign language.

Others raised some negative aspects of CALL. For example, Lee (2000) said that "engaging in Computer Assisted Language Learning is a continuous challenge that requires time and commitment" (p. 5). Many academic institutions are now aware of this fact.

Similarly, Chen (1996) is more pessimistic about the utilization of CALL and believes that it is not yet a complete platform. Chen stated that this particular aid cannot be fully adopted until a picture of its benefits is completed. This seems reasonable in the light of the fact that some students and teachers, despite being familiar with the role played by a computer, still do not have a full recognition of its applications.

However, many researchers have been working hard on easing the process, particularly in the last ten years. Lee (2000) pointed to the following reasons for using CALL: (a) experiential learning; (b) motivation; (c) enhancing student achievement; (d) authentic materials for study; (e) greater interaction; (f) individualization; (g) independence from a single source of information; and (h) global understanding.

Chapelle (1997) emphasized that the pedagogical goal of CALL activities is for learners to improve their ability in the target language by participating in linguistic interactions. She went further to indicate that learners using CALL have an opportunity to work together through oral language or written conversations. In ELT, in particular, CALL is essential. Several researchers, such as Wiazowski (1998) and Kitao (1993 and 1994) agreed on its importance.

### **3. CALL in Saudi Arabia and worldwide**

In Saudi Arabia where English is now the medium of instruction in most of the academic institutions, English is taught without using CALL. Recently a small number of universities and colleges have realized the importance of computers as a teaching aid and started to introduce CALL into their English programs. The only academic institution that has intensively used CALL is the Institute of Public Administration (IPA). The IPA chose to incorporate computers to help learners achieve a higher level of English language proficiency. It has been four years now since CALL was introduced into the IPA intensive English program, but no studies have been conducted to determine the learners' and teacher perceptions toward it or its effectiveness. However, despite the lack of evidence, there have been calls for introducing CALL in all English programs, not only those in the public sector institutions but also in the private schools.

Almekhlafi (2006), Jabir and Omar (2002), and Yushau (2006), in their studies related to the use of CALL, found positive attitudes among students of English about the use of CALL. The most interesting finding arising from the study by Almekhlafi (2006) is that the more time they spend using computers, the more benefit language learners get from CALL. Thus, according to the researcher, students should be trained in how to use CALL and should

be encouraged to increase their competency in using computers to maximize the benefit they draw from CALL. Such results are in line with the claims revealed by other researchers like Al-Khaldi and Al-Jabri (1998) and Selwyn (1999), who found that using CALL in English classes is a key factor in the students' achievement of the language they studied. The researchers also found that students enjoy using CALL. Al-Shammari (2007) commented that the issue regarding CALL should not be that the learners use it, but rather that the learners like and benefit from it.

Stevens (1991) studied Arab EFL learners' attitudes toward CALL and found that students not only got enjoyment from CALL but also appreciated that it helped them improve their English, which caused them to call for the continued use of such an aid. A local study in Saudi Arabia conducted at one of the preparatory English programs by Yushau (2006) clearly showed that students revealed positive attitudes about the use of CALL in their English classes although they did not meet the researcher's expectations. Moreover, a study conducted by Al-Shammari (2007) on students' attitudes towards the use of CALL in one of the academic institutions in Saudi Arabia clearly found positive attitudes in this respect. The results obtained by Al-Shammari along with those of the other researchers highlighted earlier clearly indicated the significant role played by CALL.

Other researchers in Saudi Arabia, such as Walker (1994), AlKahtani (2001), Abal Hassan (2002), and Alrumaih (2004), found that despite students' positive attitudes towards the use of CALL in some English programs in Saudi Arabia, there is still a gap between the time devoted to it and the time devoted to other skills. This means that some people still see CALL as a minor subject that should not be given priority over other skills. This feeling leads us to recall what Bax (2003) emphasized, saying that although CALL has been in use for a long time, it still has not reached the normalization level where it is regarded as a fundamental component of the classroom setting.

Findings of some studies on the use of CALL are conflicting. In Taiwan, for example, Chen (2003) found that although CALL was one of the components most needed by students in the English programs, its utilization has not yet met expectations. Also, in Taiwan, Lin revealed in his 2002 study that although learners held highly positive attitudes towards the use of CALL, they were less motivated with regard to its utilization. In Australia, Ayres (2002) revealed that there was a heavy demand among students learning English for the use of CALL in their classes. This was reinforced by their opinion that students have a greater need for CALL so that their language achievement will improve. In Korea where the situation is not different from those in Taiwan and Australia, Min (1998) found that students attending

English programs were not happy with the use of CALL, an issue that led to the absence of such a teaching aid in their classes.

#### **4. The study**

##### **4.1. Objectives of the study**

The purpose of this study was to identify the students' attitudes towards Computer-Assisted Language Learning in the English programs during their preparatory year in industrial colleges in Saudi Arabia. Having this knowledge will enhance researchers' and officials' understanding regarding the most effective way to run English programs. By understanding learners' attitudes toward CALL, they could make the use of CALL more effective in order to help learners, instructors, and administrators to gain the ultimate benefits from this technology.

In specific, the study sought to answer the following questions:

1. What are the Saudi industrial college students' attitudes toward CALL in general?
2. What are the students' attitudes toward the CALL software used in the English programs at the industrial colleges in Saudi Arabia?
3. Is there a relationship between Saudi EFL learners' attitudes toward CALL based on their background knowledge of English, their ownership of a computer, the hours they spend using a computer, and their computer knowledge.

##### **4.2. Methodology and instrumentation**

To determine the students' attitudes towards CALL, standardized and local instruments were used. The first instrument was the Computer Attitude Scale (CAS) developed by Loyd and Gressard (1984a & 1984b). The CAS consists of 40 items that are divided into three categories: computer anxiety, computer confidence, and computer usefulness. Each subscale consists of 10 items and is based on a four-point Likert scale (strongly agree, slightly agree, slightly disagree, and strongly disagree). For this test, higher scores indicate more positive attitudes toward computers. This instrument has been used widely by researchers for measuring students' attitudes towards the use of computer, and its validity and reliability make it highly acceptable as one of the most reliable instruments used for such a purpose.

The other instrument was a local scale developed by Al-Shammari (2007) for the purpose of measuring the attitudes of students in Saudi Arabia towards CALL. The instrument is called SACALL and consists of 30 items that are put into three subscales. One measures

general attitudes toward computers, the second one examines attitudes toward the use of computers in language instruction (20 items). Finally, the last subscale includes items on the attitudes toward the CALL lab (ease of use and integration into the English language program). The scale is based on a five-point Likert-scale (strongly agree, agree, uncertain, disagree, and strongly disagree). Higher scores indicate more positive attitudes toward computers.

The present researcher also employed observations and interviews to further support the findings obtained and seek data to answer the three questions posed in this study. It is known that observations and interviews are techniques used to complement the questionnaire and to ensure greater validity. Observation was necessary because it provided further support to data obtained from the other instruments used for collecting data. Different groups of students using the computer in the CALL classrooms were observed. Afterwards, 70 students were interviewed concerning their attitudes towards CALL.

#### **4.3. Sampling and procedures**

Two sections that included 70 students in the second semester of the preparatory English program in Jubail Industrial College in Saudi Arabia were selected for this study. All of them were male as no co-education is allowed in the country. The participants were all Saudi and had the same learning situations, such as the same sized classroom, the same English textbook, the same amount of exposure, and the same availability of teaching aids. They were all native speakers of Arabic, aged 19 to 20. They had all experienced 6 years of English instruction in intermediate and secondary schools prior to enrolling in the English programs in the colleges they attended.

The questionnaire was distributed by the researcher himself, who was present during their administration to prevent any ambiguity. Although students probably had an adequate background in English to understand the items in the questionnaire, I translated all items on the standardized scale as there had been no prior Arabic translation of them. After the CAS questionnaires were completed and returned, I handed out the other questionnaire (SACALL). The version used was in Arabic, and again I was present to prevent any ambiguity.

#### **4.4. Presentation of results**

All data were analyzed using SPSS. A descriptive analysis was adopted in order to answer the research questions on students' attitudes towards CALL based on standardized and local five- and four-point Likert scale questionnaires. The mean value and standard deviation were

obtained for this purpose. Higher scores indicated that students had more positive attitudes to CALL. The survey scores were all combined and divided by the number of items on the questionnaires in order to get the overall mean. For the observation, notes were used, so no statistical analysis was possible. A descriptive analysis was adopted for the interviews using percentages. Moreover, since question number three on the research measured correlations among students concerning four variables (their background in English, ownership of a computer, hours they spend using a computer, and their computer knowledge) the Pearson Correlation Test was used.

As Table 1 shows, the statistical analysis of the data strongly indicates that students attending English programs in industrial colleges tended to exhibit positive attitudes toward their use of CALL in their English programs. The mean value obtained (2.7) and the standard deviation both confirmed that students hold slightly positive attitudes toward CALL, a result that met my expectations that students have a positive attitudes toward CALL in their classrooms. The results also matched the findings of previous researchers such as Al-Shammari (2007) and Almekhlafi (2006).

Table 1. Descriptive statistics of students' general attitudes toward CALL at the Saudi industrial colleges

Variable	Mean	Standard Deviation	Minimum Score	Maximum Score
General attitudes toward CALL*	2.67	.1661	2.35	3.35

\*General attitudes toward CALL = computer anxiety, computer confidence, and computer usefulness

Table 2 displays the mean values along with the standard deviation of the students' attitudes. The data here indicate that the students were more in favor of using CALL software in their English programs, because they exhibited positive attitudes toward the software. This result is in line with the results obtained for question one, so one can conclude that the attitudes of students concerning CALL were entirely positive.

Table 2. Descriptive statistics of students' attitudes toward CALL software at the Saudi industrial colleges

Variable	Mean	Standard Deviation	Minimum Score	Maximum Score
Attitudes toward the				

<b>CALL Software*</b>	<b>3.45</b>	<b>.729</b>	<b>1.70</b>	<b>4.47</b>
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\***Attitudes toward CALL software** = general attitudes toward computers, attitudes toward the use of computers in language instruction, and the attitudes toward the CALL lab (ease of use and integration into the English language program).

The observation sessions of students attending the classes with CALL confirmed that the students were enthusiastic about using CALL in their English programs. Some students noted that they needed more classes that use CALL, which leads one to have the impression that the students' attitudes toward CALL are promising.

In addition, the interviews with several students attending classes in which CALL is used revealed that the majority of them held positive attitudes toward the use of computers in general and CALL Software in particular. Such a result reinforces the results obtained by other instruments that measured the students' attitudes toward CALL.

Table 3. Pearson Correlation Test of students' attitudes toward CALL based on their background knowledge of English, ownership of a computer, hours they spend using a computer, and their computer knowledge

<b>Attitudes toward CALL</b>	<b>P. Value</b>		<b>Sig (2-Tailed)</b>	
	<b>CAS</b>	<b>SACALL</b>	<b>CAS</b>	<b>SACALL</b>
<b>Background knowledge of English</b>	<b>-066</b>	<b>.067</b>	<b>.590</b>	<b>.580</b>
<b>Ownership of a computer</b>	<b>.037</b>	<b>-030</b>	<b>.763</b>	<b>.807</b>
<b>Hours spent on the computer</b>	<b>-.107</b>	<b>.267*</b>	<b>.377</b>	<b>.026</b>
<b>Computer knowledge</b>	<b>.095</b>	<b>.055</b>	<b>.435</b>	<b>.653</b>

Note. **CAS** = Computer Attitude Scale; **SACALL** = Saudi Arabia CALL Scale; correlation is significant at 0.05.

The Pearson Correlation Test was used to answer this question. As shown in Table 3, apart from the hours students spend on the computer, none of the other variables mentioned above was found to have any correlation with the students' attitudes toward their use of CALL. However, a correlation was found between students' attitudes and the number of hours they spend using a computer. Nevertheless, this correlation was rather slight (.267). One more notable point is that this slight correlation appeared only on the SACALL Scale, which measures the students' attitudes toward CALL software. The result obtained for this correlation shows that the more hours students spend working on a computer, the more positive attitudes they have toward CALL. A similar finding to this correlation was revealed by Al-Shammari (2007) in a similar setting in Saudi Arabia. However, the researcher

accepted partially his hypothesis that stated that there is no relationship amongst Saudi EFL learners' attitudes toward CALL based on their background knowledge of English, their ownership of a computer, the hours spent on the computer, and their computer knowledge.

The study revealed that Saudi learners attending English programs at the industrial colleges in Saudi Arabia had positive attitudes toward the use of CALL and the use of CALL software. The results obtained are in line with the researcher's observations during his experience in teaching English in Saudi Arabia. Furthermore, the current results coincided with the results obtained by previous research conducted worldwide and in Saudi Arabia by Al-Shammari (2007) and Alrumaih (2004).

The results obtained revealed that apart from the minimal correlation to daily hours that students spend on the computer, no correlation was found among the four variables, namely, students' background knowledge of English, ownership of a computer, hours spent using a computer, and their computer knowledge, which was consistent with the results obtained by Al-Shammari (2007) in a similar environment in Saudi Arabia.

#### **4.5. Conclusions**

There is no doubt that the attitudes of students attending foreign language learning courses have an impact on their achievement. Thus, one can assume that the more positive their attitudes are towards the target language, the more progress they can obtain. The attitudes towards the use of technology as a teaching and learning aid are related to this belief. Thus, the more positive the students' attitudes are towards the use of a computer, the more progress they will make. Most researchers have found that CALL helps students improve their achievement, so one can safely assume that CALL is an effective teaching aid and is a component that cannot be ignored by those teaching foreign languages in general and English in particular. The main objective of this paper was to determine the attitudes that students enrolled in English programs in industrial colleges in Saudi Arabia hold about the use of CALL.

The results of the study showed that students hold positive attitudes, so we can also assume that they accept the computer as an effective teaching aid in learning English. The positive attitudes were expected, and this can be attributed to several factors. First, students feel that CALL helps them to make greater progress, which leads to their success in the course, which was supported by Alshammari (2007). Another factor is that students have a background of computer usage, so they want their programs to use computers. One more factor is that these days students are more aware of the importance of technology in learning

than those in the past. Their awareness may be attributed to what they read on the Internet or in newspapers, see on TV, or what they listen to on the radio. All these influences should be taken into account when English programs attempt to measure the attitudes of students towards the use of CALL. Finally, apart from the daily hours students spend using a computer, for which a slight correlation was found between this variable and the students' attitudes toward CALL, other variables, such as students' background knowledge of English, ownership of a computer, and their computer knowledge were found not relevant to their attitudes toward CALL.

#### **4.6. Implications, policies and practices**

Although the study revealed positive attitudes among students, it also provided some implications concerning policies and practices that would improve the success of CALL instruction. Such implications and practices are important to teachers, curriculum planners, and administrators.

Of course, the teachers' role cannot be ignored when one thinks about the use of CALL when teaching English classes. Their role is a key factor in whether students have a positive attitude toward this technology, which leads to better achievement in learning. Therefore, teachers should have a positive attitude towards this technology prior to helping their students. They also need to make their students fully aware of what CALL adds to the learning process and help them understand the real function of computers in general and CALL in particular.

Broadening learners' knowledge about computers and working patiently with those who have little experience with computers are among the teachers' duties. Teachers are advised to introduce CALL to students on the first day of classes. Also, they should be careful in giving CALL classes the same amount of attention as classes focused on language skills. The teachers' role should go beyond motivating students to use CALL outside classes and make sure that students understand that CALL is considered to be one of the main components of the English classes. In addition, teachers should frequently evaluate CALL materials.

In this regard, curriculum designers should work hard with teachers. They should be concerned that the curriculum for students has sufficient references to the use of CALL in teaching English. Those responsible for curriculum design should make sure that each skill included in the English program is taught along with CALL. Integrating these two components will have a positive impact on the learning process. The designers and teachers

should also make sure that what is taught to students in the classrooms should be related to what is taught in the CALL labs. Their roles should ensure that CALL labs are connected with external and internal facilities not only domestically but internationally, including using the Internet. It is their duty to make sure that the curriculum devotes more time or extra sessions to CALL classes to cover all skills being taught. This means that the same amount of time should be devoted to CALL as to other skills. They also should ensure that the curriculum provides additional courses for students with a modest computer background, but not at the expense of shortening the hours scheduled for CALL.

Administrators of the industrial colleges in Saudi Arabia should understand the students' need for CALL in English classes. Once they reach this understanding, they should be willing to provide enough lab facilities for CALL during classes and students' free time so they have adequate time to practice using a computer. The administrators are advised to purchase the latest versions of CALL software that does not conflict with the Saudi culture, an opinion shared by Alkahtani (2004) and Al-Shammari (2007). Moreover, their policy should be strict enough so as not to hire teachers who have no background in CALL.

## **5. Directions for further research**

The discipline of using CALL demands an independent study. In the light of the findings of this paper and the author's own experience, there is still a need for further research to examine the status of CALL in Saudi Arabia, and to explore the hidden reasons behind the absence of CALL in the English-language programs, not only in Saudi Arabia but in neighboring countries, such as Kuwait, Bahrain, Qatar, Oman, and the United Arab Emirates.

Further research is also needed to find out whether the academic institutions in Saudi Arabia have made any serious efforts to introduce CALL to students in the English-language programs. Determining the attitudes of students and teachers towards the use of CALL in the English-language programs in Saudi Arabia would need to be compared with the current study. More research may be needed in order to investigate the influence of CALL on learning English in public and private schools. Finally, urgent research is needed in order to discover the influence of CALL on non-Arab learners, as this study was concerned only with Saudi learners.

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