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Factors affecting the use of CALL by EFL female faculty members in Saudi higher education: current status

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This paper investigates the current state of **CALL** *in* **EFL** *instruction at four Saudi institutions. The study identifies factors promoting or inhibiting* **CALL** *use and integration and how these factors affect* **EFL** *teaching/learning as perceived by* **EFL** *female faculty members at those institutions. The researchers used questionnaires to elicit information regarding computing facilities, use, and types of support available for* **EFL** *female faculty members in English departments at the four selected institutions. It was found that the female faculty members at the four institutions were not provided with enough computing facilities by their departments to use computer-assisted language learning in* **EFL** *instruction. The use of available computing facilities for instructional purposes is minimal and superficial. Different kinds of support (financial, technical, and training) in using computer-assisted language learning in* **EFL** *instruction were limited at the four institutions.*

1. Introduction

To successfully integrate **CALL** technology into **ESL/EFL** classrooms, institutions need to understand the issues that most strongly affect technology use and to provide their faculty members with the support required to integrate **CALL** into their teaching methods. Based on individual needs analyses and clearly defined educational goals, institutions can decide on the appropriate number of computers and scope of **CALL** facilities required by their particular teachers and students. Planning for **CALL** integration must also take into account helping teachers make sense of the role that technology can play in their classrooms.

EFL programs at most Saudi universities are in the process of integrating CALL into their curricula. Therefore, it is important to investigate the infrastructure of CALL, to know what type of access English teachers and their students have to CALL resources, to determine what CALL resources are being employed and for what purposes, and to understand the barriers inhibiting the use and integration of CALL.

This study intends to tackle the different factors that may inhibit CALL use and integration in EFL instruction by female faculty members at four Saudi universities. There are two reasons for limiting the study to female faculty members. First, the conservative nature of Saudi society would make it difficult for a female to interview or interact with a male teacher, and vice-versa. Second, Saudi EFL female teachers are understudied population. There is very little attention given to the perception of female teachers regarding the use of CALL in EFL instruction.

The study was conducted at King Saud University (KSU) in Riyadh, Imam Mohammed Bin Saud Islamic University (IMIU) in Riyadh, Umm Al-Qura University (UQU) in Mecca, and King Khalid University (KKU) in Abha .It is hoped that the present study can answer some important questions regarding the factors that may inhibit the use of CALL by female faculty members in Saudi higher Education.

The study aims to fulfill the following purposes:

1. To investigate CALL barriers that influence EFL female faculty members' decisions to use CALL in EFL instruction.
2. To document computing facilities available for EFL female faculty members and their students at the four selected Saudi universities and the types of support provided for them to use CALL in EFL instruction.

This work is meant to help EFL female faculty members at these universities and maybe other Saudi universities to better understand the benefits of CALL usage in their teaching and to provide administrators with baseline data about CALL to aid their strategic planning of integrating CALL into their schools.

Research questions

The study intends to address the following research questions:

1. What computing facilities are available for EFL female faculty members at the four Saudi universities?
2. How are available computing facilities used by female faculty members in EFL instruction?
3. What kinds of support (technical, financial, and training) are provided for EFL female faculty members to use and integrate CALL in EFL instruction at the four Saudi universities?
4. How do these factors (availability of computing facilities and types of support) affect EFL female faculty members' decisions to use CALL in EFL instruction at the four universities?
5. What are other factors that might stand in the way of using CALL in EFL instruction?

2. Background research

2.1 Factors affecting the integration of CALL

As fascination with and the growth of technology spreads through instructional practice, instructors must decide on the appropriate role of technology in curriculum and instruction. Should computer -related technologies serve at the periphery of instruction as tools of reinforcement, or can they complement rather than supplement classroom teaching for certain topics and skills? What must an instructor know in order to use technologies more effectively, particularly in the classroom?

There are many factors that can affect the integration of computer technologies in **EFL** instruction, including time pressures (Al Kahtani, 2001; Lam, 2000; Levy, 1997; Reed, Anderson, Ervin, & Oughton, 1995; Smerdon, Cronen, Lanahan, Anderson, Iannotti, & Angeles, 2000; Strudler, Quinn, McKinney, & Jones, 1995); lack of resources and materials (Loehr, 1996; Smerdon et al., 2000); insufficient or inflexible guidelines, standards, and curricula (Langone, Langone, Ross, & Wissick, 1998); lack of support or recognition for integrating computers (Grau 1996; Strudler, McKinney, & Jones, 1999); a clash between new technologies at universities and older ones in schools; lack of leadership (Smerdon et al., 2000); and inadequate training and technical support (Abdal-Haqq, 1995; Lam, 2000; Langone et al., 1998; Levy, 1997; Smerdon et al., 2000).

A number of other early and recent studies investigated why teachers do not use technologies in their teaching (AlKahtani, 2004; Dupagne & Krendl, 1992; Hadley & Sheingold, 1993; Mumtaz, 2000; Rosen & Weil, 1995; Winnans & Brown, 1992,Kumar, Rose, & D'Silva, 2008; Osika, Johnson & Buteau, 2009). They found that teachers avoid using technologies in their classrooms for various reasons. The following is a list of some of these reasons:

- Lack of teaching experience with **CALL**
- Lack of onsite support for teachers using technology
- Lack of help supervising students when using technology
- Lack of **CALL** specialist teachers to teach students computer skills
- Lack of computer availability
- Lack of time required to successfully integrate technology into the curriculum
- Lack of financial support
- The resistance on the part of some language teachers to change and the fear that technology will someday replace them
- The high cost of technology equipments and the rapid change of technology

All or some of these inhibitors cause some language teachers to resist the integration of computers into teaching English as a second/foreign language.

Some academics may believe that the availability of technologies at language schools is the key to making faculty adopt the use of **CALL** in their teaching. Studies on technology use by teachers such as Fabry and Higgs (1997), Levy (1997), Marcinkiewicz (1994), Sheingold and Hadley (1990), and Yerrick and Hoving (1999) have indicated that the availability of technology does not guarantee their integration in classes by teachers. Many teachers in these studies reported that they were not using them even though they were readily available at their schools. Despite this fact, it is believed that technology can improve teaching and learning and the quality and quantity of teaching and learning (Marcinkiewicz, 1994). To understand this phenomenon and to have full integration of technology in institutions,

Marcinkiewicz (1994) suggested that technology and the factors that make teachers want or need to use them be studied.

According to McCarthy (1999), other factors were resolute: human factors such as government educational policy, institutional vision, departmental cohesion, the teaching philosophy and practices of individual teachers, student motivation, and ability interact in a complex manner with considerations relating to hardware, software, logistics, personnel, and resources in both the short and long term (ICT4LT, 1999).

For the current state of CALL in Saudi Arabia, AlKahtani (2004) found that computer technology were not readily available at some Saudi schools. Classifying factors into three types (factors related to technical issues, factors related to financial issues, and factors related to training issues), the findings of each type did not indicate that the four studied universities had enough CALL materials. This caused many constraints in following up with the highly developmental organizations of education in other countries. Some social factors were controlled by the cultural, social, and religious attitudes of persons in charge. They could not allow any inappropriate material that might contain some doubtful pictures or misconceptions. This caused some retreat, which affected CALL development in the Saudi universities. Alkahtani detailed four factors: technical, financial, training, and overt and covert social factors. He did a sufficient job of explaining the state of CALL use and integration in Saudi Arabia. The only noted development found was in KFUPM (King Fahd University of Petroleum & Mineral).

McCarthy (1994) also discussed CALL support: "Any piece of CALL software represents a balance between the technology, the linguistic content, and pedagogy" (p. 11). The study found that this discussion about CALL software was truly correct. Any teacher would need all three aspects to have a balanced process. When a teacher decided to use any kind of technology or software in the classroom, he or she definitely wants to make an interesting, useful, impressive, and sophisticated lesson. Therefore, all three aspects, technology, linguistic content, and pedagogy, needed to be present in one class.

Another factor was student computer literacy skills. It was important to determine whether they had keyboard skills or navigation skills or general IT (information technology) awareness. Student skills required some polishing to be upgraded to the next level. Students who mastered keyboard skills might dominate the class and surpass the other students who had low experience in keyboard skills. Sosabowski, Herson, and Lloyd (1998) reported that 62% of students in a beginning course had no previous experience with the Internet, and only 8% had used it regularly. They also discovered that use of the resource increased gradually over the semester, resulting in 99% of students using the Internet at least once a week. To help their students gain crucial computer literacy skills, teachers themselves need to have some form of ICT skills. Hsu (2004) and Boland (2008) found that teachers with low levels of computer self-efficacy were likely to avoid the use of computers in the classroom. This meant that training courses needed to be held to improve both students' and teachers' skills in using computers.

Because all teachers were not IT specialists, time was one of the factors that heavily affected CALL. Teachers were not acquainted with this new medium of teaching. This means that knowledge of technology was required. Tillyer (1996) mentioned some tasks in which time could be an obstacle or assistant factor: scheduling and assessing CALL exercises and tutorials, planning how they fit into the program, and disseminating this information to students. Student time needs should also be considered when implementing CALL. Students

who had wide experience in technology could perform better and needed less time than others who had less experience using them.

In summary, it is clear from the literature reviewed here, that there are a wide range of factors which influence teachers' decisions to use computer in their teaching. This review is intended to summarize the salient information available about factors affecting the adoption and use of computer technology by faculty members for instructional purposes in general and for **EFL** instruction in particular. Most of previous research was centered on discussions of factors originating from research conducted in a context different from that of Saudi Arabia. The context of the present study is quite different for all mainstream and government universities in Saudi are single sex schools. This study will lay the ground for further research on barriers deterring female faculty members from using **CALL** in **EFL** instruction at Saudi Arabian schools.

3. Methodology

The researchers used questionnaires to solicit information from the respondents on factors affecting **CALL** use and integration in **EFL** instruction. An online version of the questionnaire was created to quickly distribute the questionnaires to the participants. It was created through the SurveyMonkey Web site and can be found at www.surveymonkey.com/ (see Figure 1).The statistics on computing facilities, use, and support were calculated to answer the first three research questions. For the fourth research question, the Pearson correlation coefficient was calculated to determine the relationship between the type of support and the availability of computing facilities and how they affect **EFL** female faculty members' decisions to use or not to use **CALL** in **EFL** instruction at the four universities. In other words, the Pearson correlation was used as a measure of the tendency of the variables to see if they rose or fell together. To clarify some of the survey findings, a number of **EFL** female faculty members were purposefully chosen for interviews. A semi-structured interview format was used to elaborate on responses obtained through questionnaires to help us understand how **CALL** was being used by female faculty members in Saudi government-funded universities.

Figure 1. SurveyMonkey Web site. **157**

4. Results

4.1 Research question 1

What computing facilities are available for EFL female faculty members at the four Saudi universities?

In order to answer this question, the data were presented in descriptive statistics through frequency counts, percentages, means, and standard deviations for each phrase separately.

Table 1: Mean scores on available computing facilities for EFL female faculty members

Variables		Yes	No	Mean	SD	Rank Order
College computing lab	F	86	103	0.46	0.499	2
	%	45.5	54.5			
Department computing lab	F	73	116	0.39	0.488	3
	%	38.6	61.4			
Class computing lab	F	29	160	0.15	0.361	5
	%	15.3	84.7			
Access to WWW from the office	F	110	79	0.58	0.495	1
	%	58.2	41.8			
Lab Internet access	F	40	149	0.21	0.410	4
	%	21.2	78.8			
Wireless Internet access	F	22	167	0.12	0.322	6
	%	11.6	88.4			

*SD: Standard Deviation

Table 1 includes the findings of computing facilities available for EFL female faculty members' use at the four universities. Access to resources was measured by participants' responses to yes/no questionnaire items asking about the availability of computing facilities in several settings: college computing lab, department computing lab, class computing lab, office Internet access, lab Internet access, and wireless Internet access. The following are the findings, as seen in Table 1:

1. Access to the WWW from the office was the most available computing facility at the four universities, with a mean of 0.58, which was within the mean range of a maximum of 1 and a minimum of 0. Of the participants, 110 (58.2%) indicated that Internet office access was available all the time. Only 79 participants (41.8%) indicated that this facility was not available. Despite the fact that this was rated as most available (58.2%), it suggests that technology access in general is low.
2. College computing lab was the second most available computing facility at the four universities, with a mean of 0.46. Of the participants, 86 (45.5%) indicated that a college computing lab was available most of the time. Conversely, 103 participants (54.5%) indicated that this facility was not available.
3. Department computing lab was the third most available computing facility at the four universities, with a mean of 0.39. Seventy-three participants (38.6%) indicated that a department computing lab was available most of the time. Of the participants, 116 (61.4%) indicated that this facility was not available.
4. Lab Internet access was the fourth most available computing facility at the four

universities, with a mean of 0.21. Only 40 participants (21.2%) indicated that lab Internet access was available most of the time. Of the participants, 149 (78.8%) indicated that this facility was not available.

5. Class computing lab was the fifth most available computing facility at the four universities, with a mean of 0.15. Only 29 participants (15.3%) indicated that a class computing lab was available most of the time. Of the respondents, 160 (84.7%) indicated that this facility was not available.
6. Wireless Internet access was the sixth most available computing facility at the four universities, with a mean of 0.12. Only 22 participants (11.6%) indicated that wireless Internet access was available most of the time. Of the participants, 167 (88.4%) indicated that this facility was not available.

4.2 Research question 2

How often do female faculty members use available computing facilities in EFL instruction?

In order to answer this question, the data were presented in descriptive statistics through frequency counts, percentages, means, and standard deviation for each phrase separately.

Table 2: Mean scores on computing usages by EFL female faculty members.

Variables		Never	Once a year	Once a month	Once a week	Daily	Mean	SD	Rank order
How often do you use a computer at home?	F	1	-	3	12	173	4.88	0.45	1
	%	0.5	-	1.6	6.3	91.5			
How often do you use a computer at your department?	F	33	6	20	50	80	3.73	1.47	2
	%	17.5	3.2	10.6	26.5	42.3			
How often do your students use the computer(s) in your classroom?	F	120	5	25	29	10	1.96	1.37	4
	%	63.5	2.6	13.2	15.3	5.3			
How often can your students use the computer lab?	F	85	4	36	40	24	2.55	1.53	3
	%	45.0	2.1	19.0	21.2	12.7			
How often do you use a computer lab in your schedule?	F	125	5	26	20	13	1.89	1.36	5
	%	66.1	2.6	13.8	10.6	6.9			

The following are the findings from Table 2:

1. Using a computer at home ranked first, with a mean of 4.88 within the mean range of a maximum 5 and a minimum of 1, suggesting that 173 participants (91.5%) use computers at home on a daily basis.
2. Using a computer at the English department ranked second, with a mean of 3.73, suggesting that 80 participants (42.3%) use computers at their English departments on a daily basis.

3. Using the computer lab by the students ranked third, with a mean of 2.55, suggesting that 24 participants (12.7%) use computers at the computer lab on a daily basis.
4. Students' use of the computer(s) in the classroom ranked fourth, with a mean of (1.96), suggesting that 10 participants (5.3%) use computers in the classroom on a daily basis.
5. Using a computer lab in the schedule ranked fifth, with a mean of 1.89, suggesting that 13 teachers (6.9%) integrate the computer lab in the schedule on a daily basis.

4.3 Research Question 3

What kinds of support (technical, financial, and training) are provided for **EFL** female faculty members to use and integrate **CALL** in **EFL** instruction at the four Saudi universities?

In order to answer this question, the data were presented in descriptive statistics through frequency counts, percentages, means, and standard deviation for each phrase separately.

Table 3: Mean scores on kinds of support provided for EFL female faculty members.

Variables		0–25%	26–50%	51–75%	76–100%	Can't decide	Mean	SD	Rank order
Technical support	F	39	55	61	27	7	2.51	1.085	3
	%	20.6	29.1	32.3	14.3	3.7			
Financial support	F	55	31	55	11	37	2.70	1.447	1
	%	29.1	16.4	29.1	5.8	19.6			
Training support	F	59	30	62	19	19	2.52	1.299	2
	%	31.2	15.9	32.8	10.1	10.1			

The following are the findings from Table 3:

1. Financial support ranked first, with a mean of 2.70 within mean range of a maximum of 4 and a minimum of 1. Despite the fact that financial support was ranked first, it shows that **EFL** female faculty members had in general a minimal access to different types of support at their universities to use and integrate **CALL** in **EFL** instruction.
2. Training support ranked second, with a mean of 2.52, suggesting that **EFL** female faculty members had limited access to training support at their universities to use and integrate **CALL** in **EFL** instruction.
3. Technical support ranked last, with a mean of 2.51. This suggested that **EFL** female faculty members had limited access to technical support at their universities on a regular basis to use and integrate **CALL** in **EFL** instruction.

As shown in the table, It was also found that some participants failed to judge the availability of support provided by their universities.

4.4 Research question 4

How do these factors (availability of computing facilities and types of support) affect **EFL** female faculty members' decisions to use or not use **CALL** in **EFL** instruction at the four universities?

In order to answer this question, the researchers calculated the Pearson correlation coefficient to determine the relationship between the type of support and the availability

of computing facilities and how they affect EFL female faculty members' decisions to use or not to use CALL in EFL instruction at the four universities.

Table 4: Relationship between support types and availability of computing facilities and use of CALL.

How do these factors (availability of computing facilities and types of support) affect EFL female faculty members' decisions to use or not use CALL in EFL instruction at the four universities?		Using computers in teaching English language
Types of support	Pearson correlation	0.153 (*)
	Statistical significance	0.035
	Number	189
Availability of computing facilities	Pearson correlation	–0.081
	Statistical significance	0.269
	Number	189

Table 4 shows the relationship between the availability of computing facilities and the types of support and their effects on EFL female faculty members' decisions to use or not to use CALL in their teachings. The set of descriptors by Davis (1971, as cited in Al-Asmari, 2005) was used to describe the strength of correlations. A coefficient of 1.00 signifies a perfect relationship. A coefficient of 0.70> shows a very strong relationship. A coefficient ranging between 0.50 and 0.69 indicates a substantial relationship, a coefficient ranging between 0.30 and 0.49 indicates a moderate relationship, a coefficient ranging between 0.10 and 0.29 indicates a low relationship, and a coefficient ranging between 0.01 and 0.09 indicates a negligible relationship. The following are the findings from Table 5:

1. As shown in Table 4, there was a low positive relationship (0.153*) between EFL female faculty members' use of CALL in EFL instruction and the types of support that they get from their colleges. This suggests that providing technical support for teachers may encourage them and make them more interested in using CALL with their students.
2. There was also a negative relationship (-0.081) between computer availability and EFL female faculty members' use of CALL in EFL instruction. This suggests that the availability of computers for teachers does not guarantee the use of technology without possessing the required technical and training skills to use them for instructional purposes. This result corresponds with Sheingold and Hadley (1990), Marcinkiewicz (1994), Fabry & Higgs (1997), Levy (1997), and Yerrick & Hoving (1999) who indicated that providing teachers with technologies does not necessarily guarantee the use of technological devices in teaching.

4.5 Research question 5

What are other factors that might stand in the way of using CALL in EFL instruction?

In order to answer this question, the data were presented in descriptive statistics through frequency counts, percentages, means, and standard deviation for each phrase separately.

Table 5: Mean scores on obstacles to CALL use and integration in English departments.

Variables		Obstacle	No obstacle	Mean	SD	Rank order
a. Insufficient number of computers for teachers' use	F	144	45	1.76	0.43	6
	%	76.2	23.8			
b. Insufficient number of computers for students' use	F	166	23	1.88	0.33	1
	%	87.8	12.2			
c. Outdated computers (older than 3 years)	F	112	77	1.59	0.49	20
	%	59.3	40.7			
d. Shortage of maintenance and technical support	F	149	40	1.79	0.41	3
	%	78.8	21.2			
e. Not enough copies of software for instructional purposes	F	137	52	1.72	0.45	10
	%	72.5	27.5			
f. Not enough variety (types) of software	F	127	62	1.67	0.47	14
	%	67.2	32.8			
g. Poor quality of available software	F	141	48	1.75	0.44	8
	%	74.6	25.4			
h. Insufficient time for teachers to prepare lessons in which computers are used	F	128	61	1.68	0.47	12
	%	67.7	32.3			
i. Difficult to integrate computers into classroom instruction practices	F	116	73	1.61	0.49	19
	%	61.4	38.6			
j. Not enough staff to supervise students using computers	F	126	63	1.67	0.47	15
	%	66.7	33.3			
k. Problems in scheduling enough computer time for different classes	F	165	24	1.87	0.33	2
	%	87.3	12.7			
l. Internet connection unavailable	F	141	48	1.75	0.44	7
	%	74.6	25.4			
m. Difficult to use with low-achieving students	F	127	62	1.67	0.47	13
	%	67.2	32.8			
n. No time in the school schedule for using the Internet/WWW	F	145	44	1.77	0.42	4
	%	76.7	23.3			
o. No time in teachers' schedule to explore opportunities for using the Internet/WWW	F	137	52	1.72	0.45	9
	%	72.5	27.5			
p. Not enough space to locate computers appropriately	F	125	64	1.66	0.47	17
	%	66.1	33.9			
q. Lack of interest/willingness of teachers to use computers	F	108	81	1.57	0.50	21
	%	57.1	42.9			
r. Teachers' lack of knowledge/skills in using computers	F	124	65	1.66	0.48	18
	%	65.6	34.4			

Variables		Obstacle	No obstacle	Mean	SD	Rank order
s. Not enough training opportunities for teachers	F	144	45	1.76	0.43	5
	%	76.2	23.8			
t. Insufficient plans and/or resources to prevent theft and vandalism of computers	F	105	84	1.56	0.50	22
	%	55.6	44.4			
u. Lack of support from the universities	F	126	63	1.67	0.47	16
	%	66.7	33.3			
v. Weak infrastructure (telecommunications, electricity, etc.)	F	136	53	1.72	0.45	11
	%	72.0	28.0			

Table 5 displays the mean scores of obstacles to **CALL** use and integration in the English departments from the points of view of **EFL** female faculty members at the four universities. The following are the findings from Table 5:

1. Insufficient number of computers for students' use and problems in scheduling enough computer time for different classes ranked first and second, respectively, with respective mean scores of (M = 1.88 & 1.87) within a mean range of a maximum of 2 and a minimum of 1. Over 87% of participants considered those two statements obstacles that would stand in the way of **CALL** use and integration in **EFL** instruction.
2. The following were considered by respondents to be the second stage of obstacles that might stand in the way of using **CALL** in **EFL** instruction: shortage of maintenance and technical support (M = 1.79); insufficient number of computers for teachers' use (M = 1.76); not enough training opportunities for teachers (M = 1.76); no time in the school schedule for using the Internet (M = 1.77); Internet connection unavailable (M = 1.75); no time in teachers' schedules to explore opportunities for using the Internet (M = 1.72); poor quality of available software (M = 1.75); weak infrastructure (e.g., telecommunications, electricity) (M = 1.72); not enough copies of software for instructional purposes (M = 1.72); insufficient time for teachers to prepare lessons in which computers are used (M = 1.68); difficult to use with low-achieving students (M = 1.67); lack of support from the universities (M = 1.67); not enough staff to supervise students using computers (M=1.67); not enough variety (types) of software (M =1.67); not enough space to locate computers appropriately (M = 1.66); teachers' lack of knowledge/skills in using computers (M = 1.66); and difficult to integrate computers into classroom instruction practices (M = 1.61).
3. Outdated computers (older than 3 years), lack of interest/willingness of teachers to use computers, and insufficient plans and/or resources to prevent theft and vandalism of computers were the third stage of obstacles that might stand in the way of using **CALL** in **EFL** instruction. Outdated computers had a mean score of M = 1.59, lack of interest/willingness of teachers had a mean score of M = 1.57, and insufficient plans and/or resources to prevent theft and vandalism of computers had a mean score of M = 1.56. Over 57% of participants viewed those three statements as obstacles to **CALL** use in **EFL** instruction at the four universities.

5. Conclusion

The findings of the study indicate that EFL female faculty members at the four Saudi universities are not provided with enough computing facilities by their institutions. Office Internet access and college computing labs were the most widely available facilities, noted by more than half of the respondents (51.9%). The number of other computing facilities, such as department computing labs, lab Internet access, class computing labs, and wireless Internet access, were extremely limited. Female faculty members' use of computers for non-instructional purposes topped that of instructional purposes. Using a computer at home and in departments for non-instructional purposes ranked first and second, respectively, while using computers for EFL teaching/learning in classroom and in computer labs was below an acceptable level, as shown in Table 2.

The different types of support to use CALL in EFL instruction are generally lacking at the four institutions. The one exception was financial support. Of the participants, 54%, with a mean of 2.70, indicated that they were given financial support by their institutions. Data analysis showed that there was a consensus among all participants regarding the importance of providing EFL teachers with technical, financial, and training support to be able to use and integrate CALL in EFL instruction. This suggests that the scarcity of computing facilities in general and lack of institutional support in particular would constitute a real problem for institutions and may hinder faculty members from using CALL in EFL instruction. While the number of computers is important, how those computers are cared for is just as important. The more salient point that can be made from responses to questions regarding this issue is the fact that availability of computing facilities without constant technical, financial, and training support will have only a minor effect on CALL use and integration in EFL instruction.

Other deterring factors that might stand in the way of implementing CALL in EFL instruction were: insufficient number of computers for teachers' use, insufficient number of software programs, lack of staff to supervise students, management of integrating CALL into academic schedule, inadequate training knowledge, unwillingness to use CALL for EFL instruction, and inadequate computer resources and infrastructure. To implement CALL into those schools, EFL female faculty members should have access to such CALL resources as computer labs, adequate language software, online resources, and audio/video editing facilities. Schools need to make a focused effort on expanding such facilities, and be willing to make the economic investment required to fulfill that goal. To ensure a high level of CALL integration, the limited computing facilities that are available for EFL female faculty members use at the four universities must be upgraded and expanded. At least, one walk-in computer lab should be established in every EFL department along with one or more labs for use by formal classes or by students working on assignments after class.

The result of this study clearly shows that a great access to CALL resources could help the use of technology in EFL instruction. However, the study also shows that providing EFL female faculty members with technology alone is not sufficient for good technology integration. If CALL technology is to be integrated into EFL instruction, a continuous type training has to be conducted on an ongoing basis throughout the year to provide the female faculty members with the necessary competencies so that they will be able to use the technology independently.

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Appendix

The Survey Instrument

Survey on the factors affecting the use of **CALL** by **EFL** female faculty members in Saudi higher education: current status

Section 1. Types of computing facilities:

1. What types of computing facilities are presently available for **EFL** teachers in your department. Please check all that apply:

A	College computing lab	☐
B	Department computing lab	☐
C	Class computing lab	☐
D	Office Internet access	☐
E	Lab Internet access	☐
F	Wireless Internet access	☐
G	Other (please specify)	

2. Do you require your students to use available computer facilities (if any)? YES NO
   If YES, for which of the following tasks:

   a) to submit assignments by electronic mail

   b) to search the web for information

   c) to type their assignments

   d) to practice their computer skills

   e) to practice their language skills

   f) other (please specify)

Section 2. Computing usage.
Tick one space in each row.

	Never	Once a year	Once a month	Once a week	Daily
1. How often do you use a computer at home?	☐	☐	☐	☐	☐
2. How often do you use a computer at your department?	☐	☐	☐	☐	☐
3. How often do your students use the computer(s) in your classroom?	☐	☐	☐	☐	☐
4. How often can your students use the computer lab?	☐	☐	☐	☐	☐
5. How often do you use a computer lab in your schedule?	☐	☐	☐	☐	☐

Section 3. Types of support.

1. In a table from 0–4, rate the amount of support provided by your department/university to help you use and integrate Computer Assisted Language Learning (**CALL**) into your teaching. *Please put a tick .*

	0–25% (0)	26–50% (1)	51–75% (2)	76–100% (3)	Can't decide (4)
a) Technical support: The university/ department provides computer technicians/ coordinators/ consultants to help run, repair, and maintain computer systems.	☐	☐	☐	☐	☐
b) Financial support: The university/ department provides grants for **CALL** projects or funds to buy needed **CALL** software and materials.	☐	☐	☐	☐	☐
c) Training support: The university/ department provides training programs, workshops or, at least, encourages teachers to attend professional conferences on **CALL.**	☐	☐	☐	☐	☐
d) Other kinds of support that your university/department provides for you (Please write them down and circle the appropriate rate) :	☐	☐	☐	☐	☐

	0–25%	26–50%	51–75%	76–100%
1. _____	0	1	2	3
2. _____	0	1	2	3
3. _____	0	1	2	3
4. _____	0	1	2	3
5. _____	0	1	2	3

2. Do you consider any of the following obstacles to CALL use and its integration in your department?
Tick one box in each row.

	No obstacle	Obstacle
a. Insufficient number of computers for teachers' use	☐ 1	☐ 2
b. Insufficient number of computers for students' use	☐ 1	☐ 2
c. Outdated computers (older than 3 years)	☐ 1	☐ 2
d. Shortage of maintenance and technical support	☐ 1	☐ 2
e. Not enough copies of software for instructional purposes	☐ 1	☐ 2
f. Not enough variety (types) of software	☐ 1	☐ 2
g. Poor quality of available software	☐ 1	☐ 2
h. Insufficient time for teachers to prepare lessons in which computers are used	☐ 1	☐ 2
i. Difficult to integrate computers into classroom instruction practices	☐ 1	☐ 2
j. Not enough staff to supervise students using computers	☐ 1	☐ 2
k. Problems in scheduling enough computer time for different classes	☐ 1	☐ 2
l. Internet connection unavailable	☐ 1	☐ 2
m. Difficult to use with low achieving students	☐ 1	☐ 2
n. No time in the school schedule for using the Internet/WWW	☐ 1	☐ 2
o. No time in teachers' schedule to explore opportunities for using the Internet/WWW	☐ 1	☐ 2
p. Not enough space to locate computers appropriately	☐ 1	☐ 2
q. Lack of interest/willingness of teachers to use computers	☐ 1	☐ 2
r. Teachers' lack of knowledge/skills in using computers.	☐ 1	☐ 2

	No obstacle	Obstacle
s. Not enough training opportunities for teachers	☐ 1	☐ 2
t. Insufficient plans and/or resources to prevent theft and vandalism of computers	☐ 1	☐ 2
u. Lack of support from the university	☐ 1	☐ 2
v. Weak infrastructure (telecommunications, electricity, etc.)	☐ 1	☐ 2

3. From your point of view, what are other factors that might promote or stand in the way of using CALL in EFL instruction?

1) Promoting factors:

_____

_____

_____

_____

2) Deterring factors:

_____

_____

_____

_____

This is the end of the questionnaire. Thank you very much for your generous cooperation.