

## TEACHERS' COMPUTER-ASSISTED LANGUAGE LEARNING (CALL) LITERACY: A COMPARATIVE STUDY IN SPAIN AND IRAN

### ALFABETIZACIÓN DEL PROFESORADO EN APRENDIZAJE DE IDIOMAS ASISTIDO POR ORDENADOR: UN ESTUDIO COMPARATIVO EN ESPAÑA E IRÁN

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#### ABSTRACT

The application of technology in teacher education has received significant attention recently. It would be, somehow, impossible to deny the necessity of integrating technology in language education. The deficiency and illiteracy in delivering technology-based practices into instruction are assumed as key challenges of teachers in 21st-century education. This study aimed to explore the current level of Computer-Assisted Language Learning (CALL) literacy of language teachers in Iran and Spain. Moreover, the relationships between CALL literacy and their nationality are investigated. The study was based on a sample of 318 language teachers in Iran and Spain. Data collection was carried out through an online questionnaire. To make a sound decision, the researchers agreed to utilize the Delphi method so that appropriate experts were chosen in order to ensure a valid study. In the data analysis phase, descriptive, t-test, and one-way ANOVA analyses were performed to answer the research questions. The findings of the study revealed that there is no difference between the participants' CALL literacy of language teachers in terms of their nationality. Finally, pedagogical implications and recommendations for further research are presented.

**Keywords:** Computer-Assisted Language Learning (CALL) literacy, language teachers, Delphi methodology, Spain, Iran.

#### RESUMEN

La aplicación de la tecnología en la formación del profesorado ha recibido una gran atención en los últimos tiempos. Sería de todo punto imposible negar la necesidad de integrar la tecnología en la enseñanza de idiomas. La deficiencia y la falta de formación a la hora de aplicar prácticas basadas en la tecnología en la enseñanza se asumen como retos clave para el profesorado en la educación del siglo XXI. El objetivo de este estudio es explorar el nivel actual de alfabetización en aprendizaje de idiomas asistido por ordenador (CALL – *Computer Assisted Language Learning* – para sus siglas en inglés) de los profesores de idiomas en Irán y España. Además, se investigan las relaciones entre la alfabetización en el aprendizaje de idiomas asistido por ordenador y su nacionalidad. El estudio se basó en una muestra de 318 profesores de idiomas de Irán y España. La recogida de datos se llevó a cabo mediante un

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cuestionario en línea. El método Delphi fue utilizado para validar el instrumento diseñado ad hoc, para lo que se eligieron los expertos adecuados que garantizaran la validez de este trabajo. En la fase de análisis de datos, se realizaron análisis descriptivos, pruebas t y ANOVA para responder a las preguntas de investigación planteadas. Los resultados del estudio revelaron que no hay diferencias entre la alfabetización CALL de los profesores de idiomas en función de su nacionalidad. Por último, se presentan las implicaciones pedagógicas de este estudio y recomendaciones para futuras investigaciones.

**Palabras clave:** Alfabetización en el Aprendizaje de Lenguas Asistido por Ordenador (CALL), Profesores de Idiomas, Metodología Delphi, España, Irán.

## 1. Introduction

Technology has effectively altered our personal and professional lives. In such a revolutionary digitalized world, both teachers and learners are urged to build up their knowledge in nonlinear settings hindered by different digital tools and devices. These new learning settings lead scholars to revise the concept of “literacy” from “the ability to read and write in a predominantly printed context” (Goodfellow, 2011, p. 131) to the new literacies (see Table 1). Tafazoli and Gómez-Parra (2017) believed that none of the mentioned literacies could not fulfil all the needs of the 21<sup>st</sup> century language teachers and learners. None of the new literacies such as ‘cyberliteracy’ (Gurak, 2001), ‘digital literacy’ (European Commission, 2003), ‘electracy’ (Ulmer, 2003), ‘electronic literacies’ (Warschauer, 1999), ‘eLiteracy’ (Martin, 2003), ‘ICT literacy’ (Educational Testing System, 2007), ‘media literacy’ (Aufderheide, 1993), ‘technoliteracy’ (Kimber et al., 2007), etc. deals with the nature of language teaching and learning.

Computer-Assisted Language Learning (CALL) as an approach to language learning and teaching is defined as any application of technology to language teaching and learning (Tafazoli, 2015), which could be assumed as a paradigm shift in order to meet teachers’ and students’ needs in our digital world. Although there is a considerable amount of research that tackles to appraise CALL and its programs from a variety of aspects (e.g., Hsie et al., 2017; Ma, 2017; Mei et al., 2017; Rienties et al., 2018; Shadiev et al., 2017; Xu & Peng, 2017), the literature shows that most of the studies which investigate the role of literacy in CALL concentrate on the basic computer literacy (e.g., Son et al., 2011). Meanwhile, only two paper presentations (Tafazoli, 2014; Tafazoli et al., 2017), and one workshop (Tafazoli, 2017) dealt with the critical concept of CALL literacy. The researchers believed the focus of the CALL programs and courses should be on empowering language teachers and student by considering the product end-users’ CALL literacy.

Rooted in CALL, Tafazoli (2017) proposed a new literacy called ‘CALL literacy’, which is particularly applicable for language learning and teaching. He defined ‘CALL literacy’ as “the ability to use technology at an adequate level for teaching or learning a language” including three main core components of language literacy, language teaching/learning literacy, and computer literacy” (Tafazoli, 2017, n. p.).

As the very first study on CALL literacy, this study attempted to respond to the need by exploring the current level of CALL literacy of language teachers in two different countries: Iran (as an exemplar of a developing country) and Spain (as an exemplar of a developed country). Moreover, the study investigated the relationship between the nationality and the CALL literacy of the participants.

Therefore, this research seeks to answer the following research questions:

RQ1: What is the overall status of Spanish and Iranian language teachers’ CALL literacy?

RQ2: Is there any significant difference among the language teachers’ CALL literacy in terms of nationality?

## 2. New Literacies in Language Learning and Teaching

An appeal for new literacies called 'computer literacy', 'IT literacy', 'ICT literacy', etc. has been aroused since the late 1960s. The importance of students' and teachers' computer literacy has been investigated in many studies (e.g., Atkins & Vasu, 2000; Cunningham, 2000; Johnson, 2002; Lam, 2000; Oh & French, 2007; Park & Son, 2009; Shin & Son, 2007).

Table 1.  
Views of literacy (Tafazoli et al., 2017, p. 717)

Type	Literature
computer literacy	Corbel, 1997
Cyberliteracy	Gurak, 2001
digital literacy	European Commission, 2003
Electracy	Ulmer, 2003
electronic literacies	Warschauer, 1999
eLiteracy	Martin, 2003
ICT literacy	Educational Testing Service, 2005
media literacy	Kubey, 1997; Livingstone, 2003; Potter, 2004
Multiliteracies	Cope & Kalantzis, 2000; Unsworth, 2001
multimedia literacy	New London Group, 1996
multiple literacies	Kellner, 2002
new literacies	Lankshear & Knobel, 2003
online literacy	Tuman, 1996
silicon literacies	Snyder, 2002
Technoliteracy	Lankshear & Synder, 2000; Luke, 1997
visual literacy	Curtis, 2004; Moore & Dwyer, 1994

Undoubtedly, complying with new literacies in the second and foreign language classrooms is a demanding task for both language teachers and learners (Tan & McWilliam, 2009; Valdés, 2004; Warschauer, 2008b). Even in developed countries with fully furnished technological infrastructures, second and foreign language learning and teaching contexts have been shown to be depreciating the benefits of educational technologies (Ware, 2008).

Rilling et al. (2005) assert that, in consideration of successful integration of technology into language classrooms, teachers necessitate to shape their working knowledge and skills in online environments. Moreover, teachers should improve their technical skills to employ different computer applications for educational purposes (Cunningham, 2000). Thus, in CALL, one of the most critical aspects in language teacher education is the enhancement of their computer literacy (Hong, 2010) and acknowledging the demand for technology-competent language teachers (Hubbard, 2008). In other words, there will be greater professions for computer-literate teachers than those who lack this literacy (Tafazoli et al., 2017).

As Hall (2001) states "How well we prepare learners of additional languages to meet the social, political, and economic challenges of the next several decades will depend in part on our success in integrating technology into the foreign language curriculum" (p. 60). However, we should care about the issue that the only integration of technology is not an important issue but integrating suitable technology-based tools and devices which are important for language learning and teaching are the crucial factors in successful integration of technology in language education. To explain more, the technology itself cannot enhance language learning and teaching; the knowledge of how to use technology in language learning and teaching contexts is the case (Kern & Warschauer, 2000).

In the U.S., Warschauer's (2008a) 2-year multi-site case study was to qualitatively explore literacy practices of teachers, students, school staff members and parents based on a 'sociocultural framework of literacy' (Gee, 1996). Three different techniques of observation (650 hours), interviews (with 61 teachers, 32 school staff members, 67 students, and 31 parents), surveys (from 35 teachers and 877 students), and document reviews (teaching materials, student assignments, and student test scores) were applied in order to collect data. In the ICT literacy phase of the study, the findings revealed that continual and regular access to the Internet led both teachers and students to go beyond mechanical facets of ICT literacy, and allowed more in-depth skills and proficiencies such as: a) more "just-in-time" learning, b) more individualized learning, c) greater ease in conducting research, and d) more empirical investigation (Warschauer, 2008a, p. 61).

In Turkey, Konan (2010) conducted a study on 506 teachers in order to specify their levels of computer literacy. The researchers collected data through a questionnaire and analyzed them applying t-test and one-way analysis of variance (ANOVA). The results of the study showed significant differences between the levels computer literacy in terms of teachers' gender, experience, and education level. In general, computer literacy of teachers was medium. Nonetheless, computer literacy was higher in favor of male, novice, highly educated, and subject teachers than female, experienced, low educated, and class teachers.

In Indonesia, Son et al.'s (2011) study was to explore the computer literacy level of 73 in-service teachers of English as a Foreign Language (EFL) and investigate variables influencing on their use of computers in classrooms. In order to collect data, a questionnaire including participants' background, use of computer applications, computer-related questions, computer knowledge test, and factors affecting the use of computers was used. The findings showed that in self-evaluation, most teachers believed that their level of computer literacy, Internet literacy and typing skills were adequate or higher. However, in-depth assessment revealed great individual differences in the level of computer literacy. Son et al. (2011) concluded that "these differences bring about a need for a different approach to teacher training for a different background group of teachers, which allows teachers to improve their personal level of computer literacy and competency and gain online experience contextually relevant to their teaching situations" (p. 34).

### 3. Methodology

#### 3.1. Participants

The participants of this study were 318 language teachers in Iran and Spain. As illustrated in Table 2, 50.94% of the teachers were Iranian. Spanish teachers were 49.06% of the sample. Moreover, female was the dominant gender in the sample with over half of the teacher participants (64.46 %).

Table 2.  
Distribution of participants based on their gender

Country	Gender	Teacher
Iran	Male	69
	Female	93
	Total	162
Spain	Male	44
	Female	112
	Total	156

Total	Male	113
	Female	205
	Total	318

It could be observed in Table 3 that the distribution of BA, MA and PhD teachers was almost equal in the sample.

Table 3.  
Distribution of participants based on their educational level

Country	Educational Level	Teacher
Iran	BA	25
	MA	92
	PhD	45
Spain	BA	25
	MA	85
	PhD	46
Total	BA	50
	MA	177
	PhD	91

As far as the age was concerned, as depicted in Table 4, the largest category of teacher participants (N=170) fell within the age range of 36 and above. On the other hand, the smallest groups in teacher participants were the category of 18 to 23 (2.51%).

Table 4.  
Distribution of participants based on their age groups

Country	Age group	Teacher
Iran	18-23	8
	24-29	30
	30-35	61
	36 and above	63
Spain	18-23	0
	24-29	15
	30-35	34
	36 and above	107
Total	18-23	8
	24-29	45
	30-35	95
	36 and above	170

### 3.2 Instrumentation

A CALL literacy online questionnaire was used to collect data on the Iranian and Spanish language teachers' CALL literacy. The questionnaire consists of 6 sections: Section I (background information), Section II (CALL courses), Section III (CALL tools), Section IV (CALL in

action), Section V (Computer software/applications/programs), and Section VI (CALL and language skills and components). To meet the end of the study, all of the sections and items in the questionnaire were designed in order to find out the answers to the following questions: 1) Have teachers ever undertaken professional courses? 2) How well do they cope with using different technologies for language teaching and learning? 3) How well do they use technology for teaching and learning purposes? 4) How well do they use different software/applications/programs?, and 5) To what extent are they able to improve their language skills and components with technology?

Table 5.  
Distribution of items on the questionnaire

Construct	Section I	Section II	Section III	Section IV	Section V	Section VI
Question type	Background information	CALL courses	CALL tools	CALL in action	Computer software/applications/programs	CALL and language skills and components
Total	14	10	14	12	12	8

### 3.3 Measurement analysis

To make a sound decision, the researchers utilized the Delphi method, so that appropriate experts were chosen in order to ensure a valid study. Due to the multidisciplinary nature of CALL, the researchers decided to arrange the panel of experts based on their expertise. The first draft of the questionnaire for this research was designed and emailed to 20 PhD experts in the fields of Applied Linguistics, Computer Sciences, English Language Teaching, and Computer-Assisted Language Learning, and from different parts of the world such as Iran, Spain, the USA and the UK, among others.

The data collection and analysis phase of the Delphi method was guided by three issues: discovering the experts' opinions; determining the most important issues; and managing opinions (Keeney et al., 2000). First, the lead researcher tried to discover the opinions to reach consensus on the content of the questionnaire. After gathering experts' opinions, data were analyzed through content analysis technique. At the end of three rounds, the researchers agreed on a questionnaire for language teachers.

The questionnaire contained 56 items, which measured CALL literacy of language teachers. After administering this questionnaire to the teachers' sample, the researchers first checked the validity of the case processing. All the 318 cases of the sample were valid, and SPSS did not exclude the scores of any of the participants from the processing. Then, the researchers used SPSS to calculate the Cronbach's Alpha Coefficient, which was .948 for 56 quantitative items of CALL literacy construct. This indicated that this construct enjoyed ample internal consistency.

## 4. Results and Discussion

RQ1: What is the overall status of Spanish and Iranian language teachers' CALL literacy?

As depicted from Table 6, among the participants, 44.3% of them has participated in introductory courses on internet use and general application. Also, 198 teachers (62.3%) have not participated in online communities for educational discussions with other language teachers. On the other hand, only 120 out of 318 teachers (37.7%) have attended such communities.

Table 6.  
Descriptive statistics of CALL courses

Have you ever undertaken the following courses?	Response	Freq. (%)
1. Introductory courses on internet use and general applications (basic word-processing, spreadsheets, presentations, databases, etc.)	Yes	141 (44.3%)
	No	177 (55.7)
2. Advanced courses on applications (advanced word-processing, complex relational databases, Virtual Learning Environment, etc.)	Yes	185 (58.2%)
	No	133 (41.8%)
3. Advanced courses on internet use (creating websites/home page, video conferencing, etc.)	Yes	186 (58.5%)
	No	132 (41.5%)
4. Equipment-specific training (interactive whiteboard, laptop, tablet, etc.)	Yes	158 (49.7)
	No	160 (50.3)
5. Courses on the pedagogical use of technologies in learning	Yes	133 (41.8)
	No	185 (58.2%)
6. Subject-specific training on learning applications (tutorials, simulations, etc.)	Yes	172 (54.1%)
	No	146 (45.9%)
7. Course on multimedia (using digital video, audio equipment, etc.)	Yes	168 (52.8%)
	No	150 (47.2%)
8. Participate in online communities (e.g., mailing lists, groups, blogs) for educational discussions with other language learners/teachers.	Yes	120 (37.7%)
	No	198 (62.3%)
9. CALL training provided by school staff Personal learning about technology in your own time	Yes	173 (54.4%)
	No	145 (45.6%)
10. Other professional courses related to CALL	Yes	166 (52.2%)
	No	152 (47.8%)

Based on the self-evaluation of competency in terms of the use of CALL tools, Table 7 indicated that teachers were more competent in computers, PowerPoint software, mobile phones, CD/DVD players, video projectors, social networking sites and applications, Google Docs, tape-recorders/ videocassette recorders and discussion forums, respectively. Moreover, teachers' self-evaluation reported that they are less proficient in Excel software, image-editing software, weblogs, overheads, and interactive whiteboards. The findings are consistent with Golshan and Tafazoli's (2014) study that computer and video projector are among the most applied CALL tools in teaching English. These researchers indicated that out of all the participants (N=32), 50.99% used computer and video projectors, 18.18% applied websites, and 12.65% utilized mobile phones for teaching EFL to Iranian students.

Table 7.  
Descriptive statistics of CALL tools

How well do you cope with using the following technologies for language learning/teaching?	Response	Freq. (%)
	Tape-recorder/ Videocassette recorder	Not used
Poorly		18 (5.7%)
Moderately well		36 (11.3%)
Well		52 (16.4%)
Very well		123 (38.7%)
CD/DVD player	Not used	42 (13.2%)
	Poorly	13 (4.1%)
	Moderately well	22 (6.9%)

	Well	66 (20.8%)
	Very well	175 (55%)
	Not used	2 (0.6%)
	Poorly	10 (3.1%)
Computer	Moderately well	16 (5%)
	Well	70 (22%)
	Very well	220 (69.2%)
	Not used	53 (16.7%)
Image-editing software (Photoshop, Paint, etc.)	Poorly	53 (16.7%)
	Moderately well	78 (24.5%)
	Well	82 (25.8%)
	Very well	52 (16.4%)
	Not used	95 (29.9%)
	Poorly	34 (10.7%)
Overheads	Moderately well	38 (11.9%)
	Well	63 (19.8%)
	Very well	88 (27.7%)
	Not used	37 (11.6%)
	Poorly	21 (6.6%)
Video projector	Moderately well	35 (11%)
	Well	89 (28%)
	Very well	136 (42.8%)
	Not used	88 (27.7%)
	Poorly	40 (12.6%)
Weblogs	Moderately well	63 (19.8%)
	Well	57 (17.9%)
	Very well	70 (22%)
	Not used	13 (4.1%)
	Poorly	21 (6.6%)
PowerPoint Software	Moderately well	28 (8.8%)
	Well	67 (21.1%)
	Very well	189 (59.4%)
	Not used	72 (22.6%)
	Poorly	38 (11.9%)
Excel Software	Moderately well	68 (21.4%)
	Well	64 (20.1%)
	Very well	76 (23.9%)
	Not used	51 (16%)
	Poorly	28 (8.8%)
Google Docs	Moderately well	46 (14.5%)
	Well	70 (22%)
	Very well	123 (38.7%)
	Not used	60 (18.9%)
	Poorly	31 (9.7%)
Discussion forums	Moderately well	47 (14.8%)
	Well	75 (23.6%)
	Very well	105 (33%)
	Not used	41 (12.9%)
	Poorly	25 (7.9%)
Social Networking Sites and Applications	Moderately well	45 (14.2%)
	Well	78(24.5%)
	Very well	129 (40.6%)
	Not used	121 (38.1%)

Interactive whiteboards	Poorly	41 (12.9%)
	Moderately well	37 (11.6%)
	Well	58 (18.2%)
	Very well	61 (19.2%)
Mobile phones	Not used	20 (6.3%)
	Poorly	20 (6.3%)
	Moderately well	34 (10.7%)
	Well	71 (22.3%)
	Very well	173 (54.4%)

The ability of teachers in using CALL was quite different in comparison to students. As indicated in Table 8, more than 90% of the teachers were capable of browsing/searching the Internet to collect information and resources to prepare lessons. In addition, about 90% of them were able to use applications to prepare presentations for lessons. A little above 80% of the teachers were competent in looking for online professional development opportunities and participating in social networks. However, around 70% of the teachers demonstrated that they are not proficient in programming.

Table 8.  
Descriptive statistics of CALL in action

How well do you do the followings?	Response	Freq. (%)
Browse/search the Internet to collect information and resources to prepare lessons	Not used	3 (0.9%)
	Poorly	7 (2.2%)
	Moderately well	24 (7.5%)
	Well	52 (16.4%)
	Very well	232 (73%)
Use applications to prepare presentations for lessons	Not used	14 (4.4%)
	Poorly	15 (4.7%)
	Moderately well	50 (15.7%)
	Well	75 (23.6%)
	Very well	164 (51.6%)
Create your own digital learning materials for students	Not used	31 (9.7%)
	Poorly	37 (11.6%)
	Moderately well	78 (24.5%)
	Well	65 (20.4%)
	Very well	107 (33.6%)
Post homework for students on the school website	Not used	95 (29.9%)
	Poorly	29 (9.1%)
	Moderately well	34 (10.7%)
	Well	61 (19.2%)
	Very well	99 (31.1%)
Use ICTs to provide feedback and/or assess students' learning	Not used	103 (32.4%)
	Poorly	31 (9.7%)
	Moderately well	58 (18.2%)
	Well	55 (17.3%)
	Very well	71 (22.3%)
Evaluate digital learning resources in the subject(s) you teach	Not used	82 (25.8%)
	Poorly	29 (9.1%)
	Moderately well	64 (20.1%)
	Well	68 (21.4%)
	Very well	75 (23.6%)

Communicate online with parents and students	Not used	59 (18.6%)
	Poorly	17 (5.3%)
	Moderately well	49 (15.4%)
	Well	60 (18.9%)
	Very well	133 (41.8%)
Look for online professional development opportunities	Not used	27 (8.5%)
	Poorly	21 (6.6%)
	Moderately well	47 (14.8%)
	Well	75 (23.6%)
	Very well	148 (46.5%)
Participate in social networks	Not used	21 (6.6%)
	Poorly	20 (6.3%)
	Moderately well	63 (19.8%)
	Well	69 (21.7%)
	Very well	145 (45.6%)
Teach students how to behave safely and ethically online	Not used	59 (18.6%)
	Poorly	32 (10.1%)
	Moderately well	59 (18.6%)
	Well	80 (25.2%)
	Very well	88 (27.7%)
Programming	Not used	159 (50%)
	Poorly	57 (17.9%)
	Moderately well	49 (15.4%)
	Well	27 (8.5%)
	Very well	26 (8.2%)

The next section of the CALL literacy questionnaires asked participants to what extent teachers are proficient in using different software, applications and programs for language teaching. As depicted in Table 9, teachers reported their competency in using word processors. Moreover, they should be more competent in utilizing programs for special needs.

Table 9.  
Descriptive statistics of software/applications/programs

How well do you use the following software/ applications/ programs?	Response	Freq. (%)
Word-processors	Not used	33 (10.4%)
	Poorly	21 (6.6%)
	Moderately well	35 (11%)
	Well	56 (17.6%)
	Very well	173 (54.4%)
Story writing programs	Not used	152 (47.8%)
	Poorly	32 (10.1%)
	Moderately well	59 (18.6%)
	Well	34 (10.7%)
	Very well	41 (12.9%)
Electronic dictionaries	Not used	15 (4.7%)
	Poorly	11 (3.5%)
	Moderately well	28 (8.8%)
	Well	57 (17.9%)
	Very well	207 (65.1%)
	Not used	58 (18.2%)
	Poorly	30 (9.4%)

Educational games	Moderately well	62 (19.5%)
	Well	79 (24.8%)
	Very well	89 (28%)
Talking books	Not used	126 (39.6%)
	Poorly	29 (9.1%)
	Moderately well	55 (17.3%)
	Well	55 (17.3%)
	Very well	53 (16.7%)
Programs for special needs	Not used	143 (45%)
	Poorly	48 (15.1%)
	Moderately well	65 (20.4%)
	Well	37 (11.6%)
	Very well	25 (7.9%)
Grammar exercise programs	Not used	46 (14.5)
	Poorly	23 (7.2%)
	Moderately well	63 (19.8%)
	Well	79 (24.8%)
	Very well	107 (33.6%)
Pronunciation programs	Not used	46 (14.5)
	Poorly	19 (6%)
	Moderately well	82 (25.8%)
	Well	74 (23.3%)
	Very well	97 (30.5%)
Vocabulary programs	Not used	37 (11.6%)
	Poorly	14 (4.4%)
	Moderately well	65 (20.4%)
	Well	89 (28%)
	Very well	113 (35.5%)
Spelling programs	Not used	72 (22.6%)
	Poorly	23 (7.2%)
	Moderately well	61 (19.2%)
	Well	72 (22.6%)
	Very well	90 (28.3%)
Cross-curricular programs	Not used	120 (37.7%)
	Poorly	28 (8.8%)
	Moderately well	70 (22%)
	Well	47 (14.8%)
	Very well	53 (16.7%)
Language testing programs	Not used	71 (22.3%)
	Poorly	21 (6.6%)
	Moderately well	73 (23%)
	Well	68 (21.4%)
	Very well	85 (26.7%)

Son et al. (2011) reported that approximate half of the teachers assessed themselves as a basic or an intermediate user of general computer applications while over 46% of them disclose that they do not have skills for using spreadsheet, database or Web design applications, Web search engines and communication applications. Moreover, in terms of the use of computer applications, Son et al. (2011) stated that the use of word processors, email, Web and multimedia programs are more tendentious among English language teachers, while the integration of other types of applications such as databases, graphics, concordancers, blogs, wikis, online discussion groups, voice chatting and video conferencing programs are infrequent.

In the final section, eight items of the questionnaires dealt with teachers' competency in applying different technologies in order to improve their language skills and components. In items regarding language skills (Table 10), teachers claimed that they are most proficient in improving students' listening via CALL. Moreover, teachers were least competent in boosting students' writing skill through technology.

Table 10.

Descriptive statistics of CALL and language skills and components

To what extent are you able to improve the followings with technology?	Response	Freq. (%)
Reading	Very poor	6 (1.9%)
	Poor	18 (5.7%)
	Fair	85 (26.7%)
	Good	112 (35.2%)
	Very good	97 (30.5%)
Writing	Very poor	14 (4.4%)
	Poor	34 (10.7%)
	Fair	89 (28%)
	Good	93 (29.2%)
	Very good	88 (27.7%)
Speaking	Very poor	6 (1.9%)
	Poor	25 (7.9%)
	Fair	70 (22%)
	Good	111 (34.9%)
	Very good	106 (33.3%)
Listening	Very poor	2 (0.6%)
	Poor	9 (2.8%)
	Fair	51 (16%)
	Good	94 (29.6%)
	Very good	162 (50.9%)
Grammar	Very poor	7 (2.2%)
	Poor	19 (6%)
	Fair	85 (26.7%)
	Good	112 (35.2%)
	Very good	95 (29.9%)
Vocabulary	Very poor	4 (1.3%)
	Poor	13 (4.1%)
	Fair	58 (18.2%)
	Good	116 (36.5%)
	Very good	127 (39.9%)
Pronunciation	Very poor	5 (1.6%)
	Poor	25 (7.9%)
	Fair	73 (23%)
	Good	98 (30.8%)
	Very good	117 (36.8%)
Cross-cultural awareness	Very poor	20 (6.3%)
	Poor	23 (7.2%)
	Fair	70 (22%)
	Good	106 (33.3%)
	Very good	99 (31.1%)

RQ2: Is there any significant difference among the language teachers' CALL literacy in terms of nationality?

An independent sample of t-test was carried out to investigate if there is any statistical significant difference among Spanish and Iranian language teachers' CALL literacy in terms of nationality.

Table 11.  
Differences among teachers' CALL literacy in terms of their nationality

	Country	N	Mean	Std. Deviation	Sig.	t	df
CALL literacy	Iran	162	171.2222	37.9289	.001	-2.657	79
	Spain	156	181.5576	30.9280			

As depicted in Table 11, the results outline significant differences between Iranian and Spanish teachers' CALL literacy in terms of their nationality in favor of language teachers in Spain. The calculated value of the significance level is ( $p = 0.01$ ,  $p < 0.05$ ).

## 5. Conclusion

Several issues might influence on the results of the study, which is based on a self-evaluation that is totally different from actual competency of the participants. Among them, unfamiliarity of the participants with technical vocabulary rooted in computer science like spreadsheet, vodcast, etc., the limited number of choices in the questionnaires (the participants might use robots and any other high-tech technologies not considered in the study), participants' attitudes towards CALL, and limitations in the size of the participants (the findings cannot be used to predict the CALL literacy of all language teachers in Iran and Spain). By considering these limitations, the findings showed that among teachers there is no significant difference between CALL literacy. However, the findings revealed that there is a significant relationship between CALL literacy and nationality of language teachers in favor of Spanish teachers.

This study provided useful results and findings for language teachers, material developers and decision makers. Regarding policy makers, using developed countries' CALL materials, such as Spain, in the curriculum of developing countries like Iran is not appropriate based on the teachers' CALL Literacy. As Tafazoli et al.'s (2018) study on the computer literacy of the Iranian and non-Iranian English language students confirmed that "it is not possible to apply all the CALL materials produced in other cultures and contexts in our [refers to Iran] context. Therefore, we [refers to Iranian decision makers] have to select the best CALL materials based on our students' computer literacy" (p. 60).

Once again, I would like to declare that it should be considered that self-evaluation CALL literacy might not be equivalent to actual levels of CALL literacy for using a wide range of applications in language teaching and learning. We have to take into account three main components - computer literacy, language teaching/learning literacy, and language literacy - which shape the main core of CALL literacy. These components, all together, will shape the CALL literacy of an individual (Tafazoli, 2017). To explain more, an expert in computer science or a competent user of technology cannot be a good language teacher or learner if s/he has no proficiency in language and language teaching/learning literacies. All of these components are interwoven, and they act as a unit and integrated literacy.

I would like to suggest further research on actual level of CALL literacy of language teachers and students. Moreover, although design and propose a new framework/model of CALL literacy could be a demanding task, this framework/model might add a new field of research interest

among scholars in applied linguistics, computer assisted language learning, language teaching and learning, education, and even computer sciences.

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