The Journal of Teaching English with Technology

The Journal of

Teaching English with Technology

(*TEwT*)

Publishers

IATEFL Poland Computer Special Interest Group

University of Nicosia

Maria Curie-Skłodowska University

ISSN 1642-1027

Teaching English with Technology

Abstracting and Indexing

Reviewing Procedure

- Each publication is reviewed by at least two external reviewers.
- Since the language of publication is English, at least one reviewer is a native speaker of English.
- At least one reviewer has a different affiliation country than the author.
- The submissions are subject to the double blind review process.
- Every care is taken so that there is no conflict of interest between the authors and the reviewers.
- The review is made in a written form with a clear conclusion on acceptance or rejection of the submission.
- The reviewing procedure and the reviewer file are published on the Journal's website at http://www.tewtjournal.org/reviewingprocedure.html
- The names of reviewers for particular issues are not revealed, instead, once a year, the aggregate list of reviewers for the entire volume is published.

ALL THE SUBMISSIONS SHOULD BE SENT TO

Kamila Burzyńska, *kamila.burz@wp.pl*

AND

Jarek Krajka, *jarek.krajka@wp.pl*

Chris Alexander, *alexander.c@unic.ac.cy*

Volume 18, Issue 1

FROM THE EDITOR

by **Jarosław Krajka**

Maria Curie-Skłodowska University

Ul. J. Sowińskiego 17/336, 20-041 Lublin, Poland

jarek.krajka @ wp.pl

Expanding the publication basis of *Teaching English with Technology,* reaching out new audiences in different parts of the world, overcoming the digital divide not only visible in terms of inequalities of access to ICT tools, but also in the publishing opportunities that researchers and teachers from outside the Western world face, has always been the major focus of the Journal. Originally from Poland, *Teaching English with Technology* has managed to establish its reputation for promoting independent and practical research into educational technology in every corner of the world. Having said that, I am happy to announce that in this issue we manage to broaden our publication basis into India and Lebanon. It is truly fascinating to see how foreign language teaching assisted by technology is flourishing in many countries while overcoming problems and trying to win its proper place in some others. Whenever possible, we are going to expand the geographical reach, by promoting authors from the countries that have not published with us before and that have limited publishing opportunities elsewhere.

The current issue opens with a contribution "**Collaborative Academic Projects on Social Network Sites to Socialize EAP Students into Academic Communities of Practice**" by **Reza Dashtestani** from Iran. The author examined the use of collaborative projects designed within *Facebook*, *LinkedIn*, and *ResearchGate* social portals. The students showed a preference for using *Facebook*; however they did not agree on their interest in the use of *ResearchGate* and *LinkedIn*.

Ruba Fahmi Bataineh, Raghda Fayez Al-Hamad and **Dina Abdulhameed Al-Jamal** (Jordan) investigated the utility of a popular mobile app *WhatsApp* with respect to gender. The study proved that *WhatsApp* is a potential catalyst for writing performance across gender, more so for female students than their male counterparts.

Cross-cultural aspect of computer-assisted language instruction is the focus of the next article, "**A Cross-Cultural Study on the Attitudes of English Language Students towards Computer-Assisted Language Learning**" by **Dara Tafazoli, Mª Elena Gómez Parra** and

Cristina A. Huertas Abril from Spain. The attitudes of Iranian and non-Iranian English language students' attitudes towards Computer-Assisted Language Learning (CALL) were investigated, with a special focus on effect of gender, education level, and age. The findings of the study revealed that there is no difference between the attitudes of Iranian and non-Iranian learners towards CALL.

The topic of ESP instruction delivered through the Second Life virtual world has been addressed in the article by **Mercedes Rico García** and **Paula Ferreira da Silva** from Spain. Focusing specifically on developing ESP learners' intercultural competence, the authors conducted a four-phased in/out SL instruction. Questioning about the differences between the mean score obtained by experimental and control groups shows no significant differences in the acquisition of language regarding face to face and Second Life interaction, but demonstrates a positive tendency in the case of intercultural competences.

"Effect of Glogster and Cooperative Learning Differentiated Instruction on Teachers' Perceptions" is a study conducted by **Ghada M. Awada** and **Kawthar H. Faour** from Lebanon. The research with Science and English teachers showed that utilizing Glogster and cooperative learning as a multifeatured model could improve students' English and Science projects and enhance Science and English language teachers' perceptions of differentiated instruction.

Finally, Divya John from India shows how to practically ensure student engagement in the instruction of all the four skills through tasks demanding student editing of films. As evidenced by the study, the whole process of the film task provided a rich input for listening and reading, and subsequently a productive language output in speaking and writing.

We wish you good reading!

COLLABORATIVE ACADEMIC PROJECTS
ON SOCIAL NETWORK SITES
TO SOCIALIZE EAP STUDENTS
INTO ACADEMIC COMMUNITIES OF PRACTICE

by **Reza Dashtestani**

University of Tehran

Karegar-e-Shomali st., Tehran, Iran

rdashtestani @ ut.ac.ir

Abstract

Learning English for academic purposes (EAP) can help university students promote their academic literacy through socializing them into academic communities of practice. This study examined the impact of the use of collaborative projects on three social network sites on EAP students' attitudes towards EAP and academic content learning. Three groups of students from three disciplines, i.e. engineering (n = 54), social sciences (n = 57), and basic sciences (n = 62) participated in the study. The students participated in collaborative projects on three social network sites, i.e. *Facebook*, *LinkedIn*, and *ResearchGate*, for a period of four months with the help of their teachers. Questionnaires and semi-structured interviews were utilized as the instruments of the study. The results suggested that the students from the three disciplines had positive attitudes towards carrying out collaborative projects on three social network sites. No significant difference was identified regarding students' attitudes. The perceived benefits of the project work included opportunities for having international communication, learning academic vocabulary, peer collaboration, teacher support, and opportunities for improving academic English and academic literacy. The study further explored students' attitudes towards factors which affected students' project work and the limitations of the use of collaborative projects on three social network sites. The students showed a preference for using *Facebook*; however they did not agree on their interest in the use of *ResearchGate* and *LinkedIn*. The findings can have implications for integrating the three social network sites in EAP instruction.

Keywords: collaborative learning; social network sites; English for Academic Purposes

1. Introduction

The application of social network sites (SNSs) in educational contexts has gained tremendous popularity among educational researchers, teachers, and students (Álvarez Valencia, 2015; Hsu, 2013; Özmen & Atıcı, 2014; Toetenel, 2014; Veletsianos & Navarrete, 2012; Yen, Hou,

& Chang, 2013). SNSs are defined as "web-based services that allow individuals to (1) construct a public or semi-public profile within a bounded system, (2) articulate a list of other users with whom they share a connection, and (3) view and traverse their list of connections and those made by others within the system" (boyd & Ellison, 2007, p. 211). The integration of SNSs in educational practices of students has been found to offer all involved a variety of benefits. The most significant advantages of the use of SNSs in education include increase in student engagement, motivation and communication level (Brady, Holcomb, & Smith, 2010), improvement of peer feedback, student content and idea sharing and exchange, student creativity (Van De Bogart & Wichadee, 2015), participation and integration in online communities of practice, and collaborative learning (Wheeler, Yeomans, & Wheeler, 2008). The invaluable affordances of SNSs for educational purposes have encouraged educational experts and teachers to consider social networking as an effective aid for teaching and learning purposes.

English for Academic Purposes (EAP) is a branch of English for Specific Purposes (ESP) which aims to socialize university students into academic communities of practice through enabling them to engage in academic communication at an international level (Hyland, 2006). More specifically, the use of social network sites in EAP instruction can create a sense of community and collaborative learning in EAP instruction (Dashtestani & Stojkovic, 2016; Kavaliauskienė & Ashkinazi, 2014; Sabater & Fleta, 2015). Harwood (2014) suggests that social network sites can be staunch tools in order to facilitate university students' integration in online academic communities of practice and encourage them to learn both the academic vocabulary and the subject-specific academic content.

EAP and Computer-Assisted Language Learning (CALL) are closely related to each other (Jarvis & Pastuszka, 2008). Academic resources available on the Internet and computers are authentic ones and EAP students should be competent enough to read these online and computer-based resources (Plastina, 2003). More importantly, in order to join international academic communities of practice more easily, EAP students need to foster their digital literacy and be able to use online applications competently (Jarvis, 2009). Flea and Stanca (2010) suggest that collaborative learning on social network sites can affect EAP students' academic success, active learning, motivation, and interaction of students and teachers. Arno (2012) points out that the use of technology in EAP instruction would increase the level of authenticity, decrease costs, and meet the specific needs of EAP students. Therefore, the aim of this study is to identify Iranian EAP students' attitudes towards conducting academic

collaborative projects on three specific social network sites along with the limitations and students' preferences of these SNSs.

2. Language learning and social networking

Social networking and language learning research has attracted the attention of a plethora of English as a foreign language (EFL) researchers and scholars. In addition, the use of SNSs has provided a wide range of pedagogical opportunities for language learning and teaching contexts (Hsu, 2013). The analysis of the previous research on the use of SNSs in language learning reveals positive attitudes of students and positive learning outcomes in EFL contexts. For example, Millington and Smith (2012) reported that the use of social networking for EFL students promoted their autonomy and assisted them to be more creative in language learning. The persistent communication through chatting, exchanging videos and images, and blogging, which was inspired by the use of the SNS, encouraged EFL students to be involved in collaborative speaking activities and made them more interested in class participation. Kikuchi and Otsuka (2008) analyzed Japanese EFL students' use of social networking in the classroom and suggested that the students expressed positive attitudes towards blogging and its role in fostering their writing proficiency in the foreign language. The use of authentic materials and activities, together with constant communication between classmates were the other significant merits of the use of SNSs in the classroom. Liu et al. (2015) noted that the use of SNSs can have a positive influence on language learning. They proposed that the use of SNSs can enhance the rate of collaborative learning in the classroom. Based on the findings of this study, teachers may use SNSs to motivate students to have social interactions and connections with other students. Moreover, the authentic speaking interactions between less and more proficient learners can assist teachers to set more realistic teaching objectives. The other merits of the use of SNSs include opportunities for text chatting, corrective feedback on written tasks, and synchronous communication. As for the type of the SNS, it was suggested that students should find the use of a specific type of SNS easy in terms of factors such as accessibility, visibility, suitability, and language (Norman, 2002, cited in Liu et al., 2015).

Similarly, Hsu (2013) concluded that the use of *Facebook* can enhance students' engagement. The use of *Facebook* fostered students' motivation, vocabulary learning, self-confidence, and attitudes towards EFL learning. Moreover, the use of *Facebook* created an interactive learning environment in which learning improved. Kabilan, Ahmad, and Abidin (2010) identified similar benefits concerning the use of SNSs in an EFL learning context. The overall results of Kabilan et al.'s (2010) study indicated that university students considered

Facebook as an effective learning tool which can promote meaningful learning in EFL contexts. Ping and Maniam (2015) assessed the use of group discussion for learning English on *Facebook*. They reported that *Facebook* could be regarded as an effective choice for improving the quality and quantity of group discussions among EFL students. Similar findings with regard to the use of social networking in group discussion were reported in other studies (Omar, Embi, & Yunus, 2012; Tina, 2010).

As for the application of social network sites for ESP instruction, Dashtestani and Stojkovic (2016) point out that research on ESP and social networking is very limited. For example, Kavaliauskienė and Ashkinazi (2014) reported that the majority of EAP students are familiar with most social network sites, while they rarely make use of these sites. Kavaliauskienė and Ashkinazi's (2014) research provides evidence on the necessity of training EAP students for the effective use of social network sites for EAP learning. Similarly, Sabater and Fleta (2015) examined the effectiveness of *Twitter* for ESP students. They argued that the use of *Twitter* improved the rate of student participation. More importantly, the use of *Twitter* created an interactive environment in which students were involved in instruction in a learning community. Van de Bogart and Wichadee (2015) investigated the efficiency of *Line* as a social network site. They suggested that its use enhanced collaborative learning in the classroom and the majority of students held positive attitudes towards *Line* and its use for their learning.

Iranian EFL researchers and experts have shown tremendous interest in the integration of technology in EFL learning (Dashtestani, 2016). A few studies have been directed towards the use of social network sites in the Iranian EFL context (e.g. Khany & Monfared, 2013; Mohammadkhani, Mazinanai, Zandvakili, & Fard-Kashani, 2015; Qarajeh & Abdolmanafi-Rokni, 2015). The results of these studies illustrated that the use of SNSs can contribute to Iranian students' language learning in terms of improving their oral proficiency, promoting their attitudes towards language learning, and fostering their motivation and self-efficacy.

3. The study

3.1. The aims of the study

While previous research has mainly focused on EFL learning contexts, this study aimed to examine the effect of SNSs in EAP contexts. Furthermore, unlike previous research which included only one single social networking site in its analysis, this study analyzed EAP students' perceptions of the use of three distinct SNSs. *Facebook*, *ResearchGate*, and

LinkedIn are commonly used by a large number of Iranian university students (Batooli & Nazari, 2014; Khany & Monfared, 2013; Mohammadkhani et al., 2015; Moeinmanesh & Rezvani, 2015; Yaghoobi Malal, 2014). This study also sought cross-disciplinary variations in the use of SNSs in the EAP context of Iran. Alavi and Dashtestani (2014) argued that there exist cross-disciplinary variations in students' attitudes towards and use of technology in EAP instruction. Therefore, studies on the use of specific types of technologies in EAP instruction should take into account these variations and provide explanations for them. To achieve the aims of the study, four specific research questions were formulated:

1. What are the attitudes of EAP students from the three disciplines towards the use of collaborative projects carried out in three social network sites for learning EAP? Is there any significant difference among their perceptions?

2. What are the attitudes of EAP students from the three disciplines towards the limitations of the use of collaborative projects carried out in three social network sites for learning EAP? Is there any significant difference among their perceptions?

3. What are the attitudes of EAP students from the three disciplines towards the factors which can affect the use of collaborative projects carried out in three social network sites for learning EAP? Is there any significant difference among their perceptions?

4. What are the preferences of EAP students from the three disciplines for the type of social network sites which can be used for collaborative projects? Is there any significant difference among their perceptions?

3.2. Participants

Three groups of students participated in this study. These students enrolled in an EAP course and were at a Bachelor of Science/Art level. The students had an age range of 20-24 and were all male. Specifically, three classes, including 54 students of agriculture engineering (engineering discipline), three classes, including 62 students of biology (basic sciences discipline), and three classes, including 57 students of sociology (social sciences discipline), participated in the study. All of these students attended the interview and questionnaire study. They were randomly selected from a state university in Tehran, Iran. Moreover, to ensure the participants' homogeneity of general English proficiency, a TOEFL iBT test was administered to the participants and those whose scores ranged between 60-93 (*competent users* according to ETS) were chosen to participate in the study. Those students whose scores were lower or higher than this range were not considered for the study. All these participants were users of SNSs, including *ResearchGate*, *LinkedIn*, and *Facebook* with an average of 3.4

years of using at least one SNS or were instructed on how to create an account on each SNS at the time of carrying out the study. To ensure the ethical aspects of the study, an informed consent form was submitted to all participants. Those students who had not used any SNSs at the time of the study or before that were not included (Table 1).

Three teachers who participated in the study were EAP teachers who were PhD holders of applied linguistics. They had an average of 4.3 years of EAP teaching experience. Their average age was 37.4. All the teachers mentioned that they used *ResearchGate*, *LinkedIn*, and *Facebook* quite frequently (Table 2).

Table 1. Students participating in the study

Participants	Number	Age	Instruments used
Students of Agriculture Engineering	54	20-24	Interviews+ Questionnaires
Students of Biology	62	20-24	Interviews+ Questionnaires
Students of Sociology	57	20-24	Interviews+ Questionnaires

Table 2. Teachers participating in the study

Number of Teachers	Average years of teaching	Average age	Average years of using SNNs
3	4.3	37.4	4.1

3.3. Method

A mixed-methods study was considered in order to collect the data and answer the research questions. Two instruments, i.e. a questionnaire and semi-structured interviews, were used to collect quantitative and qualitative data from three groups. The specific purposes of using a mixed-methods design was to triangulate the findings obtained from the questionnaires and the interviews. Long (2005) emphasizes that triangulation of various approaches, instruments, and instruments can increase the validity of the findings. Moreover, both supplementary and confirmatory data were collected which contributed to a more comprehensive and accurate understanding of the problem under investigation.

The study lasted for a whole semester, i.e. four months. Three classes of each discipline (nine classes in total) were included in the study. Three EAP teachers (each responsible for three classes) participated in the study. All three EAP teachers had three

briefing sessions to get acquainted with the aims and focus of the study and how to make students motivated to take part in the project. At these briefing sessions, the teachers were consulted in how to use the SNSs related to the study through a manual along with face-to-face meetings with the researcher. The students were introduced to the three SNSs at the beginning of the semester. The students were guided how to build a new profile for themselves and how to add their academic information to their profiles. Afterwards, the students were assigned to groups of 6 or 7 and were asked to do a collaborative project on one academic topic that was selected by the teachers and students. Two marks (out of the total of 20) of the final score of the students were allocated to conducting the project based on continuous assessment of the teacher of students' reports of the progress of the project. Some criteria were considered for writing the reports, including a brief explanation of the strategies that they adopt to do the project, language items they learned through the use of the SNSs, things they learned about their academic content, and the problems they faced during carrying out the project. The students were also invited to do the project in the classroom with the help of the teacher 45 minutes each week in the classroom. The teacher was also online on *Facebook* for one hour twice a week at a specific time to help students with the project and the questions that they had. For each session of the class, the students were supposed to provide a report on their progress of the project. At the end of the course, the students were invited to provide the teacher with a detailed research report of what they had done and what they had learned about the academic topic. The students could join academic discussions, find academic groups, find international peers, interact with their classmates, and find scholars from other countries. All the students used English when chatting/speaking/writing on the SNS with their peers, the teacher, and other international academic users.

3.4. Instruments

3.4.1. Questionnaires

The first instrument of the study was a questionnaire to examine the attitudes of the three groups of students of the use of SNSs in learning EAP. The survey was constructed based on the analysis and review of previous studies concerning the use of social networking in language learning and educational contexts (Álvarez Valencia, 2015; Hsu, 2013; Özmen & Atıcı, 2014; Toetenel, 2014; Veletsianos & Navarrete, 2012; Yen, Hou, & Chang, 2013). In order to ensure the content validity of the questionnaire, several consulting sessions were held with a panel of three professors of EAP, four professors of EFL, and three content professors who commented on the suitability of the items for the purposes of the study. The panel was

given checklists and was asked to provide qualitative comments on the questionnaire items. In addition, initial interviews were conducted with 30 students from the three disciplines in order to provide insights for developing the questionnaire items.

The questionnaire had four sections with closed and open-ended items. The first section (Cronbach's alpha= 0.83) was developed to investigate EAP students' attitudes towards the benefits and merits of collaborative SNS project. The second section (Cronbach's alpha= 0.89) sought EAP students' perceptions on the limitations of the collaborative SNS project. The third section (Cronbach's alpha= 0.81) explored EAP students' perceptions of language-related, teacher-related, and project-related factors which affected the use of collaborative projects on three social network sites for learning EAP. The last section included three items in which the students were asked to rate the usefulness of the three types of SNS on a rating scale from 1 to 10 based on their preference. Also, there were three open-ended items in which the students were asked to write the reasons for their rating of each item. The language of the questionnaire was Persian.

3.4.2. Semi-structured interviews

To triangulate the results of the questionnaires, interviews were also carried out in this study. The interview questions were designed based on the items included in the questionnaires. To establish the content validity of the interview, a panel of three professors of EAP, four professors of EFL, and three content professors evaluated the appropriateness of the questions for the purposes of the study. The questions were also piloted with a similar group of participants prior to the study. These participants did not participate in the main study though. Each interview lasted 30-45 minutes. The same ethical issues were considered and explained to the participants of the interviews as well. Specifically, the following questions were developed and formulated:

1) How do you feel about the collaborative SNS project?
2) What do you think are the benefits of the collaborative SNS project?
3) What do you think are the limitations of the collaborative SNS project?
4) What do you think are the factors that affect the use of the collaborative SNS project?

3.5. Data analysis

The data of the questionnaires were analyzed and means and standard deviation were provided for the responses of the students to each item of the questionnaire. SPSS 16 was used for the data analysis. The non-parametric test of Kruskal Wallis was employed to

identify any significant difference among the perceptions of the three groups of students. The interview data were analyzed using content analysis. Based on a coding scheme, two coders who were experts of coding interview data coded the data and reported the common themes. A coding consistency of 0.85 was achieved which was satisfactory.

3.6. Findings

3.6.1. EAP students' attitudes towards the collaborative SNS project

As Table 3 indicates, the majority of EAP students from different disciplines had positive attitudes towards the collaborative SNS projects. The students agreed or strongly agreed with several benefits of the collaborative SNS projects such as promoting academic English proficiency, enhancing students' motivation to learn academic English, promoting general English proficiency, possibility of international communication, opportunity for joining academic groups, teacher's support, peer collaboration, online chatting with teachers and students, and ease of use. Furthermore, there was no significant difference between the students' attitudes in general.

Table 3. Questionnaire results for EAP students' attitudes towards the collaborative SNS project

Questionnaire items	Participants	Mean	SD	p
The use of SNSs promoted my academic English knowledge.	SE	4.05	0.73	0.193
	SBS	4.1	0.71	
	SSS	4	1	
The use of SNSs enhanced my motivation to learn academic English.	SE	4.20	0.75	0.084
	SBS	4.17	0.79	
	SSS	4.21	1	
The use of SNSs promoted my general English knowledge (GEP).	SE	4.09	0.77	0.101
	SBS	4.26	0.54	
	SSS	4	0.98	
The use of SNSs provided me with international communication with other students.	SE	4.31	0.86	0.095
	SBS	4.54	0.37	
	SSS	4.32	0.92	
Joining academic social networking groups was effective.	SE	3.91	0.99	0.071
	SBS	4.1	1.31	
	SSS	4.17	0.88	
The teacher's support during doing the project was effective.	SE	4.28	0.88	0.067
	SBS	4.42	0.37	
	SSS	4.37	0.69	
Collaborating with other members of the group was necessary to conduct the project	SE	3.96	1.32	0.112
	SBS	4.2	0.91	
	SSS	4.01	0.8	
Joining academic groups and discussions on SNSs was effective for doing the project.	SE	4.14	0.69	0.058
	SBS	4.09	1	
	SSS	4.1	0.91	

Online chatting with classmates in English helped me to improve my English.	SE	4.19	1.29	0.121
	SBS	4	1.20	
	SSS	4.05	1.1	
There were a large number of academic English resources on the SNSs.	SE	4.03	0.94	0.000*
	SBS	3.79	1.32	
	SSS	2.66	1.04	
The use of SNSs for learning academic English is easy.	SE	4.5	1.2	0.090
	SBS	4.09	0.88	
	SSS	4.22	1	
Online chatting/communicating in English with the teacher helped me improve my English.	SE	4.44	0.91	0.077
	SBS	4.30	0.85	
	SSS	4.19	0.40	

Note: statistical significance level was set at p ≤ 0.05.
Note: SE: students of engineering; SBS: students of basic sciences; SS: Students of social sciences
Note: Likert scales: 1. Strongly disagree; 5. Strongly agree

As Table 4 shows, the triangulated results of the interviews regarding the attitudes of EAP students' attitudes towards the collaborative SNS project revealed that the students held positive perspectives on the collaborative SNS project. The benefits of the project which were reflected in both questionnaires and interviews included opportunities for having international communication, learning academic vocabulary, peer collaboration, teacher support, and opportunities for improving academic English and academic literacy.

Table 4. Interview results for EAP students' attitudes towards the collaborative SNS project

Interview Themes	Students	Percentage of the mentioned theme	Student quotations
Opportunities for having international academic communication	SE	85%	This was the first time I had the experience of communicating with other people who study the same major in other countries. This was a very great experience for me and made me more interested in my major and academic English learning.
	SBS	90.32%	
	SS	87.21%	
			(Student of Engineering 11)
Learning a great number of academic words in English	SE	75.9%	One major benefit of this project work was that I knew a lot of new academic English vocabulary. In order to communicate in English, I had to check academic words or ask my teacher or other group members to help me. I learned many words!"
	SBS	79.03%	
	SS	82.45%	
			(Student of Basic Sciences 37)
Collaborating with other group members	SE	72.22%	This was the first time I had collaboration with my classmates so seriously. We helped each other a lot and learned from each other.
	SBS	80.64%	
	SS	70.18%	
			(Student of Social Sciences 30)

Promoting both academic English and academic literacy	SE	83.33%	I liked the project because we could improve both our knowledge of academic English and knowledge of our academic subjects.
	SBS	87.1%	
	SS	73.21%	

(Student of Basic Sciences 20)

3.6.2. EAP students' perceptions on the limitations of the collaborative SNS project

As Table 5 illustrates, the EAP students did not point out specific limitations of the project in the questionnaires. The most important limitations which were reflected in the questionnaire included the lack of subscription to SNSs and low English knowledge to use the SNS for academic purposes. Concerning the other limitations, the students were undecided on the importance of the limitations.

Table 5. Questionnaire results for EAP students' perceptions of the limitations of the collaborative SNS project

	Participants	Mean	SD	p
The cost of connecting to the Internet	SE	3.19	0.81	0.110
	SBS	2.89	1.06	
	SSS	3.2	1.14	
Lack of subscription to the social network sites	SE	4.03	0.93	0.080
	SBS	4.14	0.87	
	SSS	4.31	0.72	
Lack of time to do the project	SE	3.1	0.8	0.092
	SBS	2.87	0.72	
	SSS	3.37	1.19	
Disinterest in working in groups	SE	1.32	0.54	0.088
	SBS	2.13	0.59	
	SSS	2.25	0.96	
Unsuitability of SNSs for academic purposes	SE	2.56	0.58	0.013*
	SBS	1.76	1.1	
	SSS	2.95	0.6	
Lack of teacher's help	SE	2.67	0.57	0.038*
	SBS	1.94	0.9	
	SSS	2.14	0.79	
Low English proficiency to use SNSs for academic purposes	SE	4.15	0.61	0.573
	SBS	3.99	1.04	
	SSS	4	1	
Low digital literacy levels to use SNSs for academic purposes	SE	3.29	0.86	0.000*
	SBS	2.76	0.37	
	SSS	2.2	0.92	

Note: statistical significance level was set at $p \leq 0.05$.
Note: SE: students of engineering; SBS: students of basic sciences; SS: Students of social sciences
Note: Likert scales: 1. Strongly disagree; 5. Strongly agree

As Table 6 reveals, the triangulated data of interviews and questionnaires indicated that low levels of academic and general English proficiency and the lack of knowledge about academic vocabulary were the most significant limitations.

Table 6. Interview results for EAP students' perceptions on the limitations of the collaborative SNS project

Interview Themes	Students	Percentage of the mentioned theme	Student quotations
The lack of knowledge about academic words	SE SBS SS	57.41% 66.13% 61.40%	When I was doing the project I had to search and ask for some academic English words. I feel It was a bit hard and at times Boring. But I am happy that I Learnt a lot of new words Now." (Student of Engineering 48)
Low levels of English knowledge	SE SBS SS	79.62% 87.09% 77.19%	I had some difficulty using English suitably. Of course, I think I am not weak at English but I need to improve my English to use SNSs more easily. (Student of Social Sciences 51)

3.6.3. Factors which affected the use of collaborative projects on three social network sites for learning EAP

Table 7 illustrates that the students agreed that factors such as teachers' support, academic and general English proficiency, collaboration with peers, academic content knowledge, peer support, and digital literacy were significant ones which affected the use of collaborative projects on three social network sites for learning EAP. However, the students did not agree on the importance of factors such as the score of the project or their interest in the project.

Table 7. Questionnaire results for factors which affected the use of collaborative projects on three social network sites for learning EAP

	Participants	Mean	SD	p
Teacher support/help	SE SBS SSS	4.57 4.36 4.68	0.97 0.84 0.78	0.101
Academic English proficiency	SE SBS SSS	4.05 4.21 4.09	0.59 0.83 1.09	0.096
General English proficiency	SE SBS SSS	4.33 4.41 4.26	1.13 0.8 1.22	0.134
Collaboration with peers	SE SBS SSS	4 3.89 4.11	0.94 1.27 1.10	0.061
Academic content knowledge	SE SBS SSS	4.47 4.23 4.32	0.61 0.72 0.83	0.205
Peer support/help	SE SBS SSS	4.16 3.84 3.91	1.2 0.98 1.31	0.060
Your digital literacy	SE SBS SSS	3.92 4 3.98	1.39 1.08 0.91	0.058
The score of the project	SE SBS SSS	3.55 2.19 2.58	1.2 0.98 1.31	0.021*
Your interest in the project	SE SBS	3.45 3.2	1.2 0.98	0.047*

SSS	2.88	1.31	

Note: statistical significance level was set at p ≤ 0.05.
Note: SE: students of engineering; SBS: students of basic sciences; SS: Students of social sciences
Note: Likert scales: 1. Least important; 5. Most important

The interview data supported parts of the questionnaire data. The students from the three disciplines asserted that knowledge of academic, general English and academic content, teacher support, familiarity with the SNS, and ease of use were factors which affected their project work (Table 8).

Table 8. Interview results for EAP students' attitudes towards the collaborative SNS project

Interview Themes	Students	Percentage of the mentioned theme	Student quotations
Knowledge of academic and general English	SE SBS SS	88.88% 79.03% 87.03%	It is obvious that English knowledge is a very important requirement for doing projects like this one. Also, it is important to know how to use English in an academic manner. (Student of Social Sciences 23)
Academic content knowledge	SE SBS SS	87.04% 85.48% 77.19%	Certainly, you must be knowledgeable about the topics related to your major in order to be able to discuss academic topics at an international level. (Student of Basic Sciences 37)
Teacher support in social networking	SE SBS SS	68.51% 77.42% 66.67%	I appreciate my teacher because he was very positive during the project work. We were in touch both online and in the class and he motivated a lot. (Student of Engineering 3)
Familiarity with the SNS used	SE SBS SS	59.38% 64.51% 68.42%	I think we use some SNSs less frequently than the other ones, so we are more comfortable to use the ones that we know and use everyday. The ones that we do not use frequently are harder to be used. (Student of Social Sciences 45)
Ease of use	SE SBS SS	57.41% 54.84% 64.91%	The most important factor is how easy it is to use the SNS. Some of them are very boring and hard to be used. (Student of Social Sciences 17)

3.6.4. Students' preference for *Facebook*, *LinkedIn*, or ResearchGate

Based on the values shown on Tables 9 and 10, the majority of students from the three disciplines perceived *Facebook* as the most preferable learning tool. There was not a significant difference among the perceptions of the three groups of students on the use of *Facebook* for EAP learning.

Table 9. Questionnaire results for students' preference for *Facebook*, *LinkedIn*, or *ResearchGate*

		Rating (out of 10)	p
Facebook	SE	8.45	0.085
	SBS	6.76	
	SS	7.2	
LinkedIn	SE	4.9	0.021*
	SBS	5.87	
	SS	3.33	
ResearchGate	SE	2.67	0.010*
	SBS	2.01	
	SS	3.41	

Note: statistical significance level was set at $p \leq 0.05$.
Note: SE: students of engineering; SBS: students of basic sciences; SS: Students of social sciences

Table 10. Questionnaire results for open-ended items on students' preference for *Facebook, LinkedIn,* or *ResearchGate*

Facebook

Themes from the open-ended items of the questionnaire

The majority of students from different disciplines believed that *Facebook* was the most appropriate SNS for learning academic English. The students asserted that *Facebook* was easy to be used, free to be used, and richer in terms of its groups, and topics. The possibility of having online chat and synchronous computer-mediated communication (SCMC) was another significant benefit of using *Facebook*. The students also mentioned that *Facebook* was user-friendlier than the other SNSs.

LinkedIn

Themes from the open-ended items of the questionnaire

The majority of students from different disciplines were of the opinion that *LinkedIn* was more reliable source regarding its academic content, but needed fees for subscription and people on *LinkedIn* were not as active as people on Facebook.

ResearchGate

Themes from the open-ended items of the questionnaire

Many students reported that *ResearchGate* was interesting and comprehensive regarding its academic content. However, the students reported that they were less familiar with working with *ResearchGate* and that it was hard to get in touch with friends via *ResearchGate*.

4. Discussion and conclusion

This study aimed to present a cross-disciplinary analysis of the collaborative use of SNSs in EAP learning. The general results indicated positive attitudes towards the collaborative projects on SNSs. The results show that there was not a significant difference among the attitudes of the participants towards the collaborative projects on SNSs. The triangulated data illustrated that the majority of the students from the three disciplines perceived some benefits

of the collaborative projects on SNSs, including opportunities for having international communication, learning academic vocabulary, peer collaboration, teacher support, and opportunities for improving academic English and academic literacy. The positive attitudes of students towards the use of SNSs in educational contexts were also echoed in previous studies (Hsu, 2013; Kikuchi & Otsuka, 2008; Millington & Smith, 2012; Liu et al., 2015). It is crucial that educational planners and course designers be aware of the potential benefits of social networking on EAP students' learning and attitudes towards learning. The issue of collaborative projects appeared to be a key one which had a significant effect on students' attitudes towards the use of social networking in EAP learning. Liu et al. (2015) also reported that the use of social networking in the classroom can foster students' levels of collaboration. Ping and Maniam (2015) considered social networking as an efficient tool for encouraging students to have group work.

One major benefit of the project was that the students were enabled to have international communication with other academic members. This was a merit of the project which was reflected in the results of the interviews and questionnaires. The students had also positive attitudes towards having collaboration with the other members of their group. Furthermore, the project was an opportunity to promote both academic knowledge and academic English knowledge. The students perceived that their academic English vocabulary knowledge fostered. It can be concluded that collaborative projects on SNSs can be an influential tool for creating an interactive learning environment in which both students' English proficiency and academic literacy can be enhanced. It is paramount that Iranian educational decision makers and even teachers consider SNSs as learning aids which can have a number of benefits for students. As EAP instruction is a learner-centered approach, academic collaborative projects on SNSs can encourage students to have personalized learning in which different learning styles, needs, and preferences are taken into account.

Concerning the limitations and constraints of the collaborative projects on SNSs, there was no consensus among the perceptions of students and in some cases they did not perceive many constraints. The two important limitations were students' low knowledge of academic vocabulary and English which caused difficulty for some of them. In the questionnaire the students also perceived that they were not subscribed to the SNS, which created problems for them. Despite these issues, many other limitations were perceived to be non-existent during the conduction of the project. High levels of academic English vocabulary knowledge may be a considerable facilitator for EAP students. Similarly, students need to be competent English users if they want to have international communication and be socialized into academic

communities of practice. This issue implies that educational authorities should adopt effective strategies in order to help students promote their academic vocabulary knowledge and academic English.

The findings suggested that several factors can have an effect on students' collaborative projects on SNSs. Based on triangulated results, these perceived factors include academic and general English knowledge, academic content knowledge, teachers' support, familiarity with the SNS, and ease of use. Ease of use is a very significant factor which was also reported in Liu et al. (2015). It appears that students look for technologies which are easy to use. This study also introduced teacher supervision and cooperation with students during doing the projects. As the students perceived, teachers can regulate students' activities on SNSs and motivate them to continue the projects.

The results showed that the students preferred using *Facebook* for academic purposes. This preference may directly be associated with the issues of student familiarity and ease of use which were discussed previously. One feature of *Facebook* which was lacking in *ResearchGate* and *LinkedIn* was the opportunity for having SCMC and online chatting with the teacher, peers, and other academic members. The possibility of online chatting enables students to be connected to each other without delays and to ask for help. Based on the results of this study, it can be concluded that teachers should take students' preferences into account when they assign SNS-based projects to students.

One limitation of this study is associated with the long time of the conduction of the study. Many students were not able to take part in the study due to its long time. Moreover, despite the attempts to familiarize students with the educational application of the three SNSs, some interview quotations showed some students lacked familiarity with the features and aspects of the SNSs used in this study.

Further research should be undertaken into the learning outcomes of using SNSs for EAP instruction. Without further insights into the use of SNSs in EAP and educational contexts, many factors related to the educational use of SNSs will remain unknown. In addition, it is important to direct future research towards the potential of SNSs in order to facilitate the learning of different language skills and academic genres in ESP and EAP instruction.

References

Alavi, S. M., & Dashtestani, R. (2014). A cross-disciplinary analysis of higher education students' perspectives on the use of e-books for learning academic English. *The Asian ESP Journal. 10*(1), 2-27.

Álvarez Valencia, J. A. (2016). Language views on social networking sites for language learning: The case of Busuu. *Computer Assisted Language Learning*, *29*(5), 853-867.

Arno, E. (2012). The role of technology in teaching languages for specific purposes courses. *Modern Language Journal, 95*, 88-103.

Batooli, Z., & Nazari, M. (2014). The features of the social research network for facilitating research activities from medical sciences researchers' perspectives. *Majaleye Daneskadeye Pirapezeshkie, 8*(4), 317-331.

Brady, K. P., Holcomb, L. B., & Smith, B. V. (2010). The use of alternative social network sites in higher educational settings: A case study of the e-learning benefits of Ning in education. *Journal of Interactive Online Learning, 9*(2), 151-170.

boyd, D. M., & Ellison, N. B. (2007). Social network sites: Definition, history, and scholarship. *Journal of Computer-Mediated Communication, 13*(1), 210-230.

Dashtestani, R. (2016). Moving bravely towards mobile learning: Iranian students' use of mobile devices for learning English as a foreign language. *Computer Assisted Language Learning, 29*(4), 815-832.

Dashtestani, R., & Stojkovic, N. (2016). The use of technology in English for Specific Purposes (ESP) instruction: A literature review. *Journal of Teaching English for Specific and Academic Purposes, 3*(3), 435-456.

Felea, C., & Stanca, L. (2010). Wiki tools and English for academic purposes – fostering collaborative and autonomous learning in higher education. *Revista de Informatică Socială, 7*(14). Retrieved http://www.ris.uvt.ro/wp content/uploads/2011/03/feleastanca55-65.pdf.

Harwood, C. (2014). Personal learning environments: Using SymbalooEDU in learning English for academic purposes. *ESP Today, 2*(2), 199-215.

Hsu, L. (2013). Leveraging interactivities on social network sites for EFL learning. *International Journal of English Language Education, 1*(3), 244-270.

Hyland, K. (2006). *English for Academic Purposes*. New York: Routledge**.**

Jarvis, H., & Pastuszka, L. (2008). Electronic literacy, reading skills and non-native speakers: issues for EAP. *CALL-EJ Online, 10*(1). Retrieved from http://callej.org/journal/10-1/jarvis.htm.

Jarvis, H. (2009). Computers in EAP: change, issues and challenges. *Modern English Teacher, 18*(2), 51-54.

Kabilan, M.K., Ahmad, N., & Abidin, M.J. (2010). Facebook: An online environment for learning of English in institutions of higher education? *Internet and Higher Education, 13* (4) 179-187.

Kavaliauskienė, G., & Ashkinazi, V. (2014). Social networking systems in teaching/learning English for specific purposes. *English for Specific Purposes World. 42*(15). Retrieved from www.esp-world.info/Articles_42/Documents/Kavaliauskiene.pdf.

Khany, R., & Monfared, M. (2013). Using social networks in language learning in Iran. *International Journal of Language Learning and Applied Linguistics World, 4* (2), 261-274.

Kikuchi, K., & Otsuka, T. (2008). Investigating the use of social networking services in Japanese EFL classrooms. *The JALT CALL Journal, 4*(1), 40-52.

Liu, M., Abe, K., Cao, M., Liu, S., Ok, D. U., Park, J. B., ... & Sardegna, V. G. (2015). An analysis of social network websites for language learning: Implications for teaching and learning English as a Second Language. *CALICO Journal*, *32*(1), 113-152.

Long, M. (2005). *Second Language Needs Analysis.* Cambridge: Cambridge University Press.

Millington, N., & Smith, B. (2012). Inside the walled garden – social networking in ESL. Retrieved from http://www.apu.ac.jp/rcaps/.

Moeinmanesh, H., & Rezvani, E. (2015). Effect of LinkedIn as an ICT tool on Iranian post graduate EFL students' writing skill. *Asian Journal of Education and E-learning, 3*(5), 374-381.

Mohammadkhani, A., Mazinanai, E., Zandvakili, E., & Fard-Kashani, A. (2015). Facebook as a platform for EFL learning: Critical literacy in social networking websites. *International journal of Applied Linguistics and Language Research, 2*(6), 57-72.

Omar, H., Embi, M. A., & Yunus, M. M. (2012). Learners' use of communication strategies in an online discussion via Facebook. *Procedia-Social and Behavioral Sciences, 64*, 535-544.

Özmen, B., & Atıcı, B. (2014). Learners' views regarding the use of social network sites in distance learning. *The International Review of Research in Open and Distributed Learning, 15*(4), 21-42.

Ping, N. S., & Maniam, M. (2015). The effectiveness of Facebook group discussions on writing performance: A study in Matriculation College. *International Journal of Evaluation and Research in Education, 4*(1), 30-37.

Plastina, A. F. (2003). CALL-ing EAP Skills. *Teaching English with Technology, 3*(3), 16-30.

Qarajeh, M., & Abdolmanafi-Rokni, S. J. (2015). The impact of social networking on the oral performance of EFL learners. *Advances in Language and Literary Studies, 6*(2), 51-56.

Sabater, C. P., & Fleta, M. B. M. (2015). ESP vocabulary and social networking: The case of Twitter. *Ibérica: Revista de la Asociación Europea de Lenguas para Fines Específicos* , (29), 129-154.

Tina, L. I. M. (2010). The use of Facebook for online discussions among distance learners. *The Turkish Online Journal of Distance Education, 11*(4), 72-81.

Toetenel, L. (2014). Social networking: a collaborative open educational resource. *Computer Assisted Language Learning, 27*(2), 149-162.

Van De Bogart, W., & Wichadee, S. (2015). Exploring students' intention to use LINE for academic purposes based on technology acceptance model. *The International Review of Research in Open and Distributed Learning, 16*(3), 65-85.

Veletsianos, G., & Navarrete, C. (2012). Online social networks as formal learning environments: Learner experiences and activities. *The International Review of Research in Open and Distributed Learning, 13*(1), 144-166.

Wheeler, S., Yeomans, P., & Wheeler, D. (2008). The good, the bad and the wiki: Evaluating student-generated content for collaborative learning. *British Journal of Educational Technology, 39*(6), 987-995.

Yen, Y. C., Hou, H. T., & Chang, K. E. (2013). Applying role-playing strategy to enhance learners' writing and speaking skills in EFL courses using Facebook and Skype as learning tools: a case study in Taiwan. *Computer Assisted Language Learning, 28* (5), 383-406.

Yaghoobi Malal, N. (2014). *Information Interactions and Motives of Scientists on the Social Media Researchgate*. Unpublished Dissertation. Kharazmi University, Iran.

GENDER AND EFL WRITING:

DOES *WHATSAPP* MAKE A DIFFERENCE?[1]

by **Ruba Fahmi Bataineh, Raghda Fayez Al-Hamad**

and **Dina Abdulhameed Al-Jamal**

Yarmouk University, Irbid, Jordan

rubab@yu.edu.jo

Abstract

WhatsApp is a potentially influential informal learning tool that may be used on the go. This study examines its potential utility in EFL writing with special reference to gender. The treatment encompasses a *WhatsApp*-based instructional program designed specifically to help develop writing performance, along the aspects of *content and ideas, organization and mechanics, vocabulary,* and *language use*, among 98 Jordanian eleventh-grade students. The participants were divided into two experimental groups, one male and one female, taught through *WhatsApp*. The data were collected by means of a pre-/ post-test whose analysis revealed improved writing performance, more for female participants than for their male counterparts.

Keywords: *WhatsApp*; gender; writing performance

1. Introduction and background

Gender parity has been a matter of controversy and a concern for educational practitioners and researchers alike. Despite abounding evidence that boys enjoy higher literacy rates than their female counterparts, the latter are reported (e.g. Levy, 2016; Mullis, Martin, Foy, & Drucker, 2012; Twist & Sainsbury, 2009) as better achievers in language and mathematics in almost all internationally competitive tests (e.g., Progress in International Reading Literacy Study (PIRLS), Trends in Mathematics and Science Study (TIMSS)).

More specific to the purpose of the current research, gender is believed to affect EFL writing performance (e.g., Cheng, 2002; Hedges & Newell, 1999; Jafari & Ansari, 2012). A growing body of research suggests that boys' dwindling literacy achievement (e.g., Alloway, 2007; Disenhaus, 2015; Hall & Coles, 1997; Klein, 2006; Martino & Kehler, 2007; Wallace, 2010; Watson, Kehler, & Martino, 2010) is partly attributed to the focus on print-based literacies rather than information and communication technology (ICT) and multi-media communication at which boys are known to excel (e.g., Alloway, 2007; Weaver-Hightower, 2008; Whitmire, 2010).

There is a plethora of research (e.g., Green & Oxford, 1995; Koivula, 2001; Pajares & Giovanni, 2001; Rudzinska, 2013) which suggests that gender differences, in addition to the stereotypical image that females are better language learners than their male counterparts, may readily explain reports that females surpass their male counterparts in language learning. Female language superiority is often attributed to factors such as the ability to remember lists of words, express empathy, develop interpersonal relations, and involve in emotional and artistic expression (Koivula, 2001). Males have further been reported as more anxious and apprehensive writers (Pajares & Giovanni, 2001). Moreover, learning style may also be a potential explanation, as females, unlike males, are reported to tend towards self-reflection rather than the spontaneity reported for males (Green & Oxford, 1995).

Several studies have been conducted on the effect of gender on language learning in general and writing in particular (Bacon & Finnemann, 1992; Cheng, 2002; Sajadi & Maghsoudi, 2016; Shang, 2013). For example, Bacon and Finnemann (1992), who examined gender differences in foreign language learning and authentic oral and written input among 938 Spanish university students, reported that females had a higher level of motivation, strategy use in language learning, and social interaction in the target language than their male counterparts. However, while Cheng (2002) reported that female students experience significantly higher levels of writing anxiety than male students, Shang (2013) reported that both male and female students experience writing anxiety, but more so for male than female students. However, Sajadi and Maghsoudi (2016) reported no gender effect on 112 Iranian EFL learners' success in English, as both male and female learners performed similarly on the test.

Moreover, the literature seems to suggest that boys have better access to technology than girls (e.g. Jenson & Brushwood Rose, 2003; Littleton & Hoyle, 2002; Schofield, 1995) attributing technology to a traditionally male paradigm and that girls also feel less technologically-inclined than boys (Charles & Bradley, 2006). In the current study, technology (viz. *WhatsApp*) is used to engage learners, boys and girls alike, without risking accommodating one at the expense of the other.

The literature seems to suggest that social networking websites constitute an integral part of teenage daily life (e.g. Ellison, Steinfield, & Lampe, 2006; Kuppuswamy & Narayan, 2010). However, research (e.g. Jackson, Zhao, Kolenic, Fitzegerald, Harold, & Von Eye, 2008; Kuppuswamy & Narayan, 2010; Odell, Korgen, Shumacher, & Delucchi, 2000) seems to attribute distinct purposes of technology use across gender. For example, Jackson *et al.* (2008) reported that gender differences figure in both the intensity and nature of technology

use. Males were the most intense videogame players whereas females were the most intense cell phone users. Odell *et al.* (2000) also reported that while a slight difference in the amount of time they spent online, male and female students' purposes were reportedly different, as more male students visited sex sites, researched purchases, checked news, played games, listened to music, and copied music whereas female students used the Internet for email and school research. Jackson *et al.* (2008) also reported that technology use affected academic performance, as the amount of time of computer and Internet use correlated positively with that spent playing videogames correlated negatively with academic performance.

Numerous calls have been made to bridge this gender gap and to catalyze boy's engagement in literacy. Scholars (e.g. Smith & Wilhelm, 2002; 2004; 2009) have put forth strategies for promoting boys' literacy engagement and motivation through authentic writing tasks, hands-on learning, problem-solving, and explicit discovery and analysis of texts. Furthermore, boys' rather well-documented greater engagement with technology (e.g. Jenson & Brushwood Rose, 2003; Littleton & Hoyle, 2002; Schofield, 1995) may be used as a catalyst for their literacy development, which is the major premise of this research.

Mobile devices have been reported as catalysts for autonomous learning (Hu, 2013) and optimal teaching and learning (Boy & Motteram, 2013). Not only can learners extend their learning beyond the physical boundaries of the traditional classroom to make use of the relatively unlimited online resources, but teachers can also benefit from these resources to catalyze effective teaching and learning.

WhatsApp is a popular mobile application, compatible with both iOS and Android operating systems, for exchanging both text and multimedia (viz. photo, video, audio) messages. With Internet connectivity, *WhatsApp* enables both synchronous and asynchronous collaboration among individual or groups of users through the following capabilities:

1. *multimedia* for exchanging text, photo, audio, and video messages with up to 256 people at once;
2. *document sharing* for exchanging PDFs, documents, spreadsheets, and slideshows up to 100 MB;
3. *unlimited messaging*;
4. *unlimited voice and video calls*;
5. *group chat* of up to 50 group members;
6. *end-to-end encryption* for secure communication;
7. *cross platform engagement* over multiple devices (viz., web, desktop) and various media;

8. *chat syncing* to a desktop computer (*WhatsApp* Official Site, 2017).

Research suggests that *WhatsApp* has become a platform for fostering accessibility, cooperation, and motivation among learners (Bouhnik & Deshen, 2014; Rambe & Bere, 2013). Examining the use of *WhatsApp* among South African tertiary-level students, Rambe & Bere (2013) reported positive student feedback, as *WhatsApp* is reportedly not only fun to use but also easier to communicate with teachers and peers alike. Similarly, Plana, Escofet, Figueras, Gimeno, Appel, and Hopkins (2013) reported a rise in motivation and enthusiasm for reading among Spanish EFL learners. Along the same lines, Amry (2014) found *WhatsApp* superior to face-to-face learning in the Saudi classroom.

Similarly, Bouhnik and Deshen (2014) reported that teachers can use *WhatsApp* groups not only as a learning platform but also as a means to communicate with students, nurture social atmosphere, and encourage dialogue and student sharing. Their participants reported that *WhatsApp* offers not only social but also educational advantages, such as a pleasant environment and stronger relations with fellow students, which reportedly culminated in gains in both the social (e.g. manner of conversation) and academic (e.g. access to learning materials, teacher availability, and learning beyond class hours). However, these advantages may be offset by challenges related to mobile phone ownership and teacher's potential annoyance by the flood of (sometimes irrelevant or meaningless) messages and students' assumption of his/her uninterrupted availability.

Once dubbed the neglected skill (e.g. Bani Younis & Bataineh, 2016; Duncan, 1991; Obeiah & Bataineh, 2015) and reportedly a complicated endeavor for second and foreign language learners alike (e.g. Duncan, 1991; Grabe & Kaplan, 1996), writing in general, and in the English as a foreign language (EFL) classroom in particular, has been the subject of extensive research in Jordan (e.g. Bataineh & Bani Younis, 2016; Obeiah & Bataineh, 2016) and abroad (e.g. Cumming & Riazi, 2000; Flower & Hayes, 1981; Hyland, 2003; Raimes, 1991; 1998). However, much attention has been given to seeking alternative measures for increasing the effectiveness of writing instruction, as writing is a major medium of communication in real life today (e.g. Defazio, Jones, Tennant, & Hook, 2010).

2. The study

2.1. The aim of the research

In Jordan, English, albeit taught as a foreign language, is significant in primary, secondary and tertiary education, not to mention the labor market and potential employment. The

Ministry of Education has initiated several reforms to improve English as a foreign language (EFL) instruction to foster proficiency in the four skills of which writing has been considered among the most challenging and anxiety-provoking activities for EFL teachers and learners alike (Cheng, Horwitz, & Schallert, 1999; Hyland, 2003).

To overcome such challenges in the writing classroom, different approaches, often with contrasting orientations, to teaching writing have been introduced. For example, the product approach focuses on language structure and essentially emphasizes rhetorical drills (Freedman, Pringle, & Yalden, 1987; Silva, 1990). In contrast, the process approach focuses on how a text is written rather than the written product (Flower & Hayes, 1981; Jordan, 1997).

By conducting the current study, the researchers seek better understanding of the potential effect of *WhatsApp* on Jordanian EFL students' writing performance across gender. The current research combines the process approach and technology-based instruction (viz., *WhatsApp*) with a view to fostering writing performance among Jordanian eleventh-grade male and female students and, simultaneously, gauging potential gender differences amongst the participants. As the use of gender has been reported to make a difference, the study seeks to add to the literature on this issue either by corroborating or discrediting previous findings and, at the same time, establish whether or not *WhatsApp* affects writing performance. More specifically, this study seeks to answer the question: To what extent, if any, does *WhatsApp* affect Jordanian EFL male and female students' writing performance?

2.2. Design and procedure

The research adopts a quasi-experimental design through which a *WhatsApp*-based instructional treatment is used to supplement traditional writing instruction among Jordanian eleventh-grade students. Two intact sections, comprising 37 male and female students, were purposefully selected from Yarmouk University Model School, a private school in Irbid First Directorate of Education, in the first semester of the academic year 2016/2017.

To achieve the purpose of the research, a *WhatsApp*-based instructional treatment was designed by the researcher. The content of the treatment comprised Modules 1, 2, and 3 (viz., Starting Out, Celebrations, and Sport) of the prescribed textbook, *Action Pack 11*. The researcher analyzed the content of these modules prior to computerizing them in order to enable *WhatsApp* mediation. The treatment consisted of writing texts, lesson plans and writing worksheets, a self/peer editing checklist, and a self/peer revision checklist. The treatment was designed to allow the teacher to supplement in-class writing instruction by

monitoring, revising, reviewing and evaluating student work. Through the two *WhatsApp* groups, the students worked collaboratively, interacted and exchanged experiences with their peers.

A writing test, covering the writing aspects of *content and ideas, organization and mechanics, vocabulary,* and *language use*, constituted the instrument of the study. The validity of the test was established by a jury of ten Jordanian university professors in EFL, linguistics, curriculum and instruction, and evaluation and measurement. The jury's remarks were used to amend the test prior to its administration. To establish the reliability of the test, it was piloted on a sample of 12 students from the same school with a two-week interval between the two administrations. The correlation coefficient between the two administrations of the test amounted to 0.88, which is deemed appropriate for the purposes of the study.

Prior to the treatments, the two groups were pre-tested to identify any potential differences between them, as shown in Table 1.

Table 1. Independent sample t-test of the mean scores of the male and female groups on the pre-test

Writing Aspect	Group	Mean	SD	f	Sig.
Content and Ideas	Experimental 1 (Male)	11.38	2.36	2.31	0.06
	Experimental 2 (Female)	11.87	2.49		
Organization and Mechanics	Experimental 1 (Male)	10.85	2.30	2.02	0.12
	Experimental 2 (Female)	11.33	2.63		
Vocabulary	Experimental 1 (Male)	10.31	2.87	2.73	0.15
	Experimental 2 (Female)	10.97	2.93		
Language Use	Experimental 1 (Male)	9.38	3.04	2.25	0.09
	Experimental 2 (Female)	9.43	3.20		
Total	Experimental 1 (Male)	42.00	9.96	2.87	0.07
	Experimental 2 (Female)	43.73	10.77		

Table 1 shows no statistically significant differences at ($\alpha=0.05$) among the male and female groups, which denotes equivalence between these groups.

2.3. Experimental treatment

The researcher/instructor met the two groups three times prior to the commencement of the *WhatsApp*-enhanced instruction. At the onset of the experiment, the researcher met with the students and handed each a letter to his/her parents explaining the research and asking for their consent for their child's participation. The students were further encouraged to participate by addressing the potential role of technology in fostering and facilitating not only their learning but also their writing performance. The second meeting was meant for the students with signed parental consents to participate, which amounted to 100% of the students. At the second meeting, the researcher, who set up a mobile phone number exclusively for the experiment, exchanged phone numbers with the students, made sure all had *WhatsApp* on their mobiles, and held a quick review session to assess prior knowledge of pertinent aspects, such as paragraph development, essay writing, and peer review. At the same meeting, the participants were also acquainted with the ethics of group membership, such as language use, considerate comments, and respect of privacy.

In the third meeting, the students were introduced to the strategies of the process approach (viz., planning, organizing, writing, editing, revising and rewriting (henceforth, POWER), as the researcher demonstrated the use of each of these strategies in specific writing tasks. Later that day, two *WhatsApp* groups, dubbed *Amazing Writers* and *Smart Writers*, were created and students added. The teaching materials including videos, pictures and documents were stored in separate files as were the homework sheets, media, and voice files to be easily uploaded whenever needed.

The participants started writing according to POWER, as the researcher and the class teacher observed and facilitated their *WhatsApp* utilization for learning to write. Eight weeks later, at the conclusion of the treatment, the post-test was administered to both groups, marked, and scores tallied and compared to detect potential improvement, or lack thereof, across gender.

3. Findings and discussion

To answer the research question, which seeks to identify any potential effect of *WhatsApp*-based instruction on Jordanian male and female EFL students' writing performance, an independent sample t-test was used to check for potential *WhatsApp* effects across gender, as shown in Table 2.

To determine the potential effect of *WhatsApp* per gender, means and standard deviations of the post-test scores were calculated, as shown in Table 2.

Table 2. T-test of the effect of *WhatsApp* on male and female performance on the post-test

Writing Aspect	Gender	Mean	SD	t	Sig.
Content and Ideas	Experimental 1 (Male)	11.03	3.41	-2.24	0.03*
	Experimental 2 (Female)	12.31	2.25		
Organization and Mechanics	Experimental 1 (Male)	10.54	3.64	-2.50	0.01*
	Experimental 2 (Female)	12.05	2.34		
Vocabulary	Experimental 1 (Male)	9.62	3.39	-3.13	0.00*
	Experimental 2 (Female)	11.48	2.47		
Language Use	Experimental 1 (Male)	8.41	3.19	-2.46	0.02*
	Experimental 2 (Female)	9.98	3.01		
Total	Experimental 1 (Male)	39.54	13.09	-2.75	0.08
	Experimental 2 (Female)	45.82	9.49		

*Significant at α=0.05

Table 2 shows a statistically significant difference in the male and female participants' writing, as female participants scored higher than their male counterparts across the four aspects of the test and on the test as a whole. Even though male and female participants scored significantly differently across the four aspects of the test, writing seems to have developed significantly on all writing aspects.

The findings revealed that female students invariably outperformed male students on all the components of the writing test and on the test overall. This superior performance, which is consistent with previous research accounts, may be attributed to a host of factors. It has been reported that while female students tend to use the Internet for communication with family and friends and for school research and academic purposes, male students tend to use the Internet for leisure and entertainment (Jackson *et al.*, 2008; Odell *et al.*, 2000).

Female students may be more apt in the use of the Internet for educational purposes than their male counterparts, who tend to use the Internet for entertainment. This aptness may afford the former an advantage in effective *WhatsApp* use for learning, which may also account for their superior writing performance following the treatment. Furthermore, that most male students use the Internet for entertainment is associated with poorer academic performance since using the mobile phone for activities, such as gaming, chatting, and random search, constitutes a potential distraction from learning (Kuppuswamy & Narayan, 2010).

Another factor that may account for the male participants' inferior writing performance to that of their female counterparts is their distinct genre preferences. Essay

writing may not be the genre of preference among male students who, unlike their female counterparts, are reported to prefer factual writing to letter writing and poetry (e.g. Gorman, White, Brooks, MacLure, & Kispal, 1988; Lakoff, 1975).

Furthermore, male EFL writers tend to be more apprehensive than their female counterparts (Jebreil, Azizifar and Gowhary, 2015; Pajares & Giovanni, 2001). In the current study, even though *WhatsApp* utilization has afforded both teacher and students an informally relaxed learning environment, anxiety may have been at play, which may have been compounded by reports (e.g. Pajares, 2003) of male students' reluctance to write and lack of confidence, putting them at a disadvantage relative to their female counterparts (e.g. Cheng, 2002; Hedges & Newell, 1999; Jafari & Ansari, 2012).

4. Pedagogical implications and conclusions

The findings have shown that *WhatsApp* is a potential catalyst for writing performance across gender, more so for female students than their male counterparts. As mobile devices are finding their way into the language classroom, many learning opportunities are unlocked for male and female learners alike.

Language educators should take advantage of the capabilities afforded by technology for teaching not only writing but also listening, speaking and reading. The findings, albeit small-scale in sample and duration, are hoped to provide insights into the utility of integrating mobile technologies into foreign language teaching and learning.

However, the role of mobile technologies in the language classroom should not be overstated, as technology, albeit a catalyst for innovation, is not a fix-it-all for all learning dilemmas and in all learning contexts. The success of mobile learning is contingent upon a conducive learning environment and a diligent teacher who is willing to take risks and venture beyond the boundaries of traditional instruction.

It is the recommendation of this research to conduct larger-scale research, in terms of sample and duration, for better generalizability of its findings, for even though this study is sound in method and design, further research into the usability of mobile learning across diverse populations and skills would contribute largely to bridging an existing gap in the literature.

Note

1. This manuscript is an extension of the second researcher's PhD thesis per the regulations of Yarmouk University

References

Alloway, N. (2007). Swimming against the tide: Boys, literacies, and schooling: An Australian story. *Canadian Journal of Education, 30*(2), 582-605.

Amry, A. B. (2014). The impact of *WhatsApp* mobile social learning on the achievement and attitudes of female students compared with face to face learning in the classroom. *European Scientific Journal*, *10*(22), 116-136. Retrieved 13 November 2017 from http://eujournal.org/index.php/esj/article/viewFile/3909/3700.

Bacon, S. M., & Finnemann, M. D. (1992). Sex differences in self-reported beliefs about foreign language learning and authentic oral and written input. *Language Learning, 42,* 471-495.

Bani Younis, R., & Bataineh, R. F. (2016). To dictogloss or not to dictogloss: Potential effects on Jordanian EFL learners' writing performance. *Apples – Journal of Applied Language Studies, 10*(2), 45–63. Retrieved 9 November 2017 from http://apples.jyu.fi/ArticleFile/download/728.

Bataineh, R. F., & Bani Younis, R. (2016). The effect of dictogloss on Jordanian EFL teachers' instructional practices and students' writing performance. *International Journal of Education and Training*, *2*(1), 1-11. Retrieved 9 November 2017 from http://www.injet.upm.edu.my.

Bouhnik, D., & Deshen, M. (2014). *WhatsApp* goes to school: Mobile instant messaging between teachers and students. *Journal of Information Technology Education: Research*, *13*, 217-231. Retrieved 13 November 2017 from http://www.jite.org/documents/Vol13/JITEv13ResearchP217-231Bouhnik0601.pdf.

Boy, I., & Motteram, G. (2013). Does mobile learning need to move? Proceedings of the Global Perspective on ComputerAssisted Language Learning Conference (pp.32-35). Retrieved on 13 November 2017 from http://www.arts.ulster.ac.uk/worldcall2013/userfiles/file/shortpapers.pdf.

Charles, M., & Bradley, K. (2006). A matter of degrees: Female underrepresentation in computer science programs cross-nationally. In J. M. Cohoon & W. C. Aspray (Eds.), *Women and Information Technology: Research on the Reasons for Under-representation* (pp.183–204). Cambridge: MIT Press.

Cheng, Y. (2002). Factors associated with foreign language writing anxiety. *Foreign Language Annals, 35*(5), 647-656.

Cheng, Y., Horwitz, E., & Schallert, D. (1999). Language anxiety: Differentiating writing and speaking components. *Language Learning, 49*(3), 417-446.

Cumming, A., & Riazi, A. (2000). Building models of adult second-language writing instruction. *Learning and Instruction, 10*(1), 55-71.

Defazio, J., Jones, J., Tennant, F., & Hook, S.A. (2010). Academic literacy: The importance and impact of writing across the curriculum - A case study. *Journal of the Scholarship of Teaching and Learning, 10*(2), 34-47.

Disenhaus, N. (2015). *Boys, Writing, and the Literacy Gender Gap: What we Know, What we Think we Know*. Unpublished Doctoral Dissertation. University of Vermont, Retrieved 9 November 2017 from http://scholarworks.uvm.edu/cgi/viewcontent.cgi?article= 1329&context=graddis.

Duncan, A. M. (1991). Write makes might: A case for the neglected skill. ERIC Clearinghouse, ED341239. Retrieved 9 November 2017 from http://files.eric.ed.gov/fulltext/ED341239.pdf.

Ellison, N., Steinfield, C., & Lampe, C. (2006). Spatially bounded online social networks and social capital: The role of Facebook. Paper presented at the Annual Conference of the International Communication Association, 19-23 June, Dresden (Germany). Retrieved 15 November 2017 from https://pdfs.semanticscholar.org/0cb8/0ff871d20b077fbc6995a9827eb49b75abd9.pdf.

Flower, L., & Hayes, J. R. (1981). A cognitive process theory of writing. *College Composition and Communication, 32*(4), 365-387.

Freedman, A., Pringle, I., & Yalden, J. (1987). *Learning to Write: First Language/Second Language*. London: Longman.

Gorman, T. P., White, J., Brooks, G., MacLure, M., & Kispal, A. (1988). *Language Performance in Schools: A Review of APU Language Monitoring, 1979-83*. London: HMSO.

Grabe, W., & Kaplan, R. B. (1996). *Theory and Practice of Writing: An Applied Linguistic Perspective*. New York: Longman.

Green, J., & Oxford, R. L. (1995). A closer look at learning strategies, second language proficiency, and gender. *TESOL Quarterly, 29*, 261-297.

Hall, C., & Coles, M. (1997). Gendered readings: Helping boys develop as critical readers. *Gender and Education, 9*(1), 61-68.

Hedges, L., & Newell, A. (1999). Changes in the black-white gap in achievement scores. *Sociology of Education, 72*(2), 111-135.

Hu, Z. (2013). Vocabulary learning assisted by mobile phones: Perceptions of Chinese adult learners. *Journal of Cambridge Studies, 8*(1), 139-154. Retrieved 15 November 2017 from http://www.journal.acs-cam.org.uk/data/archive/2013/201301-article9.pdf.

Hyland, K. (2003). Genre-based pedagogies: A social response to process. *Journal of Second Language Writing, 12*, 17-29. Retrieved 11 November 2017 from http://www2.caes.hku.hk/kenhyland/files/2012/08/Genre-based-pedagogies_a-social-response-to-process1.pdf.

Jackson, L. A., Zhao, Y., Kolenic, A., Fitzgerald, H. E., Harold, R., & Von Eye, A. (2008). Race, gender, and information technology use: The new digital divide. *CyberPsychology and Behavior, 11*(4), 437-442.

Jafari, N., & Ansari, D.N. (2012). The effect of collaboration on Iranian EFL learners' writing accuracy. *International Education Studies, 5*(2), 125-131. Retrieved 15 November 2017 from http://files.eric.ed.gov/fulltext/EJ1066784.pdf.

Jebreil, N., Azizifar, A., & Gowhary, H. (2015). investigating the effect of anxiety of male and female Iranian EFL learners on their writing performance. *Procedia - Social and Behavioral Sciences, 185*, 190-196. Retrieved 15 November 2017 from www.sciencedirect.com.

Jenson, J., & Brushwood Rose, C. (2003). Women @ work: Listening to gendered relations of power in teachers' talk about new technologies. *Gender and Education, 15*(2), 169-181.

Jordan, R. R. (1997). *English for Academic Purposes: A Guide and Resource Book for Teachers*. Cambridge: Cambridge University Press.

Klein, A. (2006). Score drop prompts debate over effects of revised SAT; Girls outdo boys in writing. *Education Week, 26*(2), 18. Retrieved 10 November 2017 from http://www.edweek.org/ew/articles/2006/09/06/02sat.h26.html.

Koivula, N. (2001). Perceived characteristics of sports categorized as gender-neutral, feminine and masculine. *Journal of Sport Behavior, 24*(4), 377-393.

Kuppuswamy, S., & Narayan, P. (2010). The impact of social networking websites on the education of youth. *International Journal of Virtual Communities and Social Networking*, *2*(1), 67-79.

Lakoff, R. T. (1975). *Language and Woman's Place*. New York: Harper and Row.

Levy, R. (2016) A historical reflection on literacy, gender and opportunity: Implications for the teaching of literacy in early childhood education. *International Journal of Early Years Education, 24*(3), 279-29.

Littleton, K., & Hoyle, C. (2002). The gendering of information technology. In N. Yelland & A. Rubin (eds.), *Ghosts in the Machine: Women's Voices in Research with Technology* (pp. 3-32). New York: Peter Lang.

Martino, W., & Kehler, M. (2007). Gender-based literacy reform: A question of challenging or recuperating gender binaries. *Canadian Journal of Education, 30*(2), 406-431. Retrieved 10 November 2017 from http://journals.sfu.ca/cje/index.php/cjerce/article/viewFile/2959/2248.

Mullis, I. V. S., Martin, M. O., Foy, P., & Drucker, K. T. (2012). *PIRLS 2011 International Results in Reading.* Chestnut (Massachusetts): International Association for the Evaluation of Educational Achievement.

Obeiah, S. F., & Bataineh, R. F. (2015). Does scaffolding-based instruction improve writing performance? The case of Jordanian EFL learners. *Lublin Studies in Modern Languages and Literature, 39(*2), 106-123. Retrieved 9 November 2017 from http://www.lsmll.umcs.lublin.pl/issues/39-2-2016/7bataineh.pdf.

Obeiah, S. F., & Bataineh, R. F. (2016). The effect of portfolio-based assessment on Jordanian EFL learners' writing performance. *Bellaterra Journal of Teaching and Learning Language and Literature*, *9*(1), 32-46. Retrieved 10 November 2017 from http://ddd.uab.cat/pub/ jtl3/jtl3_a2016m2-3v9n1/jtl3_a2016m2-3v9n1p32.pdf.

Odell, P. M., Korgen, K. O., Schumacher, P., & Delucchi, M. (2000). Internet use among female and male college students. *CyberPsychology and Behavior, 3*(5), 855-862.

Pajares, F. (2003). Self-efficacy beliefs, motivation, and achievement in writing: A review of the literature. *Reading and Writing Quarterly, 19*(2), 139-158.

Pajares, F., & Giovanni, V. (2001). Gender differences in writing motivation and achievement of middle school students: A function of gender orientation? *Contemporary Educational Psychology, 26*(3), 366-381.

Plana, M. G. C., Escofet, M. I. G., Figueras, I. T., Gimeno, A., Appel, C., & Hopkins, J. (2013). Improving learners' reading skills through instant short messages: A sample study using *WhatsApp*. Paper presented at the Fourth 4th World-CALL Conference, Glasgow, 10-13 July.

Raimes, A. (1991). Out of the woods: Emerging traditions in the teaching of writing. *TESOL Quarterly*, *25*(3), 407-430.

Raimes, A. (1998). Teaching writing. *Annual Review of Applied Linguistics, 18,* 142-67.

Rambe, P., & Bere, A. (2013). Using mobile instant messaging to leverage learner participation and transform pedagogy at a South African University of Technology. *British Journal of Educational Technology*, *44*(4), 544-561.

Rudzinska, I. (2013). Are females better than males in communication in second language? *Journal of Education Culture and Society, 2,* 148-154. Retrieved 13 November 2017 from https://journals.indexcopernicus. com/search/article?articleId=1176802.

Sajadi, S. A. & Maghsoudi, M. (2016). The effect of Iranian EFL learners' gender and their learning styles on their English learning success. *English for Specific Purposes World, 50*(17), 1-27. Retrieved 11 November 2017 from http://www.esp-world.info/Articles_50/Sajadi.pdf.

Schofield, J. (1995). *Computers and Classroom Culture*. Cambridge: Cambridge University Press.

Shang, H.-F. (2013). Factors associated with English as a foreign language university students writing anxiety. *International Journal of English Language Teaching*, *1*(1), 1-12.

Silva, T. (1990). Second language composition instruction: Developments, issues and directions in ESL. In B. Kroll (ed.), *Second Language Writing* (pp. 115-150). Cambridge: Cambridge University Press.

Smith, M. W., & Wilhelm, J. D. (2004). "I just like being good at it": The importance of competence in the literate lives of young men. *Journal of Adolescent and Adult Literacy, 46,* 454-461.

Smith, M. W., & Wilhelm, J. D. (2009). Boys and literacy: Complexity and multiplicity. In L. Christenbury, R. Bomer, & P. Smagorinsky (eds.), *Handbook of Adolescent Literacy Research* (pp. 360-371). New York: The Guilford Press.

Smith, M., & Wilhelm, J. (2002). *Reading don't Fix no Chevys: Literacy in the Lives of Young Men*. Portsmouth (New Hampshire): Heinemann.

Twist, L., & Sainsbury, M. (2009). Girl friendly? Investigating the gender gap in national reading tests at age 11. *Educational Research*, *51*(2), 283-297.

Wallace, J. (2010). What about "what about the boys?" Reconsidering gender equitable education. *The Alberta Teachers' Association*. Retrieved 19 November 2017 from https://www.teachers.ab.ca/Pages/Home.aspx.

Watson, A., Kehler, M., & Martino, W. (2010). The problem of boys' literacy underachievement: Raising some questions. *Journal of Adolescent and Adult Literacy, 53*(5), 356-361.

Weaver-Hightower, M. (2008). *The Politics of Policy in Boys' Education: Getting Boys "Right."* New York: Palgrave Macmillan.

WhatsApp Official Site (2017). *WhatsApp*. Retrieved 13 November 2017 from https://www.*WhatsApp*.com/ features/.

Whitmire, R. (2010). *Why Boys Fail: Saving our Sons from an Educational System that's Leaving them behind*. New York: Amacom.

A CROSS-CULTURAL STUDY ON THE ATTITUDES
OF ENGLISH LANGUAGE STUDENTS
TOWARDS COMPUTER-ASSISTED LANGUAGE LEARNING

by **Dara Tafazoli, Mª Elena Gómez Parra** and **Cristina A. Huertas Abril**

University of Córdoba

14071 Córdoba, Spain

z52tatad @ uco.es

Abstract

The purpose of this study was to compare the attitude of Iranian and non-Iranian English language students' attitudes towards Computer-Assisted Language Learning (CALL). Furthermore, the relations of gender, education level, and age to their attitude are investigated. A convergent mixed methods design was used for analyzing both quantitative and qualitative data. In the data collection procedure, an online 44-item web-based questionnaire was applied in order to collect data from 415 students. In the data analysis phase, both descriptive and non-parametric analyses were performed. The findings of the study revealed that there is no difference between the attitudes of Iranian and non-Iranian towards CALL. Finally, pedagogical implications and recommendations for further research are presented.

Keywords: CALL; cross-cultural attitudes

1. Introduction

Technological development has affected our careers, as well as our personal and social lives. Both teachers and material designers are aware of combining technology and curriculum development. Many years ago, language learning with the aid of administrating technology-based application was quite problematic, but nowadays teachers who are not able to apply technological tools in their classrooms can be considered as out-of-date teachers (Chapelle, 2008). There are many new golden opportunities for language learning by applying computer-mediated programs (Doughty & Long, 2003). Computer-Assisted Language Learning (CALL) utilizes some modern methods such as communicative language teaching, task-based learning, process approaches to improve learners' autonomy, and control during language learning procedure (Warschauer, 1996). Learners' independency and flexibility in language learning and teaching are the key purposes of any language association and institute. To accomplish these goals, ICT, cell phones or computers, are applied to end time, space and condition learning restrictions.

In a large number of studies, CALL and different aspects of its programs are evaluated. CALL includes three types of research: software, learning task, and learners (Chapelle, 2003). Based on previous studies, most of the research focuses on the first two types of CALL, where a shortage of investigation is identified regarding the learner, who is the final user of this process. The final goal of CALL is not using various technological programs and tools in the classroom, but rather to facilitate language learning by providing a suitable setting. Therefore, another role of educational scholars and researchers is to perceive learners' beliefs and reflection on CALL programs and tools. Learners' positive attitudes toward e-learning and CALL will encourage them to use it more frequently (Liaw, 2002). Cross-cultural dimension in studies of the learners' attitudes toward CALL has been missed in the related literature since almost all of previous research is examined within a specific culture and society.

Stigler and Hiebert (1999) argued that methods gathered from comparative education research study can provide some educational improvement. The type of comparative study which examines two or more different societies and cultures is called a cross-cultural study; this research is effective to analyze psychological traits (Matsumoto & Yoo, 2006). The compatibility of the product with two different societies and cultures is another viewpoint which focuses on the significance of cross-cultural studies. According to these researchers' belief, utilizing the findings of other societies and cultures does not lead to the same result in the target context. In Western and Eastern countries, extensive research examined the usefulness of CALL, but the results cannot be extrapolated to the Iranian culture. Although attitude has the same status and the result of the study may present either positive or negative aspects of this phenomenon, administrating it to the Iranian belief, perception and facilities may lead to different findings. This research tries to make the comparison between Iranian and non-Iranian English learners' attitude towards CALL. The final purpose of this study is to find out the most and the least frequent CALL tools in the English classrooms.

The achievement of students determines their attitudes towards CALL (Lacina, 2004; Warschauer, Knoebel & Stone, 2004). In Chapelle and Jamieson's (1986) study, those students who worked harder at learning English had more positive attitudes towards CALL; therefore, they spent more time on that. One of the aims of Chen's (2013) study was to investigate the attitude of Chinese students towards tablet-based Mobile Assisted Language Learning (MALL). The researchers applied Davis's (1993) Technology Acceptance Model (TAM), to develop a questionnaire on attitude. The aim of this survey was to assess students' perceptions of usability, effectiveness, and satisfaction with tablets for language learning during four

weeks. This survey consists of 30 statements on a 5-point Likert scale which was administered to the participants. The data analysis revealed that, based on participants' attitude, tablet computers were easy to use, effective for the purpose of language learning, and that the participants were satisfied with MALL.

If the final goal is to get students adopt computers for lifelong learning, we have to consider their attitudes towards this technology (Almahboub, 2000). According to Loyd and Gressard (1984) those students who show positive attitudes towards CALL are more eager to use computer technology. Therefore, it is possible to consider attitude as an indicator for computer usage tendency.

This research aimed to find the answer for the following questions:

1. Are there any differences between Iranian and non-Iranian English language students' attitudes towards CALL?
2. How is gender related to the attitudes of Iranian and non-Iranian English language students towards CALL?
3. How is the level of education related to the attitudes of Iranian and non-Iranian English language students towards CALL?
4. How is age related to the attitudes of Iranian and non-Iranian English language students towards CALL?

2. Review of the literature

Language teachers and learners are provided with a number of opportunities due to the spread of Information and Communication Technology (ICT). In spite of the positive effects of technology, it might entail specific pedagogical adaptations to the classroom level. Consequently, the combination of technology and language is the central part of many language researchers and scholars' jobs.

2.1. Computer and electronic literacy

The meaning of literacy has changed; a person is called literate if they are able to read and write both printed and electronic texts. Based on the time needs, learners must improve their skills in the 21st century. For different activities in our daily lives, such as editing texts and photos, shopping, travelling or studying, computers play an important role. Therefore, some novel literacies such as "computer literacy", "electronic literacy", and "information literacy" are appearing due to the rapid growth of technology. Therefore, how to develop and improve these literacies has become a crucial factor in education (Son, 2004). As Dudeney, Hockly and

Pegrum (2013) mentioned, these skills involve creativity and innovation, critical thinking and problem solving, collaboration and teamwork, autonomy and flexibility and lifelong learning. Another important factor arises, called digital literacy, which is an ability to interpret, manage, share and create meaning in the growing range of digital communication channels.

In the late 1960s, the idea of computer literacy among students emerged. The specific definition of computer literacy is under dispute, so it has evolved along the years. Computer literacy is the ability which helps learners to speak about computer. According to Son, Robb and Charismiadji (2011), it is understood "as the ability to use computers at an adequate level for creation, communication and collaboration in a literate society" (p. 27). Another side of Computer Assisted Learning (CAL) affirms that computers can be the students' teacher. This definition can change for the educational arena. As Son, Robb and Charismiadji (2011) mentioned, it can be considered as "the development of knowledge and skills for using general computer applications, language-specific software programs and Internet tools confidently and competently" (p. 27).

Most computer-related texts and the Internet which are suggested to educators, scholars and students can be integrated into different educational context, where new media must be applied. However, printed materials are still the dominant media. The following text by Reinking (1994) describes the four criteria that activities must have to develop electronic literacy in educational contexts:

> First, they should relate to conventional print-based literacy in meaningful ways […] A second criterion is that activities designed to promote electronic literacy should involve authentic communication and meaningful tasks for students and teachers […] Third, activities should engage students and teachers in higher levels of thinking about the nature of printed and electronic texts as well as about the topics of their reading and writing […] Fourth, activities should engage students and teachers in ways that allow them to develop functional strategies for reading and writing electronic texts
>
> (as cited in Tafazoli, Gómez Parra, & Huertas Abril, 2017, p. 718).

Thus, learners are considered to have specific knowledge on computer literacy. The functional knowledge of computers can assist learners to learn, solve problems, and understand the academic area.

2.2. Computer-Assisted Language Learning (CALL)

Based on Levy's (1997) definition of CALL, it is the research of the application of the computer in language learning and teaching. While the name involves computer, the term

CALL includes any applications of Information and Communication and Technology (ICT) for teaching and learning foreign languages.

Using technology for learning and teaching languages is a new concept, although it is not a new story in the educational field where CALL is framed. Interesting opportunities are provided for teachers and students by CALL, and a few different phases have been identified in language programs within the gradual development of technology for language courses. Each phase is connected to a specific technological and pedagogical level: behavioristic CALL, communicative CALL and integrative CALL (cf. Barson & Debski, 1996; Warschauer, 1996; Warschauer & Healey, 1998), all of which have their own merits and drawbacks.

The merits and barriers for using CALL have been examined by different scholars. Seven different positive effects of CALL were mentioned by Warschauer and Healey (1998): 1) multimodal practice with feedback; 2) individualization in a large class; 3) pair or small group work on projects; 4) the fun factor; 5) variety in the resources available and learning styles used; 6) exploratory learning with large amounts of language data: and 7) real-life skill building in computer use.

In addition, the students will be able to learn how cultural issues can change a person's point of view toward world (Singhal, 1997). Students can have access to other people's work, publish their own work and, by using the Internet, become capable of searching extra language activities (Singhal, 1997). Higher motivation, greater interaction, higher order thinking skills, receiving both positive and negative feedbacks, global understanding, among others are the beneficial points of applying the Internet in language learning process (Lee, 2000). According to AbuSeileek and Abu Sa'aleek (2012), CALL can be practical since language learners can study anytime and anywhere.

Shyamlee and Phil (2012) mentioned that teachers should use technology to provide different approaches to course content. The Department of Education and Early Childhood Development - DEECD (2010) reported that technology changes the class from teacher-centered into student-centered classrooms. Furthermore, technology provides the encouragement of collaboration and communication in learning activities (Gillespie, 2006; Murphy, 2006). Finally, technology has proved to decrease anxiety levels among learners (Chapelle, 2001; Levy, 1997).

On the negative side, the literature has identified some drawbacks:

1) Both teachers and students need training in how to use technology for educational purposes (Baylor & Ritchie, 2002; Han, 2008).

2) Some unsuitable topics and issues may be available to students, which may cause serious problems (Singhal, 1997).

3) The absence of facilities can be a barrier for conducting technology in language classrooms (Corrêa, 2001; Han, 2008).

4) Spending time on the Internet can be fun, though time consuming at times (Cabrini Simões, 2007; Corrêa, 2001).

5) Computers can only do what they are programmed to do, so some students are never interested in learning through technology.

6) Unexpected situations cannot be controlled due to technological barriers (AbuSeileek & Abu Sa'aleek, 2012).

7) Some authors think that teachers should not use technology as abstract thinking should not be replaced by imaginative thinking (Shyamlee & Phil, 2012).

8) Finally, teachers' negative attitude towards technology in a crucial barrier (Fang & Warschauer, 2004; McGrail, 2005).

In recent years, significant investigations have been conducted to introduce different technologies such as mobile, website, weblog, internet, video, and the like (e.g., Belz, 2002; Belz & Thorne, 2006; O'Dowd, 2003; Prensky, 2007; Salaberry, 2001). However, in the field of foreign languages, most investigations have explored only one or two technological tools within a specific context. This study aims to fill a gap in the current research by researching various technologies used in two different contexts within language learning classes.

3. Conceptual framework: The multicomponent model of attitude

Attitude, from a psychological point of view, is the way in which a person expresses either their favor or disfavor towards anything such as a person, place, etc. Although finding a precious definition of attitude is a controversial issue, Eagly & Chaiken (1998) defined attitude as "a psychological tendency that is expressed by evaluating a particular entity with some degree of favor or disfavor" (p. 1). Our evaluation of an attitude could range from extremely positive to extremely negative, at the same time an individual can hold a different attitude from another one towards the same object (Wood, 2000). In Wenden's (1998) view, attitude is a set of "learned motivations, valued beliefs, evaluations, what one believes is acceptable, or responses oriented towards approaching or avoiding" (p. 52). The term "attitude" for Mantle-Bromley refers to "affect and an evaluative, emotional reaction" (Mantle-Bromley, 1995, p. 381). Zimbardo and Leippe (1991) believed that attitude is an evaluative tendency towards an object, which a person possesses based upon cognitions,

affective reactions and behavioral intentions; past behaviors may affect cognitions, affective responses, and future intentions and behaviors.

Based on the multicomponent model of attitude, the construct of attitude contains (1) cognitive; (2) behavioral; and (3) affective components (Fishbein & Ajzen, 1975; Kiesler, Collins & Miller, 1969; Mantle-Bromley, 1995; Mantle-Bromley & Miller, 1991).
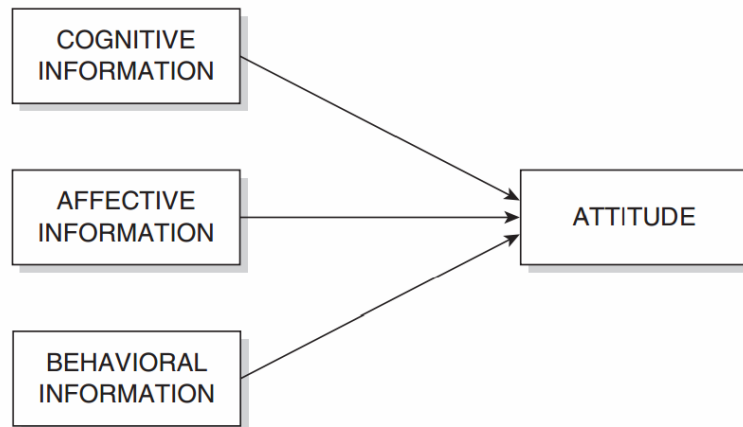
Figure 1. The Multicomponent Model of Attitude

The cognitive component refers to the amount of knowledge a person has on a specific topic. The cognitive component of a language learner regarding CALL would be based on computer literacy (Maushak & Simonson, 2001). The overt performance of a person towards an object is a behavioral component of their attitude. In other words, the behavioral component refers to appreciation or dealings related to attitude. In language learning, for instance, the learners with a positive attitude towards the target language are keen on possessing constructive learning behaviors. Therefore, this learner can get more achievements than a student with a negative attitude (Donato, Antonek & Tucker, 1994; 1996). Such a component of attitude in CALL relates to the experience of the language learner in using computers and/or other technologies for language learning. According to previous research, it could be noticed that the more experience in using computer, the more positive attitudes towards computers and vice versa (Maushak & Simonson, 2001). The affective component refers to an attitude object. The feelings or emotions which are linked to an attitude object shape the affective component. That is, the fact that students considered that CALL tools and devices made their learning less anxious and/or easy to use deals with the affective component of their attitudes. Having said that, Breckler (1984) reported that although the cognitive, behavioral and affective components of attitude are not the same, they are not completely independent. In other words, these components have a synergetic relation. When a

person has a positive belief about an attitude object, they possess both affective and behavioral associations with the object (Breckler, 1984; Breckler & Berman, 1991; Breckler & Wiggins, 1989; 1991).

4. Methodology

4.1. Research Design

This cross-cultural study has used mixed methods research design because both quantitative and qualitative data provide a better understanding of the research. In this design, two different methods were used to obtain triangulated results about a single topic.

The convergent is an efficient design in which both types of data are collected during one phase of the research and at the same time. Moreover, it is possible to collect and analyze each type of data separately and independently.
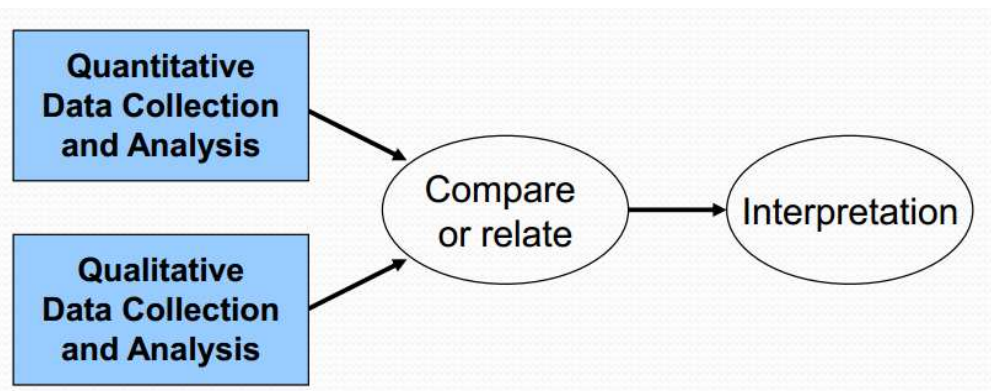
Figure 2. Prototypical version of the convergent parallel design (Creswell & Plano Clark, 2011, p. 69)

4.2. Participants

As shown in Table 1, female was the dominant sex in the sample with over three quarters of the participants (75.2%). Only 103 of the 415 participants of the sample were male.

Table 1. Distribution of different sexes in the sample

	Frequency	Percent	Valid Percent	Cumulative Percent
MALE	103	24.8	24.8	24.8
FEMALE	312	75.2	75.2	100.0
Total	415	100.0	100.0	

Undergraduate and postgraduate learners had almost equal proportion in the sample – 38.1 and 39.3, respectively. The minority group in terms of education level was the graduate learners, who were 94 participants.

Table 2. Distribution of different education levels in the sample

	Frequency	Percent	Valid Percent	Cumulative Percent
UNDERGRADUATE	158	38.1	38.1	38.1
GRADUATE	94	22.7	22.7	60.7
POSTGRADUATE	163	39.3	39.3	100.0
Total	415	100.0	100.0	

Regarding age, as shown in Table 3, the largest category of participants (158 learners) fell within the age range between 18 and 23. The second and third largest groups were those between 24 to 29 years old (27.2%), and that of over 35 (18.3%), respectively. The smallest group in the sample ranged in age between 30 and 35, comprising only 16.4 % of the sample.

Table 3. Distribution of age in the sample

	Frequency	Percent	Valid Percent	Cumulative Percent
Between 18 and 23	158	38.1	38.1	38.1
Between 24 and 29	113	27.2	27.2	65.3
Between 30 and 35	68	16.4	16.4	81.7
Between 36 and above	76	18.3	18.3	100.0
Total	415	100.0	100.0	

Table 4 shows the frequency distribution of the participants by country. Iran, Kuwait, and Japan were the nations with the largest number of participants, with 145, 95, and 17 learners, respectively.

Table 4. Distribution of nationalities in the sample

Country	F	%	Valid %	Cumulative %	Country	F	%	Valid %	Cumulative %
Algeria	5	1.2	1.2	1.2	Korea	1	.2	.2	54.7
Armenia	1	.2	.2	1.4	Kuwait	95	22.9	22.9	77.6
Australia	1	.2	.2	1.7	Laos	1	.2	.2	77.8
Austria	1	.2	.2	1.9	Libya	1	.2	.2	78.1
Azerbaijan	2	.5	.5	2.4	Malaysia	5	1.2	1.2	79.3
Bangladesh	2	.5	.5	2.9	Mexico	6	1.4	1.4	80.7
Belgium	3	.7	.7	3.6	Morocco	6	1.4	1.4	82.2
Bosnia	2	.5	.5	4.1	N Sudan	1	.2	.2	82.4
Brazil	5	1.2	1.2	5.3	Netherlands	1	.2	.2	82.7
Canada	2	.5	.5	5.8	Nigeria	1	.2	.2	82.9
Chile	1	.2	.2	6.0	Pakistan	15	3.6	3.6	86.5
Colombia	2	.5	.5	6.5	Palestine	1	.2	.2	86.7
Cambodia	1	.2	.2	6.7	Philippines	4	1.0	1.0	87.7
Cyprus	1	.2	.2	7.0	Poland	2	.5	.5	88.2
Ecuador	2	.5	.5	7.5	Qatar	2	.5	.5	88.7
Egypt	2	.5	.5	8.0	Romania	2	.5	.5	89.2
France	2	.5	.5	8.4	Russia	3	.7	.7	89.9
Germany	1	.2	.2	8.7	Saudi Arabia	1	.2	.2	90.1
Ghana	1	.2	.2	8.9	Serbia	1	.2	.2	90.4
Greece	2	.5	.5	9.4	Slovakia	3	.7	.7	91.1

India	11	2.7	2.7	12.0	Spain	13	3.1	3.1	94.2
Indonesia	1	.2	.2	12.3	Syria	1	.2	.2	94.5
Iran	145	34.9	34.9	47.2	Thailand	2	.5	.5	94.9
Iraq	4	1.0	1.0	48.2	Turkey	2	.5	.5	95.4
Ireland	2	.5	.5	48.7	UAE	1	.2	.2	95.7
Italy	1	.2	.2	48.9	UK	3	.7	.7	96.4
Japan	17	4.1	4.1	53.0	USA	10	2.4	2.4	98.8
Jordan	4	1.0	1.0	54.0	Venezuela	3	.7	.7	99.5
Kazakhstan	2	.5	.5	54.5	Vietnam	1	.2	.2	99.8
					Yemen	1	.2	.2	100.0
Total	415	100	100						

Overall, Table 5 outlines that 34.7% of the learners in the sample were Iranians, and 65.3% were foreigners. Hence, there were 127 more foreign participants in the sample than the Iranians.

Table 5. Distribution of Iranians and non-Iranians in the sample

	Frequency	Percent	Valid Percent	Cumulative Percent
Iranian	144	34.7	34.7	34.7
Non-Iranian	271	65.3	65.3	100.0
Total	415	100.0	100.0	

4.3. Instrumentation

In order to collect data about the attitudes of English language students, an online five-section questionnaire was administered through Google Forms via the following link: http://bit.ly/2teLmgc. The online questionnaire comprised 48 closed- and open-item questions, distributed into 5 sections (see Table 6 below). The first section of the questionnaire was designed to gather data about participants' demographic information: gender, current studying level, age, continent, and country. The second section aimed to investigate the level of computer literacy of the students through 10 items. The first nine items of this section were "Can you" questions with "Yes and No" options; and the last item was a multiple-choice question about the overall self-evaluation of students about their computer literacy. The third section targeted the students' attitude towards Computer-Assisted Learning (CAL). This section comprised ten 7-point Likert-scale items that ranged from strongly disagree (1) to strongly agree (7). Items 11-13 aimed to gather information about the students' attitudes towards computer; and items 14-19 were designed to measure students' attitude towards their willingness to use computer as a learning medium. The fourth section was designed to explore the students' attitudes towards Computer-Assisted Language Learning (CALL) through 20 Likert-scale items. Items 20-27 dealt only with CALL. Items 28 and 29 aimed to find out students' ideas about computers' feedback. Items 30-32 were about the role of CALL as a facilitator of communication. Item 33 concerned the evaluation of students via

computer. Items 34-40 collected data about students' attitude towards the development of language skills, grammar, vocabulary and cultural awareness via computers. The final part of the questionnaire in the last section consisted of two open-ended items, 41 and 42, which prompted students to give their experience in using English language software or any other related experiences with CALL.

Table 6. Distribution of questions on the questionnaire

Sections	Section I	Section II	Section III	Section IV	Section V
Block	Background information	Computer literacy	Students' attitudes towards CAL	Students' attitudes towards CALL	Open-ended questions
Total	6	10	10	20	2

4.4. Data analysis

This study set out to compare the potential significant difference between the attitude of Iranian and non-Iranian English learners both to computers in general, and to computer-assisted language learning (CALL). Moreover, the potentiality of any statistically significant differences between age, sex, and education level were scrutinized.

5.1. Checking the reliability of the questionnaire

The questionnaire contained 42 questions plus demographic data. It measured three different constructs distributed into three categories. After administering this questionnaire to the sample, the researchers first checked the validity of the case processing. All the 415 cases of the sample were valid, and SPSS did not exclude the scores of any of the learners from the processing. Questions 1 to 10 of the questionnaire measured the construct of computer literacy. The SPSS calculated the Cronbach's Alpha Coefficient of .569 for this construct. That is to say, the first construct of the questionnaire enjoys an acceptable level of reliability. The second construct of the questionnaire was the general attitude of the learners towards the application of computers, and it was measured in questions 11 to 20. The SPSS software calculated the Cronbach's Alpha coefficient for the second construct to be .842. This indicated that the second construct enjoyed ample internal consistency, as well. This construct measured the attitude of the learners toward the application of computers, and it was stretched from question 21 to 40. The Cronbach's Alpha coefficient for this construct was .866, which indicated a high degree of internal consistency. Finally, the researchers calculated the internal consistency of the whole questionnaire, and the Alpha of .912 could be reported for it. Hence,

it could be concluded that not only do each of the three constructs enjoy ample reliability individually, but the whole questionnaire also was highly reliable.

5.2. Checking the validity of the questionnaire

In order to make sure of the validity of the questionnaire, the researchers decided to apply the Factor Analysis Method. Field (2005) proposed that, in general, taking over 300 cases for sampling analysis is probably adequate for the successful administration of factor analysis. Hence, this study, with 450 cases in the sample, met this standard for the administration of factor analysis.

The correlation matrix in the factor analysis reported the determinant of 8.18 and the error of determinant of -8 for the whole questionnaire. Moreover, as depicted in Table 7, the Kaiser-Meyer-Olkin Measure, which measures strength of the relationship among variables, was .895. According to Kaiser and Rice (1974), 0.5 is minimum (barely acceptable) value for KMO, values between 0.7 and 0.8 are acceptable values, and KMO values above 0.9 are considered good. Thus, the KMO value of .895 was optimal.

Table 7. Basic factor analysis tests

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.895
Bartlett's Test of Sphericity	Approx. Chi-Square	6524.740
	Df	780
	Sig.	.000

Table 7 also indicates that the significant level of Bartlett's test of Sphericity, which is another indication of the strength of the relationship among variables, was .000 < .05, which meant that the correlation matrix was not an identity matrix. Hence, the administration of the factor analysis was possible and proper. Additionally, the communalities analysis shows how much of the variance in the variables has been accounted for by the extracted factors. According to the findings, questions 25, 24, and 7 were the questions of which the lowest percentage of variance was accounted for (.374, .399, and .416, respectively). By contrast, the highest ratio of the variance was accounted for in questions 3, 31, and 30 (.781, .755, and .753, respectively). All the other accounted-for variances fell within the range of .374 and .781.

All the factors extractable from the analysis along with their eigenvalues, the percent of variance attributable to each factor, as well as the cumulative variance of the factor and the previous factors. 9 components had the eigenvalues of larger than 1; hence, it could be argued

that factor analysis managed to extract 9 components from this questionnaire. The first component accounted for 25.06% of the variance, whereas the ninth component only accounted for 2.7% of the variance. The remaining 31 factors had the eigenvalues smaller than 1; they, thus, were considered insignificant in the analysis. The majority of the variables (23 of the 40 variables) have been loaded on factor 1. Two of the variables are loaded on factor 2, and the rest of the factors have only one variable loaded on them. For factors 4 and 6, on the contrary, no loaded variables can be reported.

The rotated component matrix has reduced the number factors on which the variables have high loadings to make the interpretation of the analysis easier. As it could be reported, the majority of the variables are loaded on factors 1, 2 and 3. Factor 9, on the other hand, has only one variable loaded.

Overall, it could be concluded from the statistical analyses of this section that the researcher-designed questionnaire enjoyed an ample degree of internal consistency as well as validity, hence it was fully functional to be administered as the main tool for data collection.

4.3. Descriptive statistics

After the questionnaire had been administered to the 415 members of the sample, the papers were scored by the researchers and the quantitative data were imported to SPSS. Initially, the descriptive statistics were calculated. As shown in Table 8, the Skewness ratio for the scores of the whole questionnaire was -8.2, which was far beyond the normal range of $\pm$ 1.96. Therefore, the data were not normally distributed and they are regarded as non-parametric. The mean of the whole sample was 157.54, and the standard deviation was 26.64.

Table 8. Descriptive statistics of the questionnaire

	N	Mean	Std. Deviation	Variance	Skewness		
					Statistic	Std. Error	Ratio
Questionnaire	415	157.56	26.64	710.08	-.984	.120	-8.2

In addition, the researchers checked out the descriptive statistics of each construct separately. As Table 9 outlines, the Skewness ratio for all the three constructs (11.07, -10.92, and -05.29) did not fall within the normal distribution range of $\pm$ 1.96. As a result, none of the constructs was normally distributed, and the data for each of them were non-parametric. It could also be reported that for computer literacy, the mean was 12.73 and the standard deviation was 1.15. For general attitude to computers, the mean was 51.97 and the standard

deviation was 10.32. And finally, the mean and the standard deviation for attitude toward computers were 92.85 and 18.75, respectively.

Table 9. Descriptive statistics of the three constructs

	N	Mean	Std. Deviation	Variance	Skewness		
					Statistic	Std. Error	Ratio
Computer Literacy	415	12.73	1.15509	1.334	1.329	.120	11.07
CAL Attitude	415	51.97	10.32768	106.661	-1.311	.120	-10.92
CALL Attitude	415	92.85	18.75801	351.863	-.635	.120	-5.29

Except for questions 17, 20, 32, and 33, whose Skewness ratios fell within the normal range, the data for the rest of the questions were not distributed normally.

4.4. Checking the overall differences between the variables

Before checking the research questions individually, the researchers decided to check whether or not there were any statistically significant differences among the data for all the four independent variables (age, sex, level of education, and being/not being Iranian). To do this, the researchers administered the Multivariate Analysis of Variance (MANOVA). As Table 10 shows, all the multivariate tests (Pillai's Trace, Wilks' Lambda, Hotelling's Trace, Roy's Largest Root) depicted a significant difference among the four variables (p= .000, F= 6.22, 43.18, 478.46, and 1445.68, respectively). This means that the four variables had a holistic significant difference regarding the attitude of the sample toward the application of computers.

Table 10. Group effect multivariate tests

Effect		Value	F	Hypothesis df	Error df	Sig.
SEX * LEVEL * AGE * IRANIAN	Pillai's Trace	1.263	6.129	132.000	1113.000	.000
	Wilks' Lambda	.004	43.188	132.000	1106.656	.000
	Hotelling's Trace	171.778	478.463	132.000	1103.000	.000
	Roy's Largest Root	171.456	1445.68	44.000	371.000	.000

The full factorial MANOVA did not report any significant difference for the sex, age, and education level alone. However, it reported a statistically significant difference for the education level variable (p= .044, .044, .043, and .009). Besides, the full factorial MANOVA did not report any other significant difference in any of the analyses involving two or three factors. Nevertheless, only the Roy's Largest Root reported a significant difference for the involvement of the three factors of level, age, and Iranian/non-Iranian (p= .011).

4.5. Checking the research hypotheses

After determining the existence of a statistically significant difference among the four factors by group effect MANOVA, the researchers decided to administer independent statistical tests, and check the research hypotheses one by one.

4.5.1. Checking the first research hypothesis

The first research hypothesis was concerned with being Iranian or non-Iranian, and its influence on English language students' attitudes toward CALL. Since the data for the questionnaire were not normally distributed (Skweness ration= -8.2), the researchers applied the non-parametric test of Mann-Whitney to check this research question. As Table 11 shows, the Asymptotic significant level of the Mann-Whitney test was .180 > .05. Hence, the first research hypothesis of this study was not rejected, which means that there were not any significant differences between the attitudes of Iranian and non-Iranian English language students toward the application of CALL.

Table 11. Mann-Whitney test on Iranian/non-Iranian variable

	Overall
Mann-Whitney U	17952.000
Wilcoxon W	28392.000
Z	-1.341
Asymp. Sig. (2-tailed)	.180

To delve into this matter further, the researchers decided to investigate whether or not there were any significant differences between the attitudes of Iranian and non-Iranian students in every construct. Since the data for all the three constructs were not normally distributed (Skewness ratios= 11.07, -10.92, and -05.29), the researchers opted for the non-parametric test of Mann-Whitney. As Table 12 shows, the Mann-Whitney test revealed that there were significant differences between the computer literacy as well as between the attitudes of Iranian and non-Iranian English students toward CALL (*p*= .000 and .033, respectively). Thereafter, it could be argued that as far as computer literacy and attitudes toward CALL are concerned, statistically significant differences exist between the data drawn from Iranian and non-Iranian English students. The only construct on which Iranian and non-Iranian students did not report any significant difference was the general attitude toward CAL (*p*= .343 > .05).

Table 12. Mann-Whitney test on Iranian/non-Iranian variable for the three constructs

	Computer Literacy	CAL Attitude	CALL Attitude
Mann-Whitney U	15285.500	18410.000	17038.500
Wilcoxon W	25725.500	55266.000	27478.500
Z	-3.840	-.948	-2.127
Asymp. Sig. (2-tailed)	.000	.343	.033

In order to investigate the data even further, the researchers administered the Mann-Whitney test for all the 40 items of the questionnaire. The findings revealed that 16 out of 40 questions reported a significant difference between the attitudes of Iranian and non-Iranian English students towards CALL, and 24 questions did not report any difference.

4.5.2. Checking the second research hypothesis

The second research hypothesis was concerned with being male and female, and its influence on English language students' attitudes toward CALL. Since the data for the questionnaire were not normally distributed (Skweness ration= -8.2), the researchers applied the non-parametric test of Mann-Whitney to check this research question. As it could be accessed in Table 13, Mann-Whitney test did not report any significant differences (p= .217 > .05). As a result, the second research hypothesis of this study was not rejected, as no significant difference existed between the attitudes of male and female English language students toward CALL.

Table 13. Mann-Whitney Test on sex variable

	Overall
Mann-Whitney U	14766.500
Wilcoxon W	20122.500
Z	-1.233
Asymp. Sig. (2-tailed)	.217

To delve into this matter further, the researchers decided to investigate whether or not there were any significant differences between the attitudes of male and female students in every construct. Since the data for all the three constructs were not normally distributed (Skewness ratios= 11.07, -10.92, and -05.29), the researchers opted for the non-parametric test of Mann-Whitney. Table 4.20 reports a significant difference between the computer literacy of men and women (p= .027 < .05). However, it does not report any statistically meaningful differences between the attitudes towards CAL and attitudes of male and female students towards CALL (p= .401 and .06, respectively). Hence, it could be concluded that

despite the difference between their computer literacy, male and female English students did not have any significance difference in their attitudes toward CALL.

Table 14. Mann-Whitney test on sex variable for the three constructs

	Computer Literacy	General Attitude	Attitude
Mann-Whitney U	13856.500	15181.500	14079.500
Wilcoxon W	19212.500	64009.500	19435.500
Z	-2.214	-.841	-1.884
Asymp. Sig. (2-tailed)	.027	.401	.060

In order to investigate the data even further, the researchers administered the Mann-Whitney test for all the 40 items of the questionnaire. The results showed that of the 40 questions, only 9 questions reported a significant difference between the attitude of male and female English students toward CALL, whereas in the other 31 questions, no significant differences could be reported.

4.5.3. Checking the third research hypothesis

The third research hypothesis of this study was concerned with education level and its influence on the attitudes of English language learners toward CALL. Since the data for education level variable was not distributed normally (Skewness ratio= -8.2), the researchers selected the non-parametric Kruskal Wallis test for this purpose. As Table 15 depicts, the Asymptotic Significant level of Kruskal Wallis was .566, which is larger than .05, and hence it does not report any significant differences. Accordingly, the third research hypothesis of this study was not rejected, and no significant differences among the attitudes of English students with different education levels toward CALL was reported.

Table 15. Kruskal Wallis test on education level variable

	Overall
Chi-square	1.138
Df	2
Asymp. Sig.	.566

To delve into this matter further, the researchers decided to perform the Scheffe test as the post-hoc analysis. Table 16 reveals that any of the education levels staged a significant difference in the post-hoc analysis (*p*= .958, .702, and .911). Hence, any of the two groups of learners with different education level reported a significant difference in their attitude toward CALL.

Table 16. Post-hoc Scheffe test on education level variable

(I) LEVEL	(J) LEVEL	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval Lower Bound	Upper Bound
Undergraduate	Graduate	1.01252	3.47	.958	-7.5280	9.5530
	Postgraduate	2.50854	2.971	.702	-4.8114	9.8285
Graduate	Undergraduate	-1.01252	3.47	.958	-9.5530	7.5280
	Postgraduate	1.49602	3.45	.911	-6.9955	9.9875
Postgraduate	Undergraduate	-2.50854	2.97	.702	-9.8285	4.8114
	Graduate	-1.49602	3.45	.911	-9.9875	6.9955

It could be learned from Table 17 that all the English students in the three different education level groups enjoyed means which fell within a homogeneous subset. Besides, the overall significant level of the three groups in the same subset was .751 > .05, which meant no meaningful differences among the groups could be reported.

Table 17. Means for groups in different subsets on education level variable

LEVEL	N	Subset for alpha = 0.05 1
Postgraduate	163	156.2699
Graduate	94	157.7660
Undergraduate	158	158.7785
Sig.		.751

Moreover, the researchers decided to perform the Kruskal Wallis test on each of the constructs to probe where significant differences among the scores of learners with different education levels could be reported. As Table 18 illustrates, Kruskal Wallis reported significant differences among the attitudes of learners with different education levels in computer literacy as well as in attitude towards CAL ($p=$ .041 and .006, respectively). However, there was no significant difference between the attitudes toward CALL among the English learners of different education levels.

Table 18. Kruskal Wallis test for each construct on education level variable

	Computer Literacy	CAL Attitude	CALL Attitude
Chi-square	6.386	10.290	5.721
df	2	2	2
Asymp. Sig.	.041	.006	.057

To delve into details further, the researchers also applied Scheffe post-hoc analysis to each of the constructs for different levels of education. The results, as outlined in Table 19, depict that for the construct of computer literacy, significant statistical difference only existed between the literacy of undergraduate and postgraduate English students ($p=$ .020). In the

general attitude, however, the only meaningful difference was reported between undergraduate and graduate English students ($p=$ .022). But no significant difference was reported among the three groups in the construct of attitudes.

Table 19. Post-hoc Scheffe test for each construct on education level variable

Dependent Variable	(I) LEVEL	(J) LEVEL	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Computer Literacy	Undergraduate	Graduate	.22825	.14938	.312	-.1387	.5952
		Postgraduate	.35983[*]	.12803	.020	.0453	.6744
	Graduate	Undergraduate	-.22825	.14938	.312	-.5952	.1387
		Postgraduate	.13158	.14852	.676	-.2333	.4964
	Postgraduate	Undergraduate	-.35983[*]	.12803	.020	-.6744	-.0453
		Graduate	-.13158	.14852	.676	-.4964	.2333
General Attitude	Undergraduate	Graduate	-3.70172[*]	1.33466	.022	-6.9805	-.4229
		Postgraduate	-2.36802	1.14391	.119	-5.1782	.4422
	Graduate	Undergraduate	3.70172[*]	1.33466	.022	.4229	6.9805
		Postgraduate	1.33370	1.32700	.604	-1.9263	4.5937
	Postgraduate	Undergraduate	2.36802	1.14391	.119	-.4422	5.1782
		Graduate	-1.33370	1.32700	.604	-4.5937	1.9263
Attitude	Undergraduate	Graduate	4.48600	2.43257	.184	-1.4900	10.4620
		Postgraduate	4.51674	2.08491	.097	-.6052	9.6387
	Graduate	Undergraduate	-4.48600	2.43257	.184	-10.4620	1.4900
		Postgraduate	.03074	2.41861	1.000	-5.9110	5.9725
	Postgraduate	Undergraduate	-4.51674	2.08491	.097	-9.6387	.6052
		Graduate	-.03074	2.41861	1.000	-5.9725	5.9110

The analysis of the means also outlined no significant difference between the means that fell within the same homogeneous subsets. For the construct of computer literacy, the mean for the graduate students fell within the same subset with the mean of the postgraduate students on the one hand, and fell within the same homogeneous subset with that of the undergraduates on the other hand. This case mirrors for the mean of the postgraduate learners for the construct of general attitude. On the one hand, it falls within the same subset with the mean of the undergraduate group, and on the other hand, it is in the same subset with the mean of the graduate groups. In the construct of attitude, however the means of the three groups fall under the same subset.

Table 20. Means for groups in different subsets for each construct on education level variable

Construct	Computer Literacy		CAL Attitude			CALL Attitude	
LEVEL	Subset for Alpha = 0.05		LEVEL	Subset for Alpha = 0.05		LEVEL	Subset for Alpha = 0.05
	1			1	2		1
Postgraduate	12.57		Undergraduate	50.20		Postgraduate	91.12

Graduate	12.70	12.7	Postgraduate	52.57	52.57	Graduate	91.15
Undergraduate		12.93	Graduate		53.90	Undergraduate	95.64
Sig.	.653	.277		.178	.577		.151

The researchers also administered Kruskal Wallis test for all the 40 questions in the questionnaire in order to investigate which of them report a significant difference among the attitudes of students with different education levels toward CALL, and which of them do not report any difference. As a result, only 16 of the 40 questions reported a significant difference among the attitudes of English students with different education levels toward CALL, and 24 questions revealed no differences.

5.5.4. Checking the fourth research hypothesis

The fourth research hypothesis of this study was concerned with age and its influence on the attitudes of English language learners toward CALL. Since the data for age variable was not distributed normally (Skewness ratio= -8.2), the researchers selected the non-parametric Kruskal Wallis test for this purpose. As Table 4.29 outlines, Kruskal Wallis did not report any significant differences ($p= .285 > .05$). Hence, the fourth research hypothesis of this study was not rejected, and the data analysis did not depict any statistically significant difference among the attitudes of learners of different age groups toward CALL.

Table 21. Kruskal Wallis test on age variable

	Overall
Chi-square	3.792
Df	3
Asymp. Sig.	.285

To delve into this matter further, the researchers decided to perform the Scheffe test as the post-hoc analysis. The Scheffe test, as illustrated in Table 22, did not report any significant difference among the attitudes of different age groups toward CALL ($p= .371, .638,$ and $.977 > .05$).

Table 22. Post-Hoc Scheffe test on age variable

(I) Age	(J) Age	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
	24-29	5.81830	3.27	.371	-3.3884	15.0250
18-23	30-35	5.02848	3.86	.638	-5.8098	15.8668
	35 and above	1.67322	3.71	.977	-8.7586	12.1051
	18-23	-5.81830	3.27	.371	-15.0250	3.3884
24-29	30-35	-.78982	4.08	.998	-12.2591	10.6794
	35 and above	-4.14509	3.94	.777	-15.2311	6.9409
30-35	18-23	-5.02848	3.81	.638	-15.8668	5.8098

	24-29	.78982	4.08	.998	-10.6794	12.2591
	35 and above	-3.35526	4.44	.903	-15.8294	9.1188
	18-23	-1.67322	3.71	.977	-12.1051	8.7586
35 and above	24-29	4.14509	3.94	.777	-6.9409	15.2311
	30-35	3.35526	4.44	.903	-9.1188	15.8294

The analysis of the means, as shown in Table 23, reported no significant differences ($p= .529 > .05$). It also conveyed that the means of all the age groups fell within a homogeneous subset.

Table 23. Means for groups in different subsets on age variable

LEVEL	N	Subset for Alpha = 0.05 1
24-29	113	154.4602
30-35	68	155.2500
35 and above	76	158.6053
18-23	158	160.2785
Sig.		.529

Moreover, the researchers decided to perform the Kruskal Wallis test on each of the constructs to probe where significant differences among the scores of learners of different age groups could be reported. According to the results, as shown in Table 24, significant differences could be reported among the attitudes of English students in different age groups toward CALL for the construct of computer literacy as well as for the construct of attitude towards CALL ($p= .003$ and $.019 < .05$, respectively). However, the attitude towards CAL did not report any significant differences ($p= .116 > .05$).

Table 24. Kruskal Wallis test for each construct on age variable

	Computer Literacy	CAL Attitude	CALL Attitude
Chi-square	13.964	5.909	9.969
df	3	3	3
Asymp. Sig.	.003	.116	.019

In the post-hoc analysis of each construct through Scheffe test, only two significant differences could be reported. There was a significant difference between the computer literacy of 24-29 age group and that of 18-23 ($p= .003 < .05$). Similarly, there was a difference between the attitudes of the same two age groups toward CALL. No other difference was reported between any other two groups in any other constructs.

The analysis of the means in the post-hoc test, also, did not reveal any differences between the means of any two groups. In the construct of general attitude as well as in the construct of attitude, the means of all three groups fell within the same homogeneous subset. In the construct of computer literacy, however, the mean of 24-29 and the mean of 18-23 age

groups fell under to separate subsets. The mean of the 30-35 and the mean of the 35 and above age groups fell within both subsets.

Table 25. Means for groups in different subsets for each construct on age variable

Construct	Computer Literacy		General Attitude		Attitude	
Age	Subset for Alpha = 0.05		Age	Subset for Alpha = 0.05	Age	Subset for Alpha = 0.05
	1			1		1
24-29	12.48		18-23	50.8354	24-29	89.5575
35 & above	12.59	12.59	30-35	52.0735	30-35	90.5147
30-35	12.66	12.66	24-29	52.4159	35 & above	92.4342
18-23		13.01	35 & above	53.5789	18-23	96.4241
Sig.	.777	.089		.351		.098

Finally, the researchers decided to administer the non-parametric test of Kruskal Wallis for all the 40 questions of the questionnaire to report the significant difference. 18 of the 40 questions staged a meaningful difference in the attitude of different age groups toward CALL, and 22 questions did not report any difference.

5.6. Analyzing the qualitative data

Other than the 40 quantitative questions that were analyzed in-depth in the previous sections, the questionnaire also contained two qualitative questions. Question 41 was concerned with the English language students' experience in using English language self-study software. Among the participants, 221 students (about 53.3%) responded to this optional item. Table 26 shows the categories of the CALL software (or applications) collected by the questionnaire. As shown in Table 26, English language students prefer to use the skill-based computer software rather than other types of software. Moreover, among all the software types, "Rosetta Stone" is the most popular one.

Table 26. Categorizing the CALL tools

	Category	Software/Application	No. of Ss.
1	Comprehensive 4-Skill Instructional Software (33)	Rosetta Stone	18
		Englishtown	1
		DynEd	1
		Wall Street	1
		AIEP	1
		Byki	1
		English Today	1
		English For You	1
		English World	1
		Tell Me More	7

2	Vocabulary Practice Software (3)	Wordsmith	2
		Learning Vocabulary with Solving Puzzle	1
3	Audio-Visual Software (7)	TED Talks	1
		English through news	1
		YouTube	5
4	Teaching Children (4)	Magic English	1
		English World	1
		Mingoville	1
		Clue Friends	1
5	Dictionary Software (12)	Longman Dictionary of Contemporary English	5
		Oxford Collocations Dictionary	1
		Cambridge English Dictionary	2
		Urban Dictionary	2
		KAMUSKU Dictionary	1
		Merriam-Webster	1
6	Audio Software (6)	Nosrat	1
		SATEL	1
		McMillan Sounds App	1
		BBC News	1
		JapanesePod101	1
		Tactics for listening	1
7	Translation Software (27)	ETSAM-English .com	2
		Duolingo	11
		Google Translate	13
		Translation APP	1
8	Idioms Practice Software (3)	American slang 1,2,3	1
		Speak English Like an American	2
9	Exam Preparation Software (12)	Exam essentials	1
		TOEIC i phone	2
		IELTS Software	4
		TOEFL Software	5
10	Interactive Software (4)	SPACE ALC	2
		Kahoot	2
11	Course-Book-Based Software (2)	English Files	1
		English Result	1
12	Supplementary-Book-Based Software (6)	504 Essential Words	2
		1100 Words	1
		Oxford Living Grammar	1
		Oxford Word Skills	2
13	Corpus-Based Software (2)	British National Corpus	2
14	Social Networks (5)	Twitter	3
		Instagram	2
15	Alternative Websites (4)	Eteacherenglish.com	2
		Wikipedia	1
		British Council websites	1
16	Software in General, No Reference to a particular Software (6)	English Dictionaries in General	1
		Electronic Dictionaries, Articles, & Books	4
		Android Applications in General	1
		Software for all the books I am teaching	3

Question 42, which as an open-ended question as well, dealt with the CALL experience of the learners in their own words. Out of the 415 learners of the sample, 211 participants (50.8%) provided acceptable responses for this question. Out of these 211

learners, 91.9% (194 learners) expressed absolutely positive attitudes toward the application of CALL in language learning. These learners used phrases such as "a wonderful experience", "of great use", "got great benefits", "does magic", "very accommodating", "an amazing method", "a by-product of the Internet", and "a refreshing method of learning" in order to describe their attitude toward CALL in language learning. Some other learners used statements such as "CALL gives you such a heuristic and vicarious mode enriching your experience", "CALL makes your environment conducive for learning", "CALL helped me tremendously", "CALL is worth it", "The age of blackboard and chalk is over", "CALL facilitates everything", "I feel the target language come far closer to me as a learner by CALL", and "CALL boosts my enthusiasm and self-confidence for learning". These statements let us see the positive the attitudes of the learners in this study toward CALL, and given the fact that the learners of the sample enjoyed an ample level of generalization regarding their country of origin, it would be plausible to say that the overall attitude of English learners toward CALL is positive.

The researchers found another proof regarding the positive attitude of the sample toward CALL in language learning in the fact that three of the learners (1.42%) expressed they were unlucky since, at their school years, CALL had not been developed and implemented yet. Besides, 12 participants (5.68%) expressed their regret from the fact that their CALL experience was not as much as they wished it to be, and they had planned both to expand their IT skills, and to increase the application of CALL tools in their language learning. Other positive attitudes of learners toward CALL have been classified and laid out in Table 27.

As Table 28 depicts, 32 of the learners (15.16%) described CALL as easy, useful, practical, and effective; and 15 learners (7.1%) mentioned that CALL increased their motivation, promoted their self-confidence, and reduced their anxiety. 12 learners (5.68%) proposed that CALL adds the spice of fun to their classes, and in a significant attitude, 4 learners (1.89%) mentioned that CALL could make up for the lack or absence of exposure to native production in EFL settings.

Table 28. Positive attitudes toward CALL in language learning

Positive attitudes	No. of Learners
Easy, useful, practical, and effective	32
CALL increased their motivation and self-confidence, and it has reduced their anxiety	15
CALL adds fun to learning, and it is much better than traditional learning methods	12
Use CALL to produce and present material for the classroom	9
Used CALL for research purposes	6
Helpful for self-studying	6

CALL could make up for the lack/absence of exposure to native English	4
CALL saves time	4
CALL can be used anywhere and anytime	4
Useful for doing homework	3
Use CALL tools to gain ideas as to how they could teach a particular language point	3

Other than expressing their positive attitudes, the learners in the sample described how they applied CALL in their approaches to study English, as laid out in Table 29. Thirty-six learners stated that they use software such as Google Translate or YouTube Videos to learn English, or Social Networks such as Twitter and Instagram. Moreover, 33 learners (15.63%) mentioned that they use their mobile phones or smart phones as a means for language learning. Forums and chat rooms, as well as CALL dictionaries were also popular.

Table 29. Different genres of CALL applied by learners

Genres of CALL Application	No. of Learners
Named Software such as Twitter, Google, YouTube, Instagram, or specific genres (e.g., podcasts)	36
Use mobile phones and smart phones	33
Forums and chartrooms have helped them	7
Use CALL Dictionaries	6
have subscriptions to website they find useful	1

The researchers also classified the application of CALL tools based on the skills and sub-skills. As Table 30 outlines, 8 learners (3.79%) used CALL tools for the sake of promoting their listening skills. Vocabulary progress, particularly the ESP/EAP vocabulary, and pronunciation progress were the targets which had the next ranks of frequency. Visual exposure to English as well as reading, with 4 respective participants (percentage), were also targets that learners had set for themselves to reach via CALL usage purposes.

Table 30. CALL tools applied by learners to promote language skills

Tools of CALL	No. of Learners
Use CALL for listening (movies and songs)	8
Use CALL to practice and learn vocabulary, particularly ESP	7
Use CALL for pronunciation	5
Use CALL for reading	4
Use CALL to have visual exposure to English	4
Use CALL for checking spelling and grammar	3
Use CALL for enhancing their oral production	3
Use CALL for Idioms	1

On the other hand, 17 out of the 211 learners (8.1%) expressed that they had negative attitudes toward the application of CALL in English learning. As Table 31 shows, 4 of the learners admitted that CALL was useful, yet they stated that it does not substitute the real

face-to-face classroom. Besides, 3 learners mentioned that CALL lacked teacher correction possibilities. No human interaction and boredom were the negative attitudes which were mentioned by 2 participants. Two of the teachers also mentioned that they were skeptic toward the use of CALL, seeing that they themselves had learnt their second languages by using traditional methods. One of these teachers went as far as calling CALL a total "fiasco".

Table 31. Negative attitudes toward the application of CALL in language learning

Negative attitudes	No. of Learners
It is useful but does not replace the real classroom	4
No teacher correction	3
No human interaction	2
It is boring to study with software alone at home.	2
Expressed skepticism toward CALL since they have been reared by traditional methods, does not rely on CALL	2
Just a supplementary tool	1
CALL is still incomplete, it needs to be developed	1
Can be laborious if not classified well	1
CALL needs to have better evaluation	1

Participants also expressed some of the problems that they had experienced with CALL in language learning. According to Table 32 below, 5 participants mentioned that they could not make use of CALL tools due to the lack or absence of equipment in their schools. One of the participants stated they would develop eye strain when staring at the monitor for long hours, and another one complained that teachers themselves do not know how to use CALL tools at times. Besides one of the participants objected that the majority of CALL tools these days are restricted to gap filling or MCQ exercises, so they lack creativity.

Table 32. The problems that learners reported with CALL

Problems with CALL	No. of Learners
Do not use tools in the class due to the lack of equipment	5
When I used it for a long time, I had eye strain	1
Complained that teachers cannot work with software and CALL tools	1
CALL is limited to gap filling and MCQ, it could be far more fun	1

Overall, 91.9% of the sample expressed their positive attitudes toward the application of CALL in English learning. Even the 8.1% who expressed negative attitudes admitted that CALL was useful, but they had their own concerns regarding its pitfalls.

6. Discussion

The purpose of this study was to compare the attitudes of Iranian and non-Iranian English language students' attitudes towards Computer-Assisted Language Learning. A convergent

mixed methods design was used for analyzing both quantitative and qualitative data. In data collection procedure, an online web-based questionnaire was applied, which contained 48 items. In the data analysis phase, both descriptive and non-parametric analyses were performed. In this section, the findings and conclusions of the study are discussed. Moreover, pedagogical implications and recommendations for further research are presented.

6.1. Research Question 1

The first research question was designed to find out if there are any differences between Iranian and non-Iranian English language students' attitudes towards CALL. The findings revealed that there are no differences between Iranian and non-Iranian English language students' attitudes towards CALL. As data analysis of each construct outlined, there were significant differences between the computer literacy, as well as the attitudes of Iranian and non-Iranian English students towards CALL. The only construct on which Iranian and non-Iranian students did not report any significant differences was their general attitude toward CAL.

This construct analysis shows that if there is a tendency in Iranian English language context to apply CALL materials and tools in English classes, the computer literacy of Iranian English students should be considered. Moreover, English language policy makers should consider the positive attitudes of students and therefore provide a situation in which students benefit from the technology-based educational materials. On the other hand, the difference between computer literacy of Iranian and non-Iranian English language students indicates that it is not possible to apply all the CALL materials produced in other cultures and contexts in our context. Therefore, we have to select the best CALL materials based on our students' computer literacy. Moreover, it is a great responsibility on the shoulders of educational policy makers to enhance the skills of the 21st century students, such as computer literacy.

6.2. Research Question 2

The second research question investigated the way in which gender is related to the attitudes of Iranian and non-Iranian English language students towards CALL. The data analysis indicated that there is no difference in the attitudes of English language students towards CALL based on gender. The investigation of the relationship between gender and attitudes of English language students reported a significant difference between computer literacy of men and women. However, it does not report any statistically meaningful differences between the attitudes of male and female students towards CAL and CALL.

It could be discussed that despite the fact that both female and male students hold positive attitudes towards the application of computers in learning and language learning, female students' computer literacy is lower than that of male students. From the responses to the attitudes towards CAL and CALL constructs, it was apparent that female English language students distinguished the need for computers and technology in their learning, but they are not as competent in their use as male students.

Moreover, the findings also revealed that educational policy makers should put more emphasis on training female students with computers. Also, applying the CALL materials in mixed-gender English language classrooms may provide some difficulties for female students to cope with technologies. Furthermore, to design some specific remedial courses for female students to get more familiar with computers it could be suggested in order to improve their computer literacies. At the end, providing female students with more CALL-related courses and materials prepares them for the new generation's skills at the same time that it makes them more competent in society.

6.3. Research Question 3

The third research question asked how education level related to the attitudes of Iranian and non-Iranian English language students towards CALL. The findings showed that there is no difference in the attitudes of English language students towards CALL based on education level. Finding the relationship between the education level and each construct of the study reported significant differences among the attitudes of learners with different education levels in computer literacy, as well as in attitude towards CAL. However, there was no significant difference between the attitudes toward CALL among the English learners of different education levels.

For the construct of computer literacy, significant statistical difference only existed between the literacy of undergraduate and postgraduate English students. By which, the higher level of English language among students, the more literate they are in computer knowledge. In the CAL attitude construct, however, the only meaningful difference was reported between undergraduate and graduate English students.

6.4. Research Question 4

The fourth research question examined whether and how age is related to the attitudes of Iranian and non-Iranian English language students towards CALL. The analysis of the data revealed that there is no difference in the attitudes of English language students towards

CALL based on age. According to the construct analysis, significant differences could be reported among the attitudes of English students in different age groups toward CALL for the construct of computer literacy, as well as for the construct of CALL attitude. However, the attitudes towards CAL did not report any significant difference. There was a significant difference between the computer literacy of 24-29 age group and that of 18-23. As well, there was a difference between the attitudes of the same two age groups toward CALL. No other difference was reported between any other two groups in any other constructs.

7. Conclusions

According to the findings of this study, to be Iranian or not, together with other variables such as gender, age and education level had no relationship to the attitudes of English language students towards computer-assisted language learning. In general, both Iranian and non-Iranian English language students hold positive attitudes towards CALL. Moreover, the responses indicated that most English language students understand the significance of computer skills in both their professional and daily lives. Furthermore, according to the results, the positive attitudes of English language students towards Computer-Assisted Learning are obvious. These findings may be used as a fact showing that computer literacy is a need for the future educational context. These findings also suggest that it is crucial to encourage female English language students to achieve more computer literacy to use it as an opportunity for better learning and developing a career. In the near future, English language students must be able to cope with computer- and technology-based educational materials in their classrooms. Applying CALL materials in educational settings is inevitable, and the tendency among students (which this study has corroborated) is to use these materials profusely. Nevertheless, specific training of both female and male students should be considered. In some contexts, males or females may show lack of access to the Internet and/or other technologies, and in delicately balanced opportunities more fruitful success will be achieved.

Although teacher education is not the main concern of this study, its necessity is an important aspect of language learning (Hall & Higgins, 2005). Also, teachers should be literate in computer use, which can be achieved by continuous and regular ICT training sessions. No doubt that inadequacy in manipulating technologies decreases the value and the efficacy of technology-based materials.

The focus of this study was CALL and specifically, CALL usage among my English language students. Within the field of CALL there are many areas of research, but this study

has focused on how English language students perceive the use of CALL in learning English. This evaluation must be noted as an action research-based study, so its results may not be applicable to all CALL related situations. The success of CALL in other contexts may yield to different results, so further research should be undertaken into exploring what precisely ESL students are doing on computers and the Internet. Incorporating technological tracking devices into the participants' computers would provide a daily log of English usage. This would aid in providing more direct answers to questions, asked not only by this study but also for future investigations.

As a final remark, CALL may be a vital supplementary tool for English language teaching and learning. However, all aspects of using CALL should be considered, also understanding that "technology's double face" is the key factor in applying CALL (Saeedi, 2013, p. 41). We have to pay attention to "technocentrism" and the lack of experimentation in applying CALL (Plana & Ballester, 2009; as cited in Saeedi, 2013, p. 46). Warschauer and Whittaker (1997) gave some suggestions for successful planning and implementing technology in language courses. They believed that teachers should carefully consider their goals, since little is gained by adding random on-line activities into the classroom. Clarifying course goals acts as an important first step toward the successful use of technology in classrooms. The next vital aspect of technology-based instruction is integration, and the teacher should think about how to integrate technology-based activities into the syllabus. Also, the teacher should be aware of all the complexities of using technology in learning environments, such as cultural, infrastructural or structural difficulties. According to CALL advantages, it is not logical to judge CALL as a substitute for language teachers. We should rather consider technology as the vital supplementary tool in language classes. Technology offers learners opportunities for much more valuable communicative interaction in the target language than what was ever possible in the traditional language classes (Chirimbu & Tafazoli, 2013). Therefore, there exists a need to urge language teachers to make use of technology in their language classrooms. Although it is to some extent impossible to present all CALL advantages and disadvantages in a paper, this study has reviewed a range of projects, papers and studies on CALL. From the data obtained, the researchers believe that choosing, planning and applying the CALL courseware will provide a wide range of opportunities for language teachers and learners.

The findings of the present study can be looked upon as a general driving force to the educational policy makers to allocate more budgets on providing state-of-the-art CALL programs and devices in schools and universities. In addition, course designers can benefit

from the outcome of the present study by allocating more computer activities in all stages of the educational curricula. A better familiarity with computers can result in a more frequent use of the computer in EFL classes by the teachers.

To sum up, we would like to build upon Warschauer and Whittaker (1997) to conclude with some general remarks about successful planning and implementing technology in EFL/ESL classes. They stated that teachers should carefully consider their goals, since little is gained by adding random on-line activities into the classroom. Clarifying course goals acts as an important first step toward the successful use of technology in classrooms. The next vital aspect of the technology-based instruction is integration, so the teacher should think about how to integrate technology-based activities into the syllabus. Also, the teacher should be aware of all the complexities of using technology in learning environment, such as cultural, infrastructural or structural difficulties.

We have to be careful that computers cannot change the role of teachers, but they are used to support and assist teachers and learners in different situations. Technology offers learners opportunities for much more valuable communicative interaction in the target language than what was ever possible in the traditional language classes.

We would urge language teachers to make use of technology in their language classrooms. Having such projects is a good way of motivating students to use technology outside the classroom and to make learning a part of their daily lives.

References

AbuSeileek, A. F. & Abu Sa'aleek, A. O. (2012). Computer assisted language learning: Merits and demerits. *Language in India, 12*(4), 23-36.

Almahboub, S. F. (2000). *Attitudes toward Computer Use and Gender Differences among Kuwaiti Sixth-Grade Students*. Unpublished doctoral dissertation, University of North Texas, Denton.

Barson, J. & Debski, R. (1996). Calling back CALL: technology in the service of foreign language learning based on creativity, contingency, and goal-oriented activity. In M. Warschauer (Ed.), *Telecollaboration in Foreign Language Learning* (pp. 49-68). Honolulu: University of Hawaii, Second Language Teaching and Curriculum Center.

Baylor, A. L. & Ritchie, D. (2002). What factors facilitate teacher skill, teacher morale, and perceived student learning in technology-using classrooms? *Computers and Education, 39*, 395-414.

Belz, J. A. (2002). Social dimensions of telecollaborative foreign language study. *Language Learning & Technology*, *6*(1), 60-81. Retrieved September 24, 2003, from http://www.lltjournal.org/collection/col_10125_35883

Belz, J. A. & Thorne, S. L. (2006). *Internet-Mediated Intercultural Foreign Language Education*. Boston: Thomson Heinle.

Breckler, S. J. (1984). Empirical validation of affect, behavior, and cognition as distinct components of attitude. *Journal of Personality and Social Psychology, 47*, 1191-1205.

Breckler, S. J. & Berman, J. S. (1991). Affective responses to attitude objects: Measurement and validation. *Journal of Social Behavior and Personality*, *6*, 529-544.

Breckler, S. J. & Wiggins, E. C. (1989). Affect versus evaluation in the structure of attitudes. *Journal of Experimental Social Psychology, 25*, 253-271.

Breckler, S. J. & Wiggins, E. C. (1991). Cognitive responses in persuasion: Affective and evaluative determinants. *Journal of Experimental Social Psychology*, *27*, 180-200.

Cabrini Simões, L. (2007). An overview on the use of new technologies in English language teaching. *Acta Scientiarum. Human and Social Sciences, 29*(1), 31-34.

Chapelle, C. A. (2001). *Computer Applications in Second Language Acquisition: Foundations for Teaching, Testing, and Research*. Cambridge: Cambridge University Press.

Chapelle, C. A. (2003). *English Language Learning and Technology*. Amsterdam: John Benjamins.

Chapelle, C. A. (2008). Computer Assisted Language Learning. In B. Spolsky & F. M. Hult (Eds.), *The Handbook of Educational Linguistics* (pp. 585-595). Oxford: Blackwell Publishing Ltd.

Chapelle, C. & Jamieson, J. (1986). Computer-Assisted Language Learning as a predictor of success in acquiring English as a second language. *TESOL Quarterly, 20,* 27-41.

Chen, X.-B. (2013). Tablets for informal language learning: Student usage and attitudes. *Language Learning & Technology, 17*(1), 20-36.

Chirimbu, C. S. & Tafazoli, D. (2013). Technology & media: Applications in language classrooms (TEFL, TESL & TEOL). *Professional Communication & Translation Studies, 6*(1/2), 187-194.

Corrêa, D. M. (2001). New technologies in teaching and learning English. In M. B. M. Fortkamp & R. P. Xavier (Eds.), *EFL Teaching and Learning in Brazil: Theory and Practice* (pp. 211-222). Florianópolis: Insular.

Creswell, J. W. & Plano Clark, V. L. (2011). *Designing and Conducting Mixed Methods Research (2nd ed.)*. Thousand Oaks, CA: Sage.

Davis, F. (1993). User acceptance of information technology: System characteristics, user perceptions and behavioral impacts. *International Journal of Man-Machine Studies*, *38*, 475–487.

Department of Education and Early Childhood Development (DEECD). (2010). *Teaching and learning with Web 2.0 technologies*. State of Victoria. Retrieved from http://www.education.vic.gov.au/edulibrary/public/teachlearn/innovation/technology/web2report.pdf

Donato, R., Antonek, J. & Tucker, G. R. (1994). A multiple perspective analysis of a Japanese FLES program. *Foreign Language Annals, 27,* 365-377.

Donato, R., Antonek, J. & Tucker, G. R. (1996). Monitoring and assessing a Japanese FLES program: Ambiance and achievement. *Language Learning, 46,* 497-528.

Doughty, C. J. & Long, M. H. (2003). Optimal psycholinguistic environments for distance foreign language learning. *Language Learning & Technology, 7*(3), 50-80.

Dudeney, G., Hockly, N. & Pegrum, M. (2013). *Digital Literacies*. London: Pearson Education.

Eagly, A. H. & Chaiken, S. (1998). Attitude, Structure and Function. In D. T. Gilbert, T. S. Fisk, & G. Lindsey (Eds.), *Handbook of Social Psychology* (pp. 269–322). New York: McGowan-Hill.

Fang, X. & Warschauer, M. (2004). Technology and curricular reform in China: A case study. *TESOL Quarterly, 38*(2), 301-321.

Field, A. (2005). *Discovering Statistics Using SPSS* (2nd ed.). London: SAGE.

Fishbein, M. & Ajzen, I. (1975). *Belief, Attitude, Intention, and Behavior: An Introduction in Theory and Research.* Reading, MA: Addison-Wesley.

Gillespie, H. (2006). *Unlocking Learning and Teaching with ICT: Identifying and Overcoming Barriers*. London: David Fulton.

Godwin-Jones, R. (2006). Tag clouds in the blogosphere: Electronic literacy and social networking. *Language Learning & Technology, 10*(2), 8-15.

Hall, I. & Higgins, S. (2005). Primary school students' perception of interactive whiteboards. *Journal of Computer Assisted Language Learning, 21*(2), 102-117.

Han, W. (2008). Benefits and barriers of computer assisted language learning and teaching. *US-China Foreign Language, 6*(9), 40-43.

Hope, G. R., Taylor, H. F. & Pusack, J. P. (1984). *Using Computers in Teaching Foreign Languages.* New York: Harcourt Brace Jovanovich.

Ismail, A. & Almekhlafi, A. G. (2010). Teachers' perceptions of the use of technology in teaching languages in United Arab Emirates' schools. *International Journal for Research in Education, 27*, 37-56.

Jacobsen, D. M. & Lock, J. V. (2005). Technology and teacher education for a knowledge era: Mentoring for student futures, not our past. *Journal of Technology and Teacher Education, 12*(1), 75-87.

Kaiser, H. F. & Rice. J. (1974). Little jiffy, mark iv. *Educational and Psychological Measurement, 34*(1), 111–117.

Kiesler, C. A., Collins, B. E. & Miller, N. (1969). *Attitude Change: A Critical Analysis of Theoretical Approaches.* New York: John Wiley & Sons.

Lacina, J. (2004). Promoting language acquisitions: Technology and English language learners. *Childhood Education, 81*, 113-115.

Lee, K.-W. (2000). English teacher's barrier to the use of computer-assisted language learning. *The Internet TESL Journal, VI* (12). Retrieved from http://iteslj.org/Articles/Lee-CALLbarriers.html

Levy, M. (1997). *CALL: Context and Conceptualization*. Oxford: Oxford University Press.

Liaw, S. S. (2002). An Internet survey for perceptions of computers, and the World Wide Web: Relationship, prediction, and difference. *Computers in Human Behavior, 18*(1), 17–35.

Loyd, B. H. & Gressard, C. (1984). The effects of sex, age, and computer experience on computer attitudes. *AEDS Journal, 18*, 67-77.

Mantle-Bromley, C. (1995). Positive attitudes and realistic beliefs: Links to proficiency. *The Modern Language Journal, 79*, 371-386.

Mantle-Bromley, C. & Miller, R. B. (1991). Effect of multicultural lessons on attitudes of students of Spanish. *The Modern Language Journal, 75,* 418-425.

Matsumoto, D. & Yoo, S.H. (2006). Toward a new generation of cross-cultural research. *Perspectives on Psychological Science,1*(3), 234-250.

Maushak, N. & Simonson, N. (2001). Instructional technology and attitude change. In D.H. Jonassen (Ed.), *Handbook of Research for Educational Communications and Technology* (pp. 327-374). Hillsdale, NJ: Erlbaum.

McGrail, E. (2005). Teachers, technology, and change: English teachers' perspectives. *Journal of Technology and Teacher Education, 13*(1), 5-14.

Murphy, C. (2006). The impact of ICT on primary science. In P. Warwick, E. Wilson & M. Winterbottom (Eds.), *Teaching and Learning Primary Science with ICT* (pp. 13-32). Berkshire, England: Open University Press.

Murray, L. & Hourigan, T. (2007). Blog writing integration for academic language learning purposes: towards an assessment framework. *Iberica, 14*, 9-32. Retrieved from http://www.aelfe.org/documents/14-02_murray.pdf.

O'Dowd, R. (2003). Understanding the "other side": Intercultural learning in a Spanish-English e-mail exchange. *Language Learning & Technology, 7*(2), 118-144. Retrieved August 26, 2003, from http://llt.msu.edu/vol7num2/odowd.

Plana, M. G. & Ballester, E. P. (2009). Beyond technology in computer assisted language learning: Learners' experiences. *English Language Teaching, 2*(4), 3-12.

Prensky, M. (2007). *Digital Game Based Learning*. St. Paul, MN: Paragon House.

Reinking, D. (1994). *Electronic literacy*. Retrieved online from http://curry.edschool.virginia.edu/go/clic/nrrc/reinking.html

Riasati, M. J., Allahyar, N. & Tan, K.-E. (2012). Technology in language education: Benefits and barriers. *Journal of Education and Practice, 3*(5), 25-30.

Saeedi, Z. (2013). Care with CALL. In D. Tafazoli & S. C. Chirimbu (Eds.), *Language & Technology: Computer Assisted Language Learning* (pp. 40-47). Tehran, Iran: Khate Sefid Press.

Saettler, P. (1990). *The Evolution of American Educational Technology*. Englewood, CO: Libraries Unlimited.

Salaberry, M. R. (2001). The use of technology for second language learning and teaching: A retrospective. *The Modern Language Journal, 85* (1), 39-56.

Shyamlee, S. D. & Phil, M. (2012). Use of technology in English language teaching and learning: An analysis. *Proceedings of the International Conference on Language, Medias and Culture,* Singapore, 150-156.

Singhal, M. (1997). The internet and foreign language education: Benefits and challenges. *The Internet TESL Journal, III* (6). Retrieved from http://iteslj.org/Articles/Singhal-Internet.html

Son, J.-B. (2004). Teacher development in e-learning environments. In J.-B. Son (Ed.), *Computer-Assisted Language Learning: Concepts, Contexts and Practices* (pp. 107-122). Lincoln, NE: iUniverse.

Son, J.-B., Robb, T. & Charismiadji, I. (2011). Computer literacy and competency: A survey of Indonesian teachers of English as a foreign language. *CALL-EJ, 12*(1), 26-42.

Song, Y. & Fox, R. (2008) Uses of the PDA for undergraduate students' incidental vocabulary learning of English. *ReCALL, 20*(3), 290-314.

Stigler, J. & Hiebert, J. (1999). *The Teaching Gap*. NY, New York: The Free Press.

Tafazoli, D., Gómez Parra, M. E. & Huertas Abril, C. A. (2017). Computer literacy: Sine qua non for digital age of language teaching & learning. *Theory and Practice in Language Studies, 7*(9), 716-722.

Warschauer, M. (1996). Computer-assisted language learning: An introduction. In S. Fotos (Ed.), *Multimedia Language Teaching* (pp. 3-20). Tokyo: Logos International.

Warschauer, M. (2000). CALL for the 21st Century. *Presented paper at the IATEFL and ESADE Conference*, July 2000, Barcelona, Spain.

Warschauer, M. & Healey, D. (1998). Computers and language learning: An overview. *Language Teaching, 31*(1), 57-71.

Warschauer, M., Knoebel, M. & Stone, L. (2004). Technology and equity in schooling: Deconstructing the digital divide. *Educational Policy, 18*, 562-588.

Warschauer, M., Shetzer, H. & Meloni, C. (2000). *Internet for English Teaching*. Alexandria, VA: TESOL Publications.

Warschauer, M. & Whittaker, P. F. (1997). The Internet for English Teaching: Guidelines for Teachers. *The Internet TESL Journal*, *3*(10). Retrieved from http://iteslj.org/Articles/Warschauer-Internet.html.

Wenden, A. (1998). *Learner Strategies for Learner Autonomy*. New York: Prentice Hall.

Wood, W. (2000). Attitude change: Persuasion and social influence. *Annual Review of Psychology, 51*, 539-570.

Zimbardo, P. & Leippe, M. (1991). *The Psychology of Attitude Change and Social Influence.* Philadelphia, PA: Temple University Press.

ACQUISITION OF LANGUAGE AND INTERCULTURAL COMPETENCES IN TOURISM AND HOSPITALITY STUDIES THROUGH ACTIVE EXPERIMENTATION IN SECOND LIFE

by **Mercedes Rico García**

University of Extremadura, Santa Teresa de Jornet, 06800 Mérida, Spain

and **Paula Ferreira da Silva**

EOI Villanueva/Don Benito, Nazareno, 14, 06700 Villanueva de la Serena, Spain

mricogar @ unex.es; paula.br.fer @ educarex.es

Abstract

Living in a global world involves not only mastering languages, but also dealing with different habits and values. It becomes critical with students trained to deal with a multicultural public, such as the group of learners from tourism covered by our research. Our proposal aims to analyze whether the virtual world of Second Life (SL) facilitates the development of English for Specific Purposes and the acquisition of intercultural communication. To cover the objective qualitative and quantitative research were conducted along a four-phased in/out SL instruction. Questioning about the differences between the mean score obtained by experimental and control groups shows no significant differences in the acquisition of language regarding face to face and Second Life interaction, but demonstrates a positive tendency in the case of intercultural competences.

Keywords: Second Life; English for Specific Purposes; intercultural competence

1. Introduction

With the development of information technology, Multi-User Virtual Environments (MUVEs) have been subject to a continuous research interest in the field of language learning. Although their potential has been noted for the development of communicative competences (Deutschmann & Panichi, 2009; Dell'Aria & Nocchi, 2010; Wigham & Chanier, 2013; Wang, Deutschmann & Steinvall, 2013), opening chances for professional training in real versus online environments (Good, Howland & Thackray, 2008; Authors, 2010; Blasing, 2010), applied linguistics research on virtual worlds interactions (Wang, 2015; Panichi & Deutschmann, 2012; Peterson, 2011; Thorne, 2008), newer potentialities, pedagogical opportunities and affordances of virtual worlds remain undiscovered (Zheng & Newgarden, 2012; Bull & Wasson, 2016), a big challenge pushing on with the pursuit of effective outcome evaluation (Sadler, 2012).

Accordingly, this paper analyzes how SL facilitates students-like-avatars' interaction as if they were in a real teaching training environment. In our case, it is focused on the development of English for Specific Purposes (ESP) and the acquisition of intercultural communication, identity and diversity awareness in the field of tourism and hospitality studies.

The hospitality field in which our research takes place is a multicultural scenario by necessity, since students must be prepared not simply to be able to communicate linguistically, but also to interact interculturally at some level. Bridging nationalities and cultures through English as a lingua franca for hospitality students should lead language instructors to focus on the importance of intercultural awareness in context, to show respect for diverse identities and avoid cultural miscommunications. In the case of Spain, hospitality studies are especially relevant since the country received more than 25.2 million foreign tourists in the first five months of 2016, 11.4% more than in the same period in 2015, according to data published by the National Statistics Office (INE - *Instituto Nacional de Estadística*). The main continent of origin was Europe (UK - 5.8 million tourists; Germany - 3.7 million, and France - 3.7 million). Analyzing non-European countries, the favorable performance of Latin America is clear, particularly Brazil. North African countries also stand out, as well as Asian, particularly China, South Korea and Turkey. Thus, non-European markets accounted for about 13% of total arrivals, meaning that the Spanish tourism industry needs to understand and adapt to the new international source markets. However, a quick look at Spanish news sources on the topic reveals a lack of language skills of the professionals working in this sector (Baum, 2012).

To get insights into to what extent teaching practices can make students competent for intercultural exchanges, our proposal explores opportunities to use the target language and culture with members of other cultures by means of meaningful tasks.

In the light of this context, our research, conducted with third year undergraduate students of the Tourism degree at the University of Extremadura, presents the results after the completion of in-class and Second Life tasks as the last stage of instruction composed of three previous steps to develop both linguistic and intercultural competences.

Thus, this paper begins by presenting the theoretical framework serving as background support, bearing in mind studies of development of intercultural understanding, as well as the use of virtual worlds to practice tasks in quasi-real contexts. Then, the research study is described, stating objectives, methodology, research phases, content, timing and

administration. The results of the research follow, as well as the discussion and some final conclusions.

2. Theoretical Framework

2.1. Beyond language: language and intercultural communication in Hospitality studies

In the globalised world, the ability to communicate effectively is a challenge, but communication is far more than mastering the target language only, as it involves practices of interpreting meaning, a fundamental relationship between language and the underlying culture. An understanding of language as *open, dynamic and constantly evolving* (Shohamy, 2007:5) comprises the rich complexities of communication, where not only verbal communication plays a major role in cross-cultural interaction, but also knowing the nonverbal code system of a culture (e.g. body movements, gestures, paralanguage and proxemics) is essential in intercultural contexts.

Second and foreign language learning has been reconceptualized over the last decade as a participatory process in which, besides expressing ideas, learners should acquire new ways of thinking, behaving and understanding (Dema & Kramer, 2015). In this sense, even though there has been a variety of methods and approaches for teaching culture, including the development of roleplay scenarios in which students demonstrate appropriate cultural behavior in a given situation (Galloway, 1985; Omaggio, 1986), according to Peterson & Coltrane (2003), there must be opportunities for real interaction. The acquisition of culture, much like that of language, should be changing from teacher lecturing to students discovering culture first hand through projects and activities.

However, teaching language and culture through real-life communicative settings can be intricate inside a traditional classroom where most participants, as in our case, share the same language and cultural background (Spanish) and have few (or none) opportunities to interact with people from other nations and cultures. In contexts like ours, the lack of real interactions makes it difficult to judge to what extent students become competent for intercultural actions. The dynamic nature of culture has consequently brought about a number of challenges to choose relevant teaching environments, materials and activities. Thus, out of the components which may support the incorporation of culture through real interaction in a monolingual and monoculture teaching setting, technology presents an opportunity for learners to experience communication across cultures (Dema & Kramer, 2015). Digital technology can improve the quality of the learning experiences if used as a communicative

tool to support collaboration through online real practices (Cerezo et al., 2014). Thorne, Black & Sykes (2009) claim that digital engagement in/ out-of-school settings, such as virtual environments and online games, allows for language socialization and sophisticated communicative practices. In this context and within synchronous communication, virtual worlds can move beyond real life learning strategies since, with the appropriate approach, they can enhance collaborative learning, promote learning by doing, and develop autonomy.

2.2. Second Life: an open world to develop language and intercultural competences

Baron (2008) describes SL as a multi-player role-play virtual game possessing high quality animation features which enables personal communication through chats (oral and written), as well as linking virtual objects to web pages. Though the potential of Second Life as a language instructional environment has been shown in a plethora of studies (Bueno, 2011; Liou, 2012; Melchor-Couto, 2017; Levak & Son, 2017), research is needed to investigate whether this virtual world can be used to promote language acquisition and cultural understanding. The ability of the user, represented visually by his /her avatar, to act in the world allows them to express their identity, even hiding and amplifying some aspects of their personalities.

Molka-Danielsen (2009) proposes SL-based teaching through Social Constructivism, Active learning and Action Learning. As examples of Social Constructivism practices, the author cites peer collaboration, reciprocal teaching, cognitive apprenticeships, problem-based instruction, WebQuests, and anchored instruction. She defines Active and Action learning as processes centered on the student, giving responsibility for the learning process. Deutschmann & Panichi (2009) analyze teacher practices in this virtual environment by considering three main concerns: preparatory issues, task design and the teacher's role in fostering learner autonomy (2009:27).

Considering this, the tasks we propose to develop in SL are practical activities based on simulations and role-play activities (phase 2 of our research), where students may consolidate the knowledge previously acquired during the development of the face to face interaction (phase 1).

2.3. Previous studies into intercultural communication through virtual worlds

Intercultural communication has aroused great interest in companies and scholars that have conducted a reasonable sample of empirical studies over the last years (Moore, May & Wold, 2012).

In our case, the hospitality field is multicultural by necessity, since it denotes the business of entertaining or housing guests who hail from both near and far. Hospitality and Tourism students as future professionals in this industry must consequently expect to face cultural difference successfully in order to do their jobs well (Luka,Vaidesvarans & Vinklere, 2013; Yoganjana, Menike & Pathmalatha, 2015). That is why bridging nationalities and cultures through English as a lingua franca for hospitality students has led language instructors to focus on the importance of showing respect to diversity in the field of English Language Teaching (Alsagoff, 2012). Though it has long been recognized that the abilities needed for this work are not simply linguistic, research into intercultural skills has been scarce (Ntukula, 2013; Grobelna, 2016). This intercultural dimension has been also overlooked in situations of monocultural communication among participants of the same linguistic and cultural background. The abstract observation of norms in class does not refer to the interactional dynamics that is set up when participants of different cultural backgrounds engage in verbal communication. Being the geographical barriers the main restriction which hinders linguistic and intercultural interaction in a monocultural context, with the help of ICT similar contexts and situations can be designed to enable users to interact with speakers of other languages and cultures, providing pertinent cultural learning experiences that would otherwise be impossible in real life. As advocated by Siegel (2010) and Nocchi (2012), Second Life encourages cultural intelligence by dealing with different realities through immersive experiences. Interaction is also a key word for Sadler (2012), who analyzes four learning theories, which could be applied to the use of virtual worlds for language learning, stating that successful language acquisition is preconditioned by comprehensible inputs.

In this line, in a study designed to analyze how SL can be effective in increasing learners' fluency in English and providing pertinent cultural information through interaction, Iwasaki (2014) states that language and cultural knowledge can be acquired by using the "five Cs" that occur in this virtual world (Wang et al., 2012): Communication, Culture, Connections, Comparisons and Communities.

This point of view is corroborated by Jauregi & Canto (2012) and Jauregi et al. (2011), who developed a blended learning course to facilitate interaction with native speakers in SL. The authors concluded that the tasks proposed gave rise to meaningful interaction by exchanging social and cultural meaning spontaneously, and, consequently, the value of this interaction results in cultural, linguistic, interpersonal and motivational benefits. On the other hand, there was also a development of motivation and willingness to communicate, especially

with native speakers, decreasing speaking anxiety levels that can occur sometimes (Canto, Jauregi & Van den Bergh, 2013).

3. Research Study

3.1. Objectives

To cover the research objective, aimed at measuring the effectiveness of SL as an immersive virtual world which can assist students and professionals in the acquisition of language and intercultural competences in the hospitality sector within monoculture settings, qualitative in-class observation during the first phase of the research (Appendices 1 & 2), and quantitative research in the second phase of in/out SL instruction were conducted.

A set of hypotheses was also constructed to unfold the general objective (see section 3.5) by questioning whether there were differences between the mean score obtained by experimental and control groups in the acquisition of the competences (specific language domain and intercultural and diversity awareness) under study.

3.2. Participants

Our target population is third year Spanish hospitality students enrolled in the Tourism and Hospitality Management degree at the Faculty of Business and Tourism at Extremadura University (Spain). The total sample (n=72) was distributed for the second phase of the study (see section 3.3) in a control and an experimental group (with 36 students each, respectively), being the members of the experimental group exposed to the action research in Second Life. Most students had a B1+ level of English and by passing this subject, they were supposed to achieve level B2, i.e., an upper intermediate level according to the CEFR (Common European Framework of Reference for Languages) in the target language (English) under study. A small percentage already had official certification in the B2 level (15%), and four of them had even achieved level C1.

3.3. Methodology

Our study follows two phases of instruction and research:

Phase 1: A three-step in-class instruction and action research by applying three phases - experiential, observation and reflection - to carry out specific language instruction and cultural content exploitation - scheme adapted from Kolb´s (1984) experiential learning cycle.

In-class observation and analysis were carried out by the completion and further discussion of questionnaire shown in Appendices 1 & 2.

Phase 2: A final phase of active experimentation (step four) through the development of learning experiences and professional simulations in the virtual world of SL (experimental group) and in-class (control group) to see results.

According to Kolb (1984), learning is seen as a process where learners (1) are exposed to specific experiences, (2) observe and reflect on those situations, (3) create abstract concepts, and (4) test learning in future learning or professional situations.

3.4. Research phases

Phase 1

In the first phase the whole population under study (n=72) were exposed to in-class instruction by the exposition to a three-step pedagogy:

Step 1. Learning through experience, in which students were provided with language and cultural content offering new situations and opportunities for learning through videos, games, film trailers, photographs, advertising, social media and face to face instruction from different countries and cultures.

Step 2. Learning through observation and comparison, looking for differences, stereotypes and unfamiliar situations among the content and experiences presented in step 1. This step was aimed at understanding and encouraging respect for people with different cultural affiliations.

Step 3. Learning through reflection by means of in-class discussion through visuals, written, audio or video analysis, giving rise to new ideas, or modification of existing concepts.

Phase 2

In the second phase, based on active experimentation (learning by doing), the population was divided and randomly distributed into a control and an experimental group of 36 students each, being the experimental learners who completed the active simulation in Second Life through oral and written chat with other English speakers (native and non-native). SL interactions were recorded and coded. Observation and field notes were also taken by instructors for later evaluation and interpretation of final results.

Researchers developed a framework for effective tasks to promote language interaction and intercultural awareness for the FtF in-class and for the Second Life interaction, following the literature on tasks for communicative competence (Doughty & Long, 2003; Ellis, 2003; Gardner et al, 2011; Ware & O'Dowd, 2008; Westhoff, 2004); for intercultural

competence (Byram, 1997; Hauck, 2010; Müller-Jacquier, 2000), and for exploiting the challenges of the virtual world (Deutschmann & Panichi, 2009; Jauregi & Canto, 2012).

3.5. Course content, timing and administration

The three-month course, running from February to May 2015, was divided into 4 units, all related to the tourism sector and covering B2 specific language content in ESP, designed to prepare students for their internship in different areas, namely hotel receptionist, event planner, tourist guide and tourism consultant, and two intercultural dimensions - diversity awareness and understanding, and multicultural acceptance and cultural enrichment. Each unit was composed of 12 sessions of 50 minutes each: 8 sessions for the three steps of phase 1 (the whole group in class); 4 sessions for practice experimentation - phase 2, step 4 - either in-class or in SL. The distribution and timing for each unit (four steps distributed in two phases) are summarized in Table 1.

Table 1. Unit distribution and timing

DISTRIBUTION & TIMING FOR EACH UNIT
Phase 1 (step 1): 3 sessions (50 minutes each). Learning through new experiences /inputs. **Phase 1 (steps 2):** 3 sessions (50 minutes each). Learning through observations and practice. **Phase 1 (step 3)** 2 sessions (50 minutes each). Learning through reflection and discussion. **Phase 2 (step 4):** 4 sessions, 50 minutes each (in-class or SL). Learning through active experimentation (learning by doing).

Following the degree regulation and syllabus (Tourism and Hospitality Management) and the content described in the study plan of the subject (English Language III), the competences covered by this course are as follows:

General Competences (CG)

CG5 - Being fluent in two foreign languages (English compulsory) and communicating in an optional second language in touristic activities and tasks

CT12 - Diversity and multiculturality recognition

CT15 - Working in international contexts

CT9 - Interpersonal relations skills

Specific Competences (CE)

CE23 - Identifying and managing touristic spaces, destinations and events for multicultural target groups

CE24 - Managing different communicative techniques in a foreign language (English) within the hospitality sector

CE30 - Working and dealing with different sociocultural environments from a linguistic perspective

To cover the competences above, materials and inputs used were taken from the Web and/or designed by the course teachers, with a twofold objective: (1) completing the phases following the hypotheses stipulated before, and; (2) covering the competences included in our course plan (language and culture).

A crucial step toward ensuring student engagement in SL is task design. It is imperative that instructors provide clear guidelines regarding what students should do once logged into SL, tasks to develop and with whom they should interact as they complete the tasks.

Students from the experimental group were asked, at the beginning of the semester, to enroll in several platforms and contact SL users from the target countries /continents, especially from Asia, Africa and the Middle East, nations with major cultural differences. European and American countries were also considered. Three main platforms were recommended to find SL inhabitants interested in joining the experiment and available for weekly interactions: My language exchange (https://www.mylanguageexchange.com/); Language for Exchange (http://www.languageforexchange.com/), and; Polyglot club (https://polyglotclub.com/). Surprisingly, contacting users and organizing the linguistic encounters in English were easier than initially thought; besides completing the arranged tasks (phase 2), they were always keen on solving doubts and clarifying cultural differences. Examples of materials, sources and tasks are shown in Figure 1.
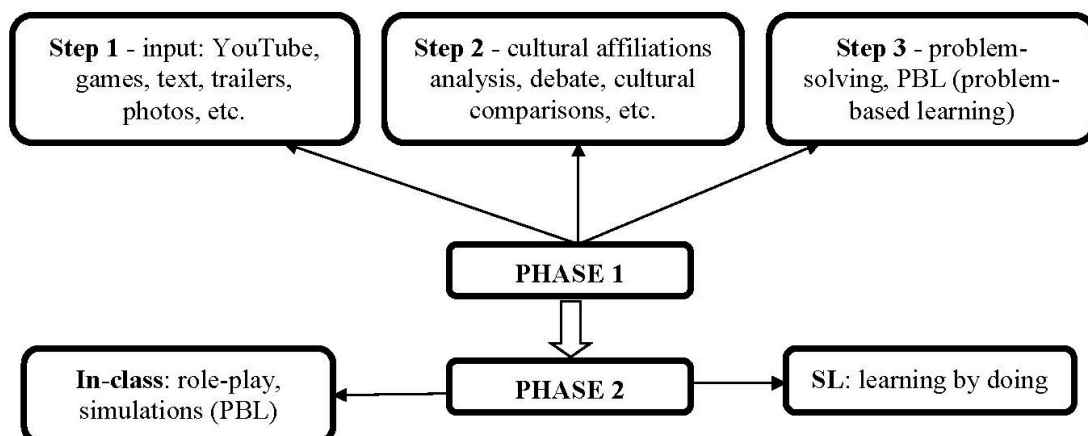

Figure 1. Materials and tasks design

As we can see in Figure 1, unit 1 deals with Hotel Receptionists' tasks. To achieve the purposes of steps 1 and 2 (phase 1 – in-class instruction), videos, texts, presentations and images were introduced and discussed to identify language and functions, hotel receptionists´ skills, stereotypes and language to be avoided when dealing with complaints related to cultural differences, among others (see Appendices 1 & 2). Subsequently, in step 3, students were divided into groups to work on activities such as dealing with stereotypes and cultural differences at the front desk. To consolidate knowledge, phase 2 included a roleplay activity where students had to deal with Chinese, Arabic and African clients in a hotel (facilities and services needed, timetable, etc.). As said, two groups were formed, one in class and the other in SL.

Unit 2 covers language and culture considerations when planning international events. In phase 1, steps 1 and 2 are developed through texts, videos, images and event presentations to introduce contents, such as considering culture while organizing events, cultural differences when hiring catering, language analysis on food and menus, planning a multicultural event correctly, etc. The objectives of step 3 were achieved by means of pair and group work with tasks such as planning an event; analysis of different cultures, and organizing specific parties (Greek, Japanese, American, Muslim, etc.). In phase 2 the same groups were formed to develop roleplay activities, one in class and the other in SL – they had to plan a multicultural conference following a set of guidelines.

With Unit 3, we introduced tourist guides' tasks by using leaflets, videos, presentations and photographs to achieve the aims of phase 1, steps 1 and 2. The contents covered were, among others: handling cultural differences and using language to avoid cultural misunderstandings; employing body language effectively; explaining cultural habits and customs; making a tour in a museum, analyzing cultural implications and art metaphors, and; explaining regional festivities. Step 3 – consolidation and acquisition of contents – was developed through pair and group work by undertaking the following activities: how to become an ideal tour guide; which body language to avoid with a multicultural crowd; how to explain Western traditions and art, and; how to organize a tour to a Spanish city. Phase 2 comprised group activities in class and SL, namely designing, organizing and implementing a tour to a multicultural group.

Finally, Unit 4 dealt with tourism consultant attributions. Phase 1, steps 1 and 2, was accomplished by texts, videos, images, presentations and webpages. The goals were to introduce topics such as the definition of a tourism consultant and specific language used in the profession; sustainable tourism and ecotourism, their benefits and specific language of

environment and ecology; sustainable means of transport, both in rural and urban areas, and importance of homemade food and vocabulary of agriculture and livestock. Practice was developed in phase 2 with roleplay activities in class and in SL, namely developing a sustainable tourism project with local inhabitants of a little village.

For further information on materials and SL interaction, see Appendix 3.

3.6. Administration and research instruments

The research study was based on quantitative and qualitative research methods. Materials, research surveys tools and data were analyzed with content analysis, instruction, data coding and data interpretation.

Data were collected and analyzed through questionnaires and in-class observation to analyze the development of phase 1, whereas face to face and SL interactions (phase 2) were recorded, coded and analyzed with the statistical package SPSS. The completion of role-plays in class and in SL was evaluated using a 1 to 10 grading scale, in which 1 is the lowest, 10 the maximum grade and 5 the minimum pass mark. The use of this scale is motivated by the familiarization students have with grades ranging between these values, once they are used to measure exams in all subjects at the university. Planning carefully the development amongst students is important for teachers or those in charge of facilitating instruction. In our case, the following research actions were taken:

Phase 1 (in-class action. Population= 72)
Step 1. Learning through experience
1. Warming up questionnaire (Appendix 1): Analysis of the role played by language and nonverbal communication to achieve a successful intercultural communication in the hospitality sector.
2. Students' exposure to text and audio-visual material (videos, photographs, texts, advertisements, etc.) presenting language and cultural situations which may lead to a lack of communication and understanding among cultures.

Step 2. Learning through comparison to encourage language acquisition in specific contexts cultural awareness, understanding and respect for diversity
1. A teacher-made evaluation sheet to analyze the content shown in the first step (see Appendix 2). The evaluation form included three main dimensions, subdivided into a set of indicators, measured on a Likert scale, ranging from 1 to 5 points, with 1 being totally disagree and 5 totally agree. The form validity was obtained by requesting

commentary and suggestions from two experts in the field of education and cultural studies, both familiar with the constructs and the purpose of intercultural research. It was tested for reliability using Cronbach's alpha to test internal consistency of items. The calculation performed concluded with a 0.75 alpha, that is 0.15 points above the 0.6 standard. The reliability of the opinions and beliefs questionnaire can be consequently considered appropriate.

Step 3. Learning through analysis. In-class oral discussion and in-depth analysis through the completion of wikis, blogs entries to keep track of their learning (Appendix 2).

Phase 2. In-class (Control) versus SL interaction (Experimental) = 36 students each

The three steps above are followed by a last assessment of participation and students' performance in-class and in SL (peer observation and analysis of the recording from the in-class and SL practices were carried out).

Statistical Analysis (Phase 2)

To reach our objective aimed at measuring the effectiveness of SL as an immersive virtual world to train professional practices for the acquisition of language and intercultural competences in the hospitality sector (Phase 2), we proposed the following hypotheses:

Hypothesis 1: In the dimension "interpersonal communication though English", there is a significant difference between the mean score obtained by the experimental group and the mean score obtained by the control group ($XE \neq XC$) in Phase 2.

Hypothesis 2: In the dimension "cultural awareness and diversity understanding" there is a significant difference between the mean score obtained by the experimental group (XE) and the mean score obtained by the control group (XC) ($XE \neq XC$) in Phase 2.

Hypothesis 3: In the dimension "multicultural acceptance and cultural enrichment", there is a significant difference between the mean score obtained by the experimental group and the mean score obtained by the control group ($XE \neq XC$) ($XE \neq XC$) in Phase 2.

To contrast the hypotheses, we carried out an analysis of difference between means (means of control group versus experimental group) for the variables under study, by performing the t-Student test for independent samples. Before performing this test, we checked the normality distributions in both groups. Normality of the scores was tested using the Kolmogorov-Smirnov test. The level was set at 0.05 for all analyses.

4. Results: In-Class versus SL Interaction (Phase 2)

To address the research hypotheses and examine whether students included in the experimental group (those using SL) obtained higher scores than those in the control one (those interacting in class), we analyzed the differences in the three hypotheses by conducting a Student's t-test for two independent samples. According to the Levene test for equality of variances, the P-value associated with an F contrast statistic is higher than 0.05 for the three dimensions analyzed at a 0.05 level of significance and, therefore, we cannot reject the hypotheses of equal variances for such dimensions. Considering this, tables 2 and 3 show the results obtained for student's t-tests.

Hypothesis 1*: In the dimension "interpersonal communication through English", there is a significant difference between the mean score obtained by the experimental group and the mean score obtained by the control group (XE ≠ XC).*

We focused our analysis on students´ language interaction by analysing the transcripts during the role-playing activities, counting the total number of general concepts generated in the two environments, the turn-taking and the language used in both the SL and the FtF role-playing activities.

Table 2 shows that at a 0.05 level of significance the t-test does not support hypothesis 1 ($p > 0.05$), that is, there is no significant difference in the linguistic performance – language used to perform the interaction in the field of tourism between both groups.

Table 2. Independent samples test

		Levene's Test for Equality of Variances		t-test for equality of means				
		F	**Sig.**	**t**	**gl**	**Sig. (bil)**	**Mean Difference**	**Std. Error Difference**
HP1_Unit4_Phase2_Step4	Equal variances assumed	.521	.473	-.860	60	.393	-.452	.525
	Equal variances not assumed			-.860	58.50	.393	-.452	.525

However, there are some differences in the mean values between both groups (6, 10 versus 6, 55 in the case of the experimental group). In this sense, and even though the number of concepts generated by each group suggested no significant differences, most role-playing tasks in SL lasted longer than in FtF (9 versus 7 minutes respectively - students were asked to

complete 6-8 minutes activities). Likewise, we could observe that the participants from the experimental group took more conversational turns (engaged in more dynamic interaction) than those in the FtF class, but produced fewer numbers of words per turn than in the FtF interaction, although there were no significant differences in the total number of words produced in the two types of conversations. The results could be partly derived from the novelty and interest in computer-based training, the strategy that could have positively enhanced participation. There are also some students who tried and/or carried out phase 2 in SL, even when they had not completed some of the previous steps of phase 1 in class. The individualized learning of SL by which students can work at their own pace could have also promoted participation. Besides, the anonymity provided by SL may have helped reduce the fear to increase social interaction, promote uninhibited behaviour and enhance participation.

Hypothesis 2: According to the t-test (Table 3), in the dimension "*cultural awareness and diversity understanding*", there is a significant difference between the mean score obtained by the experimental group and the results obtained by the control group (p≤0.05). That is, results support hypothesis 2, meaning that the students who carried out phase 2 simulation tasks of unit 1 and 3 in SL (dealing with international guests at the front desk and making a guided tour to a multicultural group respectively) showed a higher awareness and better understanding of cultural diversity than those completing the role-play tasks in class.

Table 3. Independent samples test

		Levene's Test for Equality of Variances		t-test for equality of means				
		F	Sig.	t	gl	Sig. (bil)	Mean Difference	Std. Error Difference
HP2_Unit3_Phase2_Step4	Equal variances assumed	.034	.854	-1.997	65	.050	-1.033	.517
	Equal variances not assumed			-1.996	63.47	.050	-1.033	.518

In this case, there exist significant differences in mean values between the two groups of students (6, 16 versus 7, 19, control and experimental group respectively). The results could imply that virtual environment interaction and cultural difference understanding were more productive than the ones occurring in-class, place in which all students shared the same

mother tongue and culture. SL activities offered opportunities for experiential learning within a more collaborative learning environment. Thus, the higher number of conversational turns led to pose more direct questions and reasoning about differences in timetable, hotel services preferences (room services, leisure centre, souvenirs, etc.), food and restaurants in town, main attractions and monuments to visit, among others. Besides, and in agreement with Kiesler's seminal studies (1985: 81), Computer-Mediated Communication can decrease self-awareness and reduce concern about how other interlocutors will react and think. The effects of telecommunication media on communication play an important role in how people interact and the degree of social presence – i.e. quality or state of being there- among speakers (Short, Williams &Christie, 1976:65).

Hypothesis 3: In the dimension "*multicultural acceptance and cultural enrichment*", there is a noticeable difference between the mean score obtained by the experimental group and the results obtained by the control group. As evidenced by Table 4, the p value associated with a t-Student test is lower than 0.05 for this hypothesis, which means that results support the third hypothesis, that is, students who completed phase 2 simulation tasks of unit 2 and 4 in SL (planning a cultural event and developing a sustainable tourism project respectively) developed a better social relations and multicultural acceptance.

Table 4. Independent samples test

		Levene's Test for Equality of Variances		t-test for equality of means					
		F	Sig.	t	gl	Sig. (bil)	Mean Difference	Std. Error Difference
HP3_Unit4_Phase2_Step4	Equal variances assumed	.444	.508	-1.999	64	.050	-1.021	.511
	Equal variances not assumed			-2.007	63.78	.049	-1.021	.509

In this sense, the results show that through interaction with people from other cultures, students showed a greater sense of respect and understanding, which are the basic pillars to thrive in an ever growing global world, shown by the possibility to discuss the premises to plan a multicultural event among members from different cultures (location, schedule, solving language barriers, food and beverages taboos, etc.) or the insights gained about the concept

sustainability (preserving the environment by avoiding the exploitation of natural and cultural resources).

There also exist significant differences in mean values between both groups of students (6.06 versus 7.09 in the case of the experimental group, scores in a grading scale ranging from 0 to 10 points, with a minimum pass mark of 5 to achieve the minimum acceptance level of competence).

In Table 5, we show the overall contrast of means between control and experimental groups.

Table 5. Descriptive statistics: experimental group versus control group

Descriptive statistics [a]			
Control group			
	Means	Standard deviation	N
HP1_ Unit 1_Phase1_Step3	6.42	2.248	31
HP1_Unit1_Phase2_Step4	6.16	2.252	31
HP1_Unit 2_Phase1_Step3	6.42	2.157	31
HP1_Unit2_Phase2_Step4	6.10	2.300	31
HP1_Unit 3_Phase1_Step3	6.42	2.233	31
HP1_Unit3_Phase2_Step4	5.97	2.198	31
HP1_Unit 4_Phase1_Step3	6.52	2.189	31
HP1_Unit4_Phase2_Step4	6.10	2.226	31
HP2_Unit1_Phase1_Step3	6.65	1.872	31
HP2_Unit1_Phase2_Step4	6.26	2.113	31
HP2_Unit3_Phase1_Step3	6.61	1.944	31
HP2_Unit3_Phase2_Step4	6.16	2.115	31
HP3_Unit2_Phase1_Step3	6.48	1.947	31
HP3_Unit2_Phase2_Step4	6.19	2.167	31
HP3_Unit4_Phase1_Step3	6.58	2.062	31
HP3_Unit4_Phase2_Step4	6.06	1.999	31
Experimental group			
	Means	Standard deviation	N
HP1_Unit 1_Phase1_Step3	6.03	1.816	31
HP1_Unit1_Phase2_Step4	6.32	1.833	31
HP1_Unit 2_Phase1-Step3	6.68	1.759	31
HP1_Unit2_Phase2_Step4	6.77	2.202	31
HP1_Unit 3-Phase1_Step3	6.84	1.695	31
HP1_Unit3_Phase2_Step4	6.39	1.606	31
HP1_Unit 4_Phase1_Step3	6.77	2.028	31
HP1_Unit4_Phase2_Step4	6.55	1.895	31
HP2_Unit1_Phase1_Step3	6.87	1.628	31
HP2_Unit1_Phase2_Step4	7.48	1.877	31

HP2_Unit3_Phase1_Step3	7.03	1.722	31
HP2_Unit3_Phase2_Step4	7.68	1.833	31
HP3_Unit2_Phase1_Step3	6.58	1.945	31
HP3_Unit2_Phase2_Step4	7.10	1.814	31
HP3_Unit4_Phase1_Step3	6.97	1.888	31
HP3_Unit4_Phase2_Step4	7.55	1.786	31

a. Case selection: V2 =   2

The biggest difference is observed in the second hypothesis (HP2 - cultural awareness and diversity understanding), the dimension in which those interacting in SL got an average score that exceeds 1 point to the results obtained by those that completed the tasks in class. Similar results are observed in the third hypothesis (HP3 - multicultural acceptance and cultural enrichment); the statistical analysis also shows differences higher than 1 point between the experimental group and the control group.

The lower differences between the mean scores from both groups are obtained in the first dimension (the language used) with a difference of about a quarter of a point. Though the type of interaction differs, both activities show a similar degree of students' language proficiency, contributing to their productions and understanding of key concepts.

5. Discussion

As demonstrated by the research, virtual worlds offer opportunities to communicate and negotiate meaning with other online inhabitants in a social and authentic context, which proves helpful, considering learners' need to be exposed to and to produce the target language and culture through authentic outputs, mainly in contexts where students share the same language and cultural background. Said that, students interact with speakers with different first language and cultural backgrounds, providing solutions to a basic demand in language teaching and learning: access to authentic, rather than simplified, teaching materials and to real communicative situations. Intercultural and pragmatic aspects implicit in SL have helped foreign language learners become more culturally competent, since culture is embedded in specific communicative acts. Likewise, the potential to simulate real interactions has fulfilled our teaching expectations of promoting intercultural exchanges and addressing competences required for the hospitality students and professionals under study. These advantages have to do with social and intercultural interaction, the development of users' experimentation and role-playing tasks in quasi-real environments. In this sense, SL opens up new grounds for interactive learning conditions by means of learning by doing and collaboration among multicultural groups.

In agreement with Molka-Danielsen (2009), it can be stated that effective teaching in SL should be based on careful task construction, proposals promoting constructivism, problem-based instruction, active and action learning, tandem and group work. Likewise, as stated by Deutschmann & Panichi (2009), teacher practices should follow a careful design process in virtual environments, taking into account thoughtful planning, learners' profiles, affordances and technological limitations that may influence learning.

As for the research hypotheses, the analysis of the mean values for the acquisition of language and cultural competences in both groups of students reveals that values obtained are slightly higher for the experimental group than those for the control one (XE ≠ XC), indicating that those students that had received SL experimentation did better than those who had completed similar role-play tasks in-class. The possibility to express their identity without fear to social feedback, the anonymity provided by avatars and the multi-dimensional nature of the environment could motivate students to participate in phase 2.

Bearing in mind Hypothesis 1, and although specific language outcomes between control and experimental groups may not be significant in this case, the mean score, produces a slight positive difference in students performing the phase 2 tasks in SL. Results also show that even though both environments seem equally suited for developing course tasks in English, the conversation and type of interaction can take different forms (more conversational turns in the SL role-playing activities, but with shorter contributions on each one).

Applications which simulate real contexts and bridge gaps to bring nationalities and cultures together can be a potential cultural training for educational contexts as ours in which students share the same language and cultural background (Chen, 2016). In line with Zheng et al, 2005; Deutschmann & Panichi, 2009; Dell'Aria & Nocchi, 2010; Wigham & Chanier, 2013; Wang, Deutschmann & Steinvall, 2013, SL proves its potential for the development of communicative competences, considering communication as a skill which involves much more than mastering the target language only, but interpreting meaning within a cultural context. In hypotheses 2 and 3 of our study, the mean of the two groups (control and experimental) awards a difference of 1 point to students who performed the task in SL, meaning a slight improvement of the experimental group in the intercultural related competences.

As stated in Good, Howland & Thackray (2008) and Blasing (2010), SL opens new chances for professional training of ESP students as well; apart from eliminating geographical and time barriers, it allows the combination of language use and professional development

through authentic simulations and real users, important competences which must be considered when looking for a job in the hospitality sector.

6. Concluding remarks

SL facilitates student-like-avatars' interaction among users and the world around them, affordances which include the facilitation of tasks that lead to enhanced spatial representation, and opportunities for experiential multicultural interaction within an environment where variables such as anxiety minimization, anonymity, motivation are key for successful language learning. Some of the most important barriers preventing students from using a foreign language effectively are related to inhibitions and fear of negative criticism.

In the case of our study, the experience has proven to be rewarding due to its immersive reality, real-life scenarios and sense of co-presence, encouraging the development of English for Specific Purposes and the acquisition of intercultural communication and diversity awareness in a monolinguist and monocultural education setting.

The experimental learning methodology followed in our research (Kolb, 1984), based on a cyclical process that results in active experimentation from previous phases of observation and reflection, can be applied to a great number of interactions in SL, in which learners can observe language and behavior and interiorize culture of other virtual word inhabitants.

.

References

Alsagoff, L. (2012). Identity and the EIL learner. In L. Alsagoff, S. L. McKay, G.Hu, and W.A. Renandya (Eds.), *Principles and Practices for Teaching English as an International Language* (pp. 104-122). New York: Routledge.

Baum, T. (2012). Human resource management in tourism: a small island perspective. *International Journal of Culture, Tourism and Hospitality Research*, *6*(2), 124-132.

Blasing, M. T. (2010). Second language in Second Life: Exploring interaction, identity and pedagogical practice in a virtual world. *SEEJ*, *54*(1), 96-117.

Bueno Alastuey, M. C. (2011). Perceived benefits and drawbacks of synchronous voice-based computer-mediated communication in the foreign language classroom. *Computer Assisted Language Learning*, *24*(5), 419-432.

Bull, S., & Wasson, B. (2016). Competence visualisation: Making sense of data from 21 st-century technologies in language learning. *ReCALL*, *28*(02), 147-165.

Byram, M. (1997). *Teaching and Assessing Intercultural Communicative Competence*. Clevedon: Multilingual Matters.

Canals, C. (2014). China y Rusia: los nuevos emergentes en emisión de turismo. *Informe Mensual. La Caixa*, 379, 32-33.

Canto, S., Jauregi, K., & van den Bergh, H. (2013). Integrating cross-cultural interaction through video-communication and virtual worlds in foreign language teaching programs: Is there an added value? *ReCALL*, *25*(1), 105-121.

CEFR. Available in: http://www.coe.int/t/dg4/linguistic/cadre1_en.asp

Cerezo, L., Baralt, M., Suh, B. R., & Leow, R. P. (2014). Does the medium really matter in L2 development? The validity of CALL research designs. *Computer Assisted Language Learning, 27*(4), 294-310.

Chen, J. C. (2016). The crossroads of English language learners, task-based instruction, and 3D multi-user virtual learning in Second Life. *Computers & Education, 102*, 125-171.

Dell'Aria, C. & Nocchi, S. (2010). Will Second Life help me survive in Italy? *Proceedings of the ICT for Language Learning*, 3rd, Florence, Italy, November, 2010.

Dema, O. & Kramer, A. (2015). *Teaching Culture in the 21st Century Language Classroom.* DigitalCommons@University of Nebraska.

Deutschmann, M., & Panichi, L. (2009). Talking into empty space? Signalling involvement in a virtual language classroom in Second Life. *Language Awareness*, *18*(3), 310-328.

Deutschmann, M., Panichi, L., & Molka-Danielsen, J. (2009). Designing oral participation in Second Life: A comparative study of two language proficiency courses. *ReCALL*, *21*(2), 206-226.

Deutschmann, M., & Panichi, L. (2009). Instructional design, teacher practice and learner autonomy. In J. Molka-Danielsen & M. Deutschmann (Eds.), *Learning and Teaching in the Virtual World of Second Life* (pp. 27-44). Trondheim: Tapir Academic Press.

Doughty, C., & Long. M. (2003). Optimal psycholinguistic environments for distance foreign language learning. *Language Learning & Technology*, *7*(3), 50-75.

Edwards, P., Rico, M., Dominguez, E. & Agudo, J. E. (2010). Second language e-learning and professional training with Second Life. In H. Hao Yang & S. Chi-Yin Yuen (Eds.), *Collective Intelligence and Elearning 2.0: Implications of Web-Based Communities and Networking* (pp. 207-227). Hershey: Information Science Reference.

Baron, N. (2008). *Always on: Language in an Online and Mobile World*. Oxford: Oxford University Press.

Ellis, R. (2003). *Task-based Language Learning and Teaching*. Oxford: Oxford University Press.

Galloway, V. B. (1985). A design for the improvement of the teaching of culture in foreign language classrooms. ACTFL project proposal.

Gardner, M., Gánem-Gutiérrez, A., Scott, J., Horan, B., & Callaghan, V. (2011). Immersive Education Spaces using Open Wonderland from Pedagogy through Practice. *Multi-User Virtual Environments for the Classroom: Practical Approaches to Teaching in Virtual Worlds*, 190-205. Retrieved February 27, 2015 from http://dces.essex.ac.uk/staff/vic/papers/2011_IGI11%28ImmersiveEducationSpaces%29.pdf.

Good, J., Howland, K., & Thackray, L. (2008). Problem-based learning spanning real and virtual words: A case study in Second Life. *Research in Learning Technology*, *16*(3), 163-172.

Grobelna, A. (2016). Intercultural challenges facing the hospitality industry. Implications for education and hospitality management. *Journal of Intercultural Management*, *7*(3), 101-117. Retrieved 11 Nov. 2016, from doi:10.1515/joim-2015-0023.

Hauck, M. (2010). Telecollaboration: At the interface between multimodal and intercultural communicative competence. In S. Guth & F. Helm (Eds.), *Telecollaboration 2.0* (pp. 219-248). Bern: Peter Lang.

Instituto Nacional de Estadística (Spanish Statistical Office): http://www.ine.es/

Iwasaki, I. (2014). Exploring Second Life for effective English as a Foreign Language and Culture Learning (竹中暉雄教授退任記念号). 桃山学院大学人間科学, (45), 205-220.

Jauregi, K. & Canto, S. (2012). Enhancing meaningful oral interaction in Second Life. *Procedia - Social and Behavioral Sciences*, *3*(4), 111-115.

Jauregi, K., Canto, S., de Graaff, R., Koenraad, T., & Moonen, M. (2011). Verbal interaction in Second Life: Towards a pedagogic framework for task design. *Computer Assisted Language Learning*, *24*(1), 77-101.

Kolb, D. A. (1984). *Experiential Learning: Experience as the Source of Learning and Development* (Vol. 1). Englewood Cliffs, NJ: Prentice-Hall.

Kramsch, C. (1994). *Context and Culture in Language Teaching*. Oxford: Oxford University Press.

Kiesler, S., Siegel, J. & McGuire, T. W. (1984). Social psychological aspects of Computer-Mediated Communication. *American Psychologist*, 39(10), 1123-1134.

Kyriacou, C. & Zhu, D. (2008). Shanghai pupil's motivation towards learning English and the perceived influence of important others. *Educational Studies, 34*(2), 97-104.

Levak, N., & Son, J. (2017). Facilitating second language learners' listening comprehension with Second Life and Skype. *ReCALL, 29*(2), 200-218. doi:10.1017/S0958344016000215.

Liou, H. C. (2012). The roles of Second Life in a college computer-assisted language learning (CALL) course in Taiwan, ROC. *Computer Assisted Language Learning*, *25*(4), 365-382.

Luka I., Vaidesvarans & S., Vinklere D. (2013) Educating tourism students for work in a multicultural environment. *Journal of Teaching in Travel and Tourism*, *13*(1*)*, 1-29.

Melchor-Couto, S. (2017). Foreign language anxiety levels in Second Life oral interaction. *ReCALL, 29*(1), 99-119. doi:10.1017/S0958344016000185

Menike, H. & Pathmalatha, K. (2015). Developing foreign language competencies of tourism industry oriented undergraduates in Sri Lanka. *Tourism, Leisure and Global Change*, *2*(1), 74-87.

Moore, S., May, D., & Wold, K. (2012). Developing cultural competency in engineering through transnational distance learning. *Transnational Distance Learning and Building New Markets for Universities*, 210-228.

Müller-Jacquier, B. (2000). Linguistic awareness of cultures: Principles of a training module. In J. Bolten (Ed.), *Studien zur internationalen Unternehmenskommunikation* (pp. 20-49). Leipzig: Popp.

Nocchi, S. (2012) . Come si fa? can virtual worlds help us to promote intercultural awareness In *The Call Triangle: Student, Teachers and Institution: Proceedings of Eurocall 2011*, University of Nottingham, 2011.

Ntukula, A. (2013) *Diversity in the Workplace: Managing a Culturally Diverse Workforce in the Irish Hospitality Sector*. Masters thesis, Dublin, National College of Ireland.

Omaggio, A. C. (1986). *Teaching Language in Context: Proficiency-Oriented Instruction*. Boston: Heinle & Heinle.

Panichi, L., & Deutschmann, M. (2012). Language learning in virtual worlds: Research issues and methods. In Dooly, M. and O'Dowd, R. (Eds.), *Researching Online Foreign Language Interaction and Exchange: Theories, Methods and Challenges* (pp. 205–232). Bern: Peter Lang.

Peterson, M. (2011). Towards a research agenda for the use of three-dimensional virtual worlds in language learning. *CALICO Journal*, *29*(1), 67-80.

Peterson, M. (2012). EFL learner collaborative interaction in Second Life. *ReCALL*, *24*(1), 20-39.

Peterson, E., & Coltrane, B. (2003). Culture in second language teaching. Retrieved from http://www.cal.org/resources/digest/0309peterson.html.

Sadler, R. (2012). *Virtual Worlds for Language Learning: From Theory to Practice*, New York, NY: Peter Lang.

Shohamy, E. (2007). *Language Policy: Hidden Agendas and New Approaches*. New York: Routledge.

Siegel, S., (2010). Gaining cultural intelligence through Second Life learning interventions. *The International Conference on E-Learning in the Workplace 2010*, www.icelw.org.

Short, J., Williams, E., & Christie, B. (1976). *The Social Psychology of Telecommunications*. London: John Wiley & Sons.

Thorne, S. L. (2008). Transcultural communication in open internet environments and massively multiplayer online games. In S. Sieloff Magnan (Ed.) *Mediating Discourse Online* (pp. 305-327). Amsterdam: John Benjamins.

Thorne, S. L., Black, R. W., & Sykes, J. (2009). Second language use, socialization, and learning in internet interest communities and online games. *Modern Language Journal*, *93*, 802-821.

Van Lier, L. (2002). An ecological-semiotic perspective on language and linguistics. In C. Kramsch (Ed.), *Language Acquisition and Language Socialization: Ecological Perspectives* (pp. 140-164). London: Continuum.

Wang, A., Deutschmann, M. & Steinvall, A. (2013). Towards a model for mapping participation: Exploring factors affecting participation in a telecollaborative learning scenario in Second Life. *The JALT CALL Journal*, *9*(1), 3-22.

Wang, A. (2015) Facilitating participation: teacher roles in a multiuser virtual learning environment. *Language Learning & Technology*, *19*(2), 156-176.

Ware, P., & O'Dowd, R. (2008). Peer feedback on language form in telecollaboration. *Language Learning & Technology*, 12(1), 43-63.

Westhoff, G. (2004). The art of playing a pinball machine: Characteristics of effective SLA tasks. *Babylonia*, *12*(3), 58-62.

Wigham, C. R. & Chanier, T. (2013). A study of verbal and nonverbal communication in Second Life: The ARCHI21 experience. *ReCALL*, *25*(1), 63-84.

Wigham, C. R. & Chanier, T. (2015). Interactions between text chat and audio modalities for L2 communication and feedback in the synthetic world Second Life. *Computer Assisted Language Learning, 28*(3), 1-30. Doi:10.1080/09588221.2013.851702

Zheng, D. & Newgarden, K. (2012*). Rethinking language learning: Virtual worlds as a catalyst for change. *International Journal of Learning and Media*, 3(2), 13-36. Available at https://dmlcentral.net/wp-content/uploads/files/2.pdf.

Appendix 1. Warming-up Questionnaire

Warm-up questions to make students familiarize with the topic before each unit. The items include:
1.   Introduction (personal information, previous experience with people from different cultures).
2.   Mention behavior and attitudes which could help us enhance intercultural communication.
3.   What do you understand by *cultural diversity* and *diversity understanding*?
4.   Give examples of multicultural acceptance.
5.   In what sense could intercultural knowledge be enriched?

Appendix 2. Evaluation Sheet

Set of criteria to analyze texts and audio-visual material. Analyzing the language and functions and culture dimensions from 1 (*totally disagree*) to 5 (*totally agree*).

(1)   Language and functions in-class analysis (phase 1)

(2)   Cultural Dimensions in class analysis (phase 1)

Intercultural awareness
Tick the aspects appearing on the material which may allow us to understand communication among different cultures.

•	Body Language	1	2	3	4	5
•	Customs/Traditions	1	2	3	4	5
•	Compliments	1	2	3	4	5
•	Habits (food, drinks...)	1	2	3	4	5
•	Timetable (punctuality)	1	2	3	4	5
•	Table manners	1	2	3	4	5
•	Gestures (smile, etc.)	1	2	3	4	5

Diversity Understanding

•	Speaking other languages	1	2	3	4	5
•	Understanding other cultures	1	2	3	4	5
•	Tick ways to understand diversity					
•	Observing behavior and body language	1	2	3	4	5
•	Appreciating differences	1	2	3	4	5
•	Respecting individuals (avoid stereotypes)	1	2	3	4	5
•	Being calm, patient, tolerant, respectful	1	2	3	4	5

Multicultural acceptance and Enrichment

o	Treating people equally across cultures	1	2	3	4	5
o	Not discriminating race, sex, religion …	1	2	3	4	5
o	Being sensitive to situation and people	1	2	3	4	5
o	Giving people equal opportunities	1	2	3	4	5
o	Travelling	1	2	3	4	5
o	Studying/working in a multicultural context	1	2	3	4	5
o	Indirect sources (Reading, movies...)	1	2	3	4	5

Appendix 3. Phase 2. Tasks. In-Class- SL activities

PRACTICE ACTIVITIES (PHASE 2)

	In class	In SL
Hotel receptionist	Roleplay: dealing with guests from different nationalities at the front desk	Gexcall site in AvalonLearning: dealing with Chinese, Arabic and African clients at the front desk
Event planner	Planning a cultural event on Mediterranean diet	New York island: planning a cultural event on Mediterranean diet for American citizens
Tourist guide	Roleplay: making a tour to a multicultural group	Kamimo Island: making a tour to LanguageLab* students
Tourism consultant	Choosing a destination and developing a sustainable tourism project taking into account national guidelines	Visiting VIRTLANTIS: developing a sustainable tourism projects with LanguageLab students and other visiting avatars

* A group was created for Hospitality and tourism, joining students from Europe, the USA, Turkey, China and Japan.

EFFECT OF GLOGSTER AND COOPERATIVE LEARNING DIFFERENTIATED INSTRUCTION ON TEACHERS' PERCEPTIONS

by **Ghada M. Awada** and **Kawthar H. Faour**

American University of Beirut

P.O.Box 11-0236

Beirut, Lebanon

Fisk Hall, Room 249

ghadawada@gmail.com

Abstract

The present study investigated the effectiveness of the Glogster and cooperative learning as differentiation models of English as a second/foreign language (ESL/EFL) and Science projects. The study employed a mixed method study design whereby questionnaire and open-ended interview were incorporated to elicit the required data. Eighteen teachers along with eighteen intact classes (n=374) of grade 8 learners of English as a foreign language were randomly assigned to control and experimental conditions. The researchers collected open-ended data with the intent of understanding the meaning Science and English teachers have constructed and how they perceived differentiated instruction upon using the Glogster and cooperative learning in conducting and presenting projects. The findings proved that utilizing Glogster and cooperative learning as multifeatured model could improve students' English and Science projects and enhance Science and English language teachers' perceptions of differentiated instruction.

Keywords: Active learning; cooperative learning; differentiated instruction; Glogster; ICT

1. Introduction

The Ministry of Education and Higher Education in Lebanon set the framework of Lebanon's Education Reform Strategy and Action Plan (LERSAP) in 2011 with the integration of ICT as the main vehicle which could provide learners with the dispositions, competencies, and skills to succeed in digital world (Awada & Diab, 2016). The LERSAP stipulated that curriculum reform should be achieved to build up a human capital characterized by creative and cognitive skills. The LERSAP mainstreamed for the technical infrastructure, content-based curriculum, instruction and assessment that could form educational reform set by the Ministry of Education and Higher Education (MEHE). The educational reform and the digital age initiation were launched in 2011 to meet the educational policies implemented worldwide and

would help teachers meet the standards and equip them with professional development needed to ensure that the teachers could mirror the success of the vision outlined in the LERSAP. The study is premised on the proposition that ESL/EFL and science skills are vital for communicative and academic functions, which creates a need for differentiating projects by form and process using Information Communication Technology (ICT) models and cooperative learning strategies. The setting and the context of the present study necessitated the investigation of an innovative differentiated instruction model that could bridge the disparity between the Lebanese curriculum and the poor textbook activities that aren't tailored to serve the needs of students with different learning profiles, readiness, and interests.

Differentiated instructional approach improves achievement and makes students engaged in deep thinking. It enables teachers to provide the different needed learning environments to the students of varied learning profiles and interests and makes them involved in meaningful, motivating tasks (Tomlinson and McTighe, 2006; Bailey and Williams-Black, 2008). Tomlinson and Imbeau (2012) also found that when teachers took the time to differentiate instruction, achievement increased as the assignments were tiered to meet the instructional levels of each student. As such, differentiated instruction (DI) might be defined as an effective strategy to meet the needs of diverse learners. Differentiation involves having multiple ways to structure a task so that each student is provided with an opportunity to perform at an acceptable level of difficulty (Woolley,2008). Differentiated instruction promotes the various types of cognitive domain lower-order and higher-order critical thinking skills. Teachers teaching students with low socioeconomic status incline to employ a more traditional approach to teaching than teachers working with students of high socioeconomic status (Block, Paris, Reed, Whiteley, and Cleveland, 2009; Woolley, 2008). Traditional teaching has been limited to a small set of skills in which teachers raise questions, give instructions, assign homework, control seatwork, appraise assignments, administer tests, assign and review homework, resolve disputes, punish nonconformity, grade papers, and give grades (Haberman,1995).

Cooperative learning also results in higher achievement at several grade levels and in diverse Subject matters than the traditional whole-class teaching (Johnson and Johnson, 1985; Johnson and Johnson, 1995; Slavin, 1991). Cooperative learning improves peer interaction, increases motivation, and changes perceptions of learning, school, and subject (Johnson and Johnson, 2002; Sharan, 1980; Slavin, 1991, 1995). Furthermore, cooperative learning activities improve achievement scores (Slavin, 1991, 1995; Sharan & Shaulov, 1990). Group Investigation, a cooperative learning method and a flexible learning strategy, can provide

students with various inquiry experiences whereby the classroom turns into an "inquiring community" and each student is an investigator who organizes inquiry with the class's general topic investigation (Kagan,1985; Sharan & Sharan, 1994).

With the structure and features of Glogster, students experience intrinsic motivation to pursue their project. The Glogster tool encourages students to collect information and to present their findings (McCoy, 2014). Technology seems to improve the students' perceptions of project presentations and teachers' perceptions of differentiated projects (Cutter, 2015). As such, the Glogster model facilitates student-centered learning whereby the teacher employs minimal whole class instruction to present the general topic of investigation and to provide guidelines to help students carry out their investigations. The Glogster model seems to be an appropriate teaching strategy to differentiate the content, process, and product of the oral presentations of students who employ the model to conduct their projects as well.

Consequently, the purpose of the present study is to investigate the relative effectiveness of Glogster and cooperative learning as differentiation models of EFL and Science projects in comparison with regular instructional practices that are based on the pedagogical implications of the 1997 Lebanese curriculum which doesn't emphasize differentiation as a means to increase achievement. Another purpose is to investigate the effectiveness of the Glogster and cooperative learning as form and process differentiation models in improving the perceptions of Science and English teachers of employing differentiated instruction in their classrooms at 8 public schools in Lebanon. A basic assumption behind the study is that independent research into the relative effectiveness of the Glogster and cooperative learning as form and process differentiation models in EFL and Science contexts is presently scanty or non-existent.

The purpose of this qualitative case study was to investigate the effectiveness of Glogster and cooperative learning models as a multi-featured strategy in improving the perceptions of Science and English teachers of EFL eighth graders of differentiated instruction implemented in conducting and presenting projects at 5 low performing public schools located in Beirut, the capital of Lebanon. This purpose of the study is to investigate the effectiveness of the Glogster and cooperative learning in increasing students' achievement and helping teachers to differentiate and scaffold instruction successfully.

Specifically, the present study addressed the following questions:

1. Is Glogster and cooperative learning differentiated instruction more effective than regular EFL instruction in improving science and English projects of EFL eighth graders?

2. Is Glogster and cooperative learning differentiated instruction effective in improving Science teachers' and English teachers' perceptions of differentiated instruction at public schools?

2. Theoretical framework

The theoretical underpinnings of the study relate to Vygotsky's (1978) zone of proximal development theory (ZPD) and Tomlinson's theory of differentiated instruction (Tomlinson, 2008). ZPD suggests that when a difficult task is assigned to students, frustration takes place and there is no learning, and when the assigned task is too easy for students, the brain won't be challenged; thus, learning won't take place as well. The ZPD is the difference between the learner's ability to solve problems alone and the potential that a learner might attain with the help of a teacher or a more knowledgeable peer in a good learning environment. The teacher must provide students with mediation or scaffolds beyond independent learning yet within their zone of proximal development (Gredler, 2012).The scaffolds are directly linked to the individual personal needs. In scaffolding, the task itself remains the same, yet the level of assistance provided to the learner changes. Assessment in the ZPD should align with the student's cognitive awareness and potential to analyze, synthesize and compare and concepts (Gredler, 2012).

Differentiated Instruction forms another framework of the present study. Differentiated instruction should meet the needs of all learners. Tomlinson (2008) indicates that students increase and build knowledge and then employ the new skills to build even more skills. As such, the teachers must address four definite elements: students, learning environment, content, and instruction. Should any of the four elements be ignored, the quality of learning will be diminished (Tomlinson, 2008). Differentiation includes instructional tiered assignments, cooperative learning, jigsaw activities, interest centers and group investigations (Tomlinson and McTighe, 2006). The effective classroom instruction demands having the teachers design the curriculum which should promote student understanding and skills to be learned while meeting the benchmark and standards required (Dean, Stone, Hubbell, and Pitler, 2012). Therefore, the use of differentiation in the classroom makes teachers able to bridge the achievement gap (Tomlinson, 2008). Teachers should implement several instructional tiered assignments as they differentiate the product and enable students to choose different products to reflect the learned content (Palinscar, 2012). Tiered instruction improves academic achievement of learners at all grade levels in all subjects. By employing the flexible

grouping model, teachers can use a variety of grouping patterns to improve student learning (Optiz, 1999).

The integration of technology into the classroom improves differentiation and enhances learning (Cutter,2015). Glogster, a Web 2.0 tool used to create a glog which is an interactive platform in which users create an online poster containing text, video, images, and graphics, can be used easily by students of different ages and learning profiles. Glogster has 16 key features which provide diverse ways of collaboration (Jensen & Tunon, 2012). It strengthens the students' inquiry skills, communication opportunities, and curriculum awareness of academic tasks. When used effectively, the Glogster model reinforces a great sense of collaboration among the small groups and in the whole class (McCoy, 2014). The use of the Glogster tool enhances motivation and collaboration among learners (Martinez-Alba et al., 2014). Educators can use Glogster to engage distance students to collaborate with other students to create and present their project. The Glogster project could be successfully implemented in two Mathematics classes in a middle school, and students created their glogs after they had determined the content and created the design; students reported that they tremendously enjoyed the collaboration, multimedia, colors and videos. Significant effectiveness of Glogster was reported in achieving learning outcomes and improved perceptions of learning were observed (McCoy, 2014).

3. The study

3.1. Aims and design

The study employed a mixed-method design whereby the data including interviews and a survey were collected. A questionnaire was used to measure the teachers' perceptions of Glogster and cooperative learning differentiated instruction models. The group members divided the labor among one another and then they met to collect and integrate all the distinct parts together to answer the questions raised. Each group reflected on the aspect they have overseen and used Glogster and cooperative learning differentiated instruction to report to class the summary of their inquiry process. Furthermore, each group learned about the other aspects discussed by the remaining groups in the class. As such, the whole class acted in turn as one group.

The subjects were 18 teachers teaching Science and English language Subjects trained in Glogster, cooperative learning, Information Communication Technology (ICT) tools and differentiated instruction at the beginning of the study, and 374 students of low

socioeconomic status in fourteen intact classes in 8 public schools were employed. 83 students were enrolled in 4 classrooms which formed the population of the control group, whereas the experimental group consisted of 293 students enrolled in 14 classrooms.

The experimental group consisted of fourteen teachers, seven Science and seven English teachers, along with fourteen classes (n =293) of grade 8 learners of English as a foreign language. On the other hand, the control group consisted of four teachers, 2 Science and 2 English, who were randomly assigned to control and experimental conditions. The control group teachers were teaching 4 classes consisting of 83 students. Two projects were used as pre-test and post-test measures of oral presentation achievement. The pretest project was based on a regular project whereas the posttest project was based on the Glogster model whereby the presentation was tiered and students were given the choice to choose the form of the product they want. Different forms such as the Movie Maker video, PowerPoint, report, and simple research findings were added to the Glogs of the students to present the final product of the conducted research in the experimental group whereas students in the control group were asked to present their final product using one format following the regular research guidelines.

The study used interviews to investigate how the teachers approach Glogster and cooperative learning differentiated instruction implementation, the obstacles they face in its implementation, and the potential essentials in the pedagogy that teachers identify in their teaching. Each interview consisted of seven open-ended questions. The study also employed a survey that consisted of 4 open-ended questions and 3 closed-ended ones. A semi-structured interview was used to measure how Glogster affected teachers' perceptions of differentiated instruction using Glogster and cooperative learning differentiated instruction which might increase collaboration among students.

3.2. Participants and study context

This study was conducted at eight public schools in Beirut city. Eighteen teachers along with Eighteen intact classes (n =374) of grade 8 learners of English as a foreign language were randomly assigned to control and experimental conditions. Seven science and seven English teachers along with their respective classes formed the experimental population whereas two science and two English teachers along with their respective classes formed the control group. The student population was approximately 4231 students, 81 % of whom are Lebanese and 19% are Syrians. The schools run on a September-to-June calendar and serve grades 7 through 12. A sample of 374 EFL learners enrolled in 18 sections of grade 8 was randomly

assigned to control and experimental conditions. As such, the study sample included learners from low socioeconomic families and were all native speakers of Arabic. Four classes were randomly assigned as the control group and the remaining fourteen as the experimental group. The daily communication and the social interaction were in Arabic, so the study sample had limited exposure to English which was used as the medium of instruction in English and Science, including chemistry, biology, physics, and mathematics. English is given in the context of the study as a foreign language to be learned for academic purposes.

The experimental group received differentiated instruction using the Glogster model, tired assignments, flexible grouping, and scaffolding strategies whereas participants in the control group were given the regular research skills instruction. All the participants received the treatment for a period of 8 weeks at the rate of 6 hours per week in accordance with the Lebanese curriculum requirements. The age of the participants ranged from 13- 15 years.

3.3. Treatment

The treatment lasted for eight weeks at the rate of six contact hours of differentiated instruction per week. The study participants of the control group were given regular research project and regular oral presentation instruction followed by the use of the respective rubric to evaluate the product whereas the experimental group participants received the differentiated instruction employing Glogster and cooperative learning. Specifically, Glogster and cooperative learning differentiated instruction consisted of a range of activities which were used to inquire and investigate about the assigned aspect of the same topic. The students worked in groups of four or five to create an online interactive poster of an assigned Science or English topic. Examples of the activities used in the control group include the regular, individual topic brainstorming carried out by all students, whereas students in the experimental group could use different resources to present their findings using different Glog formats.

A differentiated instruction employing Glogster and cooperative learning differentiated instruction was implemented during eight weeks following three workshops given to the participating teachers and aiming to provide training in the implementation of cooperative learning approach, Glogster model and differentiated instruction. The training in cooperative learning approach included activities, structures, and methods. The workshops provided the teachers with examples related to the use of Jigsaw I, Group Investigation, Student Team Achievement Division (STAD), Numbered Heads Together, Think Pair and Share, Think Pair and Square, Windows Live Movie Maker, PowerPoint presentation, Wiki

and WebQuest. The third training workshop was on differentiated instruction covering the strategies for differentiating by content, process, and product. Furthermore, the workshops included active and cooperative learning strategies that can help the teachers to employ tiered assignments, flexible grouping and scaffolding that can meet students' learning profiles, interest, and readiness. The researchers provided the participating teachers with different rubrics and assessment strategies to enable them to allow their students to present the product reflecting their investigation and inquiry on the aspect assigned to each small group. For example, the researchers gave training in the use of different tools such as creation of Windows Live Movie Maker (WLMM), PowerPoint presentation, Wiki and WebQuest. Students' projects, which had been produced during the treatment duration, were analyzed to reveal their achievement and reflections concerning the Glogster model which enabled students to cooperate and use the WLMM videos, text, audio, and images they prepared. The teachers were asked to report students' perceptions of how the Glogster and cooperative learning differentiated instruction changed the ways student learned in the classrooms (See Figures1, 2, 3, 4, 5, 6).

Figure 1. Samples of Language Arts and Health and Fitness Glogs
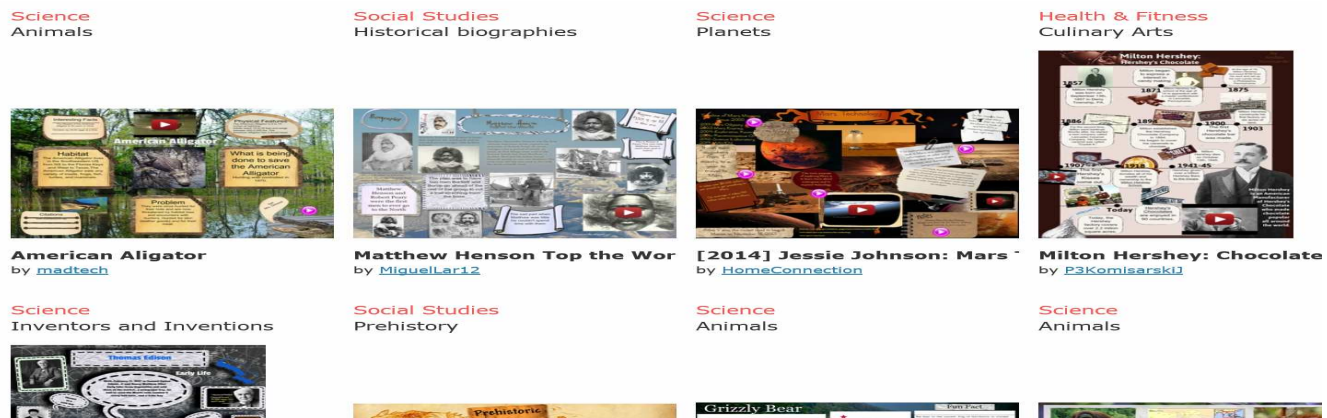
Figure 2. Search for Science project sample on Keeping Healthy
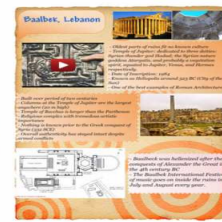
Figure 3. Search in Glogpedia for samples on Travelling around Lebanon
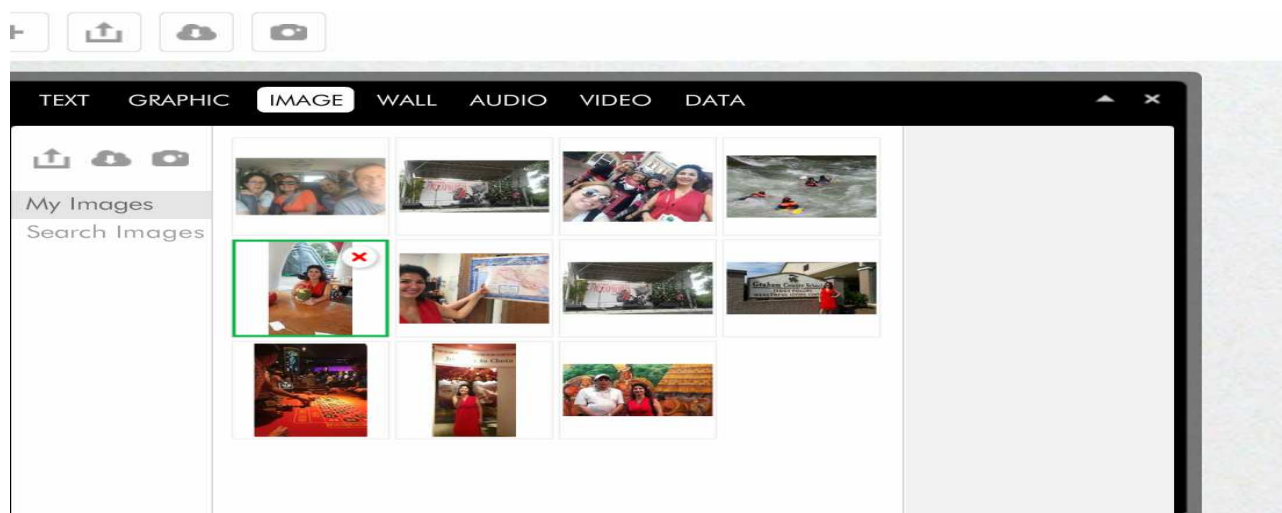

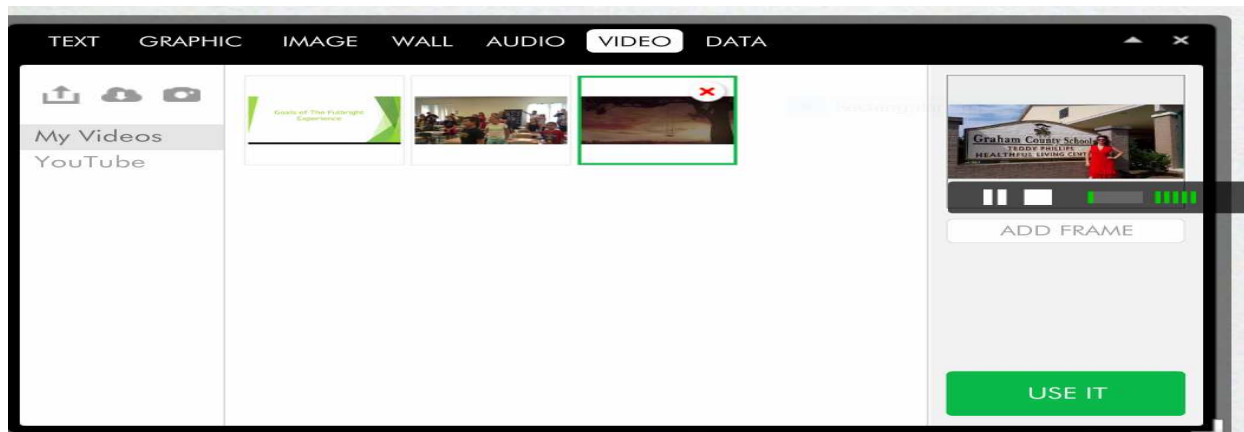Figure 4. Sample of Glog on Travelling around created by the researcher

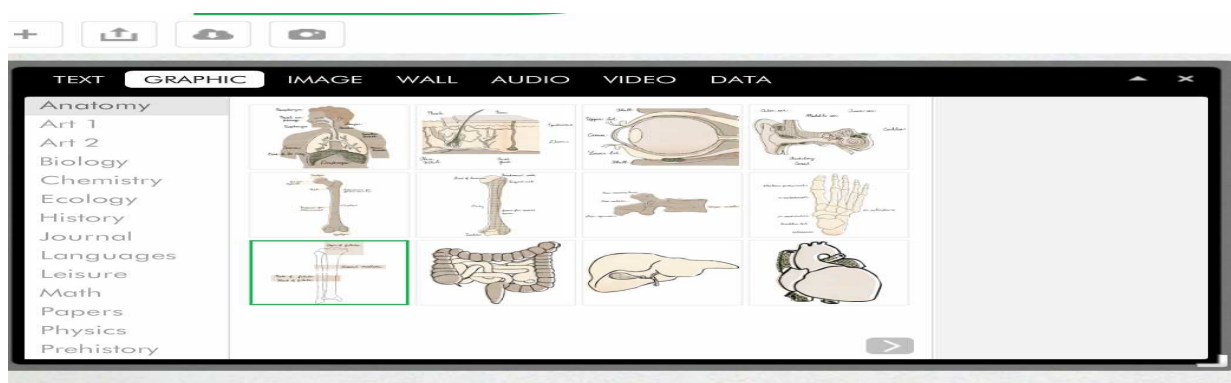Figure 5. Sample of the videos uploaded to the Glog

Figure 6. Sample of the graphics used by the Science students

Meanwhile, instruction in the experimental group focused on carrying out the stages of Glogster and guiding the learners to inquire about one aspect of the general topic. Stage I of the Glogster and cooperative learning differentiated instruction required having the teachers present a many-sided problem to the whole class. The teachers used the themes included in the class textbook as a basis for the many-sided problem. Students were instructed to use a variety of resource materials such as WebQuests, books, pictures and authentic materials to carry out their inquiry quest. Students were asked to generate questions related to the general problem. Then the questions raised by students were converted into subtopics which would be investigated in small groups. Afterwards, the students chose to be members in the small groups that would investigate the subtopic in which they are interested. Glogster allowed students to present their individual research plan of the inquiry process. The members of the small groups chose questions from the generated questions by the class, and they added some more questions for their investigations. Group members set the resources and divided the tasks among each other. Students carried out their plan, collected information from different sources, and reported findings to their group members. Afterwards, students

analyzed and synthesized their findings to create the glogs that would be used to present and reflect on their findings. Stage 4 allowed students to plan their presentations whereby the groups determined the findings they wanted to share with the class along with the manner and the glog formats of presenting them. The presentations of the experimental group took different forms, and they were all differentiated by content and product. Glogster allowed students to make their presentations and each group presented one aspect of the general topic that they had investigated. Then teachers and students evaluated the projects using the rubric adopted or designed by the experimental group teachers. The evaluation of the oral presentations took into account the creativity reflected in the final glog product of the group and the content the students gained during the course of the inquiry and investigation process.

Both the experimental and control group English teachers worked on unit 7 from the national textbook, titled "Traveling Abroad". The performance objectives of the unit were as follows:

Students should be able to:

- Predict content of the text

- Seek and provide information about the thematic focus

- Make a sentence outline

- Comprehend printed discourse using text-related clues

- Demonstrate factual and critical understanding of a varied audio-input

- Reinforce the use of context clues which help decode unfamiliar lexis

- Order a series of events

Teaching Procedures for the control group
Pre-Entry Performance:
- o Teacher introduced the unit by asking learners to examine the pictures on Page 127 and discuss them for a few minutes. Teacher elicited from learners as many vocabulary items as possible that deal with the thematic focus "Traveling Abroad."
- o Teacher recorded the related vocabulary terms on the board and asked learners to copy them in their copybooks. Teacher then initiated a short discussion on why people traveled abroad.
- o Teacher then read the introductory paragraph aloud and explained any unfamiliar terms to the learners. Learners then took turns to comment on what they have heard.

Opening:

Teacher asked learners to answer the questions in Activity 1, P: 128 orally.

- What means of transportation are used in traveling? Which one is the fastest?
- Have you traveled abroad? Where? By what means?
- Have you ever been in an airplane? What facilities can you find in an airport?

    All learners should participate in the oral communication.

Instruction / Participation:

- Teacher asked learners to read the selection "A New Terminal Opens in Prague Airport" to conduct a project on travelling by choosing a beautiful place and present things pertinent to the touristic sites, economic situation, industry and the special aspects they chose to present.
- Teachers referred students to different sources and kept checking and monitoring learners' progress. The experimental group teachers added the Glogster mediation and instruction and asked students to conduct and present their projects using the Glogster tool.

    As for the science teachers of the experimental and control groups, they worked on unit 3 from the national textbook, titled " Immune System". The performance objectives of the unit were as follows:

    Students should be able to:

- Discuss issues in subject area
- Demonstrate critical and factual understanding of a text
- Comprehend printed discourse using text-related clues
- Reinforce context clues which help decode unfamiliar lexis
- Identify causative verbs and their proper function and usage

Teaching Procedures

Opening:

The control group teachers asked learners to work in groups of 4 to look at the pictures on Page 66 and answer the questions in Activity 1, P: 66.

Instruction / Participation:

Teachers asked learners to read the selection and find the words in the word-bank in the selection and guess the meaning of the words by using context clues. Learners explained the rationale for their guesses. As a class, learners worked in groups to conduct and present a

project on how exercise helped people look and feel shipshape, strengthened heart, gave energy, helped people sleep, made muscles stronger and more flexible, burned fat, and built self-confidence.

The experimental group teachers added the Glogster and cooperative learning mediation and instruction and asked students to conduct and present their projects using the Glogster tool. The teachers of the experimental group acted as the facilitators of the Glogster model. As such, the teachers' role was limited to being the planners who helped students move throughout the stages of the Glogster and cooperative learning differentiated instruction.

3.4. Data analysis

Open-ended interviews with Science and English teachers and a questionnaire were employed to collect data. As such, data collection for this study consisted primarily of interviews with the 14 teachers of the 14 grade 8 classes. The analysis of the collected and triangulated data yielded the findings of the study. The researchers contacted all potential participants by email and personal telephone to arrange the time to conduct the 3 training workshops in cooperative learning, Glogster model and differentiated instruction. Each interview lasted for about 20-25 minutes and was conducted at teachers' schools or over the telephone. The final source of evidence for this study was the collection and review of documents relating to lesson plans, testing reports, as well as documents pertaining to the objectives of the Lebanese curriculum and the eighth graders' English and Science textbooks at the school to be able to suggest the topics and the activities to be conducted in the experimental eighth graders' classrooms. The individual interviews were conducted prior to the implementation of the treatment, and they were audio-taped and consisted of 6 questions including follow-up probes to yield more information. The researchers employed triangulation to ensure the validity in the study. After the implementation of the treatment, a questionnaire was created using Google Drive and sent to the participants to fill out to ensure obtaining the data from multiple sources. Results from interviews, member checking analysis of written grade 8 curriculum and textbook assisted in addressing the research questions.

The treatment conditions entailed the integration of the Glogster and cooperative learning differentiated instruction given to the experimental group class whereas participants in the control group were given regular research instruction. Descriptive statistics were computed for the experimental and control group on the pre-test and post-test research achievement scores. This study was also designed to describe the experiences of Science and

English teachers in grade 8. The researchers applied member checking to ensure the validity of the data analysis. As such, the data along with the analyses were taken back to the participants to check if the interpretations were accurate.

3.5. Results and findings

The study addressed the following questions:

1. Is Glogster and cooperative learning differentiated instruction more effective than regular EFL instruction in improving English teachers' perceptions of differentiated instruction at public schools?

2. Is Glogster and cooperative learning differentiated instruction effective in improving English teachers' perceptions of differentiated instruction at public schools?

The comparison between the data elicited from the conducted survey that was filled out after the implementation of Glogster and cooperative learning differentiated instruction and interview that was conducted prior to the implementation of the treatment indicated significant positive change in the perceptions of both science and English teachers.

3.5.1. Interview

The interview consisted of 6 open-ended questions, and it was conducted before the implementation of the treatment and immediately after receiving the workshops on cooperative learning, differentiated instruction, and Glogster use. 7 Science and 7 English Language teachers participated in the study.

1. Question 1: Please mention the subject you teach and share examples of the ways you differentiate instruction in classes for struggling students.

Four Science teachers asserted the importance of cooperative learning and ICT-based activities. Two science teachers mentioned that cooperative learning activities help them to support the struggling students. Similarly, four science teachers mentioned that group work, video maker, hands on activities are useful while two teachers asserted the importance of using tiered assignments, scaffolding and flexible grouping. One teacher asserted the importance of extra sheets. Some teachers' responses were as shown below: "I teach Chemistry and I usually give extra sheets to the struggling students. "Another teacher added, "I teach science .... I use different ways to explain the lesson; pictures, audio, videos, flash cards."

On the other hand, three English teachers asserted the importance of using visual aids, auditory aids, hands-on activities, and different activities that meet all students' needs. One teacher added simplifying the answer for the child as shown in the following: "I teach English. For struggling students, I read the question instead of inviting them to read, then I break the question into smaller steps." Another teacher added, "I might give extra sheets or special homework. I might also explain step by step or ask the students to explain themselves. Assessment to previous knowledge is also effective."

2. Question 2: What difficulties or obstacles do you face in differentiating instruction for your struggling students?

Six science teachers asserted the need for much time and effort for planning and preparations. One teacher added, "Concentration span of some students is short and organizing my time to meet the requirements of the curriculum are obstacles in differentiating instruction." Another said, "Sometimes the subject is highly demanding and limited,", while the third added, "It needs time and more effort along with more space and time." According to the fourth one, "A lot of time and many obstacles to tier assignments, for I teach mathematics."

Virtually all English language teachers asserted that time, number of students and the many curriculum requirements to cover form a main obstacle in differentiating instruction. As one teacher added, "ADHD and the lack of attention in my classes are prevalent." For another teacher, "Sometimes, I feel that I have no time to accommodate everyone's needs." A third teacher added, "The discouragement of these students as some think that it's impossible to improve. The main problem is to find activities that meet the needs of all the students."

3. Question 3: What do you think would help you better meet the needs of your struggling students?

Three science teachers asserted that active and cooperative learning activities along with allocating more time to the subject will help. According to one teacher, "Variety of activities and using different methods of teaching that could save time in class will help." For another one, "More time and space are needed. I usually put them in groups with other learners." A third teacher added, "We need more time and in my opinion those students need individual help from the teachers and different kinds of assessments that other students have. "

Three English teachers asserted that active and cooperative learning activities along with allocating more time to the subject will help. One teacher added, "I think a flexible pacing schedule and curriculum whereby it is the teacher's decision to manage when to move on and

when to slow down to meet her Students' needs is what is needed." A second teacher added, "Setting certain methods for help and assessing students will always help the teacher determine the progress of the students in class and determine how to help them. For the third one, "More cooperative learning activities and fewer students should be placed in one class."

4. Question 4: What assistance have you had in your school in differentiating instruction that you found beneficial?

More than half of science teachers asserted that training on cooperative learning, ICT tools and Group Investigation method have been very beneficial. A teacher added, "Smartboards - online dashboard are needed." Another one added, "The school gave us workshops on differentiated instruction and cooperative learning activities.", while the third one claimed: "Taking a workshop in positive discipline is needed."

Five English teachers asserted that more training on planning instruction, differentiated instruction and active learning activities such as Jigsaw and group investigation models is needed.

5. Question 5: What type of support do you receive from the administration in differentiating instruction in your classroom?

All science teachers asserted that they received a training workshop on the use of Glogster in classroom, cooperative learning and differentiated instruction." A teacher added, "Ultimate authority!" A second one added, "They provide a projector and a pc." They all claimed that the school provided support through development program for teachers, active learning, and group investigation activities as well.

6. Question 6: What pre-service preparation, training, or professional development helped to prepare you for differentiating instruction for struggling learners?

Virtually all science teachers asserted that the three workshops they attended on differentiated instruction and cooperative learning were useful. A teacher added, "Classroom management workshop will be useful." Similarly, all English teachers asserted that three workshops they attended on differentiated instruction, training on Glogster model, Jigsaw and cooperative learning activities were useful.

3.5.2. Survey

The survey was created using Google Drive and was sent to the participants to fill out after implementing the treatment. It consisted of 2 open-ended questions and 4 close-ended ones. The survey intended to answer questions 1 and 2.

1. What could you say about addressing the needs of students who struggle in your class?

On the one hand, five science teachers indicated that every teacher should be in charge of helping the struggling teachers. However, only two of them indicated that it is difficult to differentiate due to time constraints and the need to do much planning. As one teacher added, "We should put ourselves in the student's shoes to understand the problem. More time and more freedom to choose the form of the product they want for their assignments."

On the other hand, virtually all the English teachers asserted that differentiated instruction is great and teachers can tremendously help the struggling students. 85.7% of English teachers supported employing differentiated instruction including Glogster and cooperative learning. However, one teacher indicated that struggling students might feel more at ease should they be segregated from their peers. Another one added, "Students need more assistance and I am in favour of segregating them and giving them the same curriculum but taking into consideration their difficulties and trying to give them one to one assistance. "

As such, the post treatment survey indicated virtually all of English teachers and 85% of science teachers changed completely their perceptions of employing differentiated instruction after employing the treatment.

2. Did you find the training workshop on differentiated instruction you attended beneficial?

All science and 91.7% of English teachers emphasized the significance of the training they received on differentiated instruction.

3. What kinds of professional development do you think teachers need in order to help meet the needs of struggling students?

All science teachers asserted that differentiated instruction, classroom management, cooperative learning activities and teaching Glogster are useful for the struggling teachers. As some teacher comments indicate, "Class management, workshops on the innovative and new methods of teaching will be good," "More guidance and application on methods of teaching and cooperative learning activities are needed." Finally, for one teacher, "More training in positive discipline and class management will be strongly needed." Some other answers given by English teachers are as follows:

"Teachers need more practical solutions taking into consideration the number of the students and the time constraints."

"We should learn how to take an intervention plan. We need a workshop related to the different types of intelligence and how to approach each type."

4. Do you believe that differentiated instruction is effective in increasing students' achievement?

Virtually all science and English teachers confirmed the necessity of differentiating the instruction.

5. Do you believe that Glogster model is effective in increasing students' achievement and enhancing differentiated instruction?

All science teachers and almost all English teachers (92.9%, n=6) confirmed that Glogster model was effective in increasing students' achievement and enhancing differentiated instruction.

4. Discussion

An overwhelming majority of experimental teachers reported that most of their students revealed positive perceptions of Glogster and cooperative learning differentiated instruction learning experience. The students expressed great satisfaction with the amount of work, ease of conducting the project and the choices they were given to present their products. Very few (n=2) reported that some of their students did not enjoy the Glogster model. The comparison between the responses of the interviews conducted prior to the implementation of treatment and after giving the teachers the training workshops and the responses to the survey conducted after implementing the treatment show that teachers' perceptions of differentiated instruction using the Glogster tool in general have improved since the 14 Science and English teachers asserted the necessity of differentiated instruction and the usefulness of the Glogster tool. The perceptions of science teachers of implementing Glogster and cooperative learning differentiated instruction to improve eighth graders' project skills were not significantly positive prior to the implementation of Glogster and cooperative learning differentiated instruction, which was similar in the case of English teachers.

On the other hand, as evidenced by the post treatment survey, 100 % of English teachers and 85 % of science teachers changed completely their perceptions of employing differentiated instruction after employing the treatment. The perceptions of the English and

science teachers of implementing Glogster and cooperative learning differentiated instruction to improve eighth graders' project skills significantly changed after the implementation of the project. Conversely, most teachers of the control group(n=3) reported that most of their students revealed dissatisfaction with the huge amount of work each one of them had to carry out. Moreover, they expressed a great need for more guided research steps, and most weren't excited about students' presentations. Most experimental group teachers (n=13) indicated that differentiated instruction has been effective with struggling readers. Many teachers (n=10) reported that the Glogster model, tiered assignments and scaffolding were effective in improving struggling students, yet the assessment and evaluation strategies demanded much effort. However, some teachers revealed (n=4) that it is difficult to differentiate content, process, and product due to the diverse abilities of learners in a classroom. Very few of them (n=2) reported that differentiation is only effective when they have time to plan and prepare as teachers need more time to plan for differentiating classes.

The results of the present study revealed that using the Glogster model as a differentiating tool was effective in improving the teachers' perceptions of differentiated instruction given the limited-English proficient EFL eighth graders. Likewise, the use of the Glogster model was found to improve the students' oral presentation skills and research achievement. A possible explanation of the effectiveness and positive perceptions of the Glogster model is that the structure and the use of this form of learning facilitates scaffolding, allows flexible grouping, and encourages tiered assignments. The features of the Glogster model allowed differentiation by content, process and product and met students' readiness, interest, and profiles. The Glogster model is an enjoyable experience in conducting and presenting projects as shown in the data collected from the questionnaire and interviews filled out by the participants in the experimental group. The findings of the study corroborate those of Tomlinson and McTighe (2006); Bailey and Williams-Black (2008); and Tomlinson and Imbeau (2012), who also found that when teachers took the time to differentiate instruction, achievement increased and differentiation provided students with an opportunity to perform at an acceptable level of difficulty.

The findings align with those of Dean, Stone, Hubbell, & Pitler (2012), who indicated that effective classroom instruction demands having the teachers design the curriculum which should promote student understanding and skills to be learned while meeting the benchmark and standards required. Likewise, the findings agree with those of Cutter (2015), who believed that the integration of technology into classrooms improves differentiation in the classroom and enhances learning. Similarly, the findings of the study corroborate those of

McCoy (2014) and Martinez-Alba et al. (2014), who believed that the Glogster model reinforces a great sense of collaboration among students and enhances motivation.

7. Implications for the future and final conclusions

The present study intended to investigate how the Glogster and cooperative learning differentiated instruction can be used as a differentiating educational model that might enable the participants to increase their achievement and improve teachers' perceptions of employing differentiated instruction at public schools. The study contributes to improving the quality of integrating the Glogster and cooperative learning into eighth grade Science and English language instruction, which is presently a scanty area of research. The Lebanese curriculum and the national English and Science textbooks don't include any mention for differentiated instruction. The curriculum emphasizes that eighth graders should believe in themselves as active and dynamic readers who can transfer their skills to other situations. As such, the use of the Glogster and cooperative learning differentiated instruction intended to bridge the disparity in the curriculum and the poor textbook activities. Students' ability to understand, draw conclusions, and defend their conclusions rationally was a major goal. The uniqueness of the approach in a public school in Lebanon would make the present study significant in the field of teaching research and oral presentation skills in both, Science and English Language Subjects. The findings of the study may encourage administrators and teachers to implement professional development programs that focus on differentiated instruction using Glogster and cooperative learning differentiated instruction along with other specific instructional practices that contribute to increased achievement for the students.

7.Conclusions

The implementation of differentiated instruction using the Glogster and cooperative learning differentiated instruction model improves students' research and oral presentation skills in the English and Science classrooms. The Glogster and cooperative learning differentiated instruction model, tiered assignments and scaffolding were effective in improving struggling students, yet few teachers need more time to plan for differentiating classes. Differentiation using Glogster and cooperative learning seems to provide learners with an interesting environment to investigate a certain topic. Glogster could improve collaboration among learners and enhance research and oral presentation skills. The findings of the present study suggest that this form of learning could be an effective student-centered method which could widen students' understanding of the different aspects of a certain topic and improve their

synthesis skills. Furthermore, the findings show that teachers' perceptions of differentiated instruction using the Glogster and cooperative learning differentiated instruction model in general have tremendously improved since all the experimental Science and English(n=14) teachers asserted the necessity of differentiated instruction and the usefulness of the Glogster tool. As such, the model is recommended as a pedagogical approach which would boost motivation, improve students' research skills, and facilitate differentiated instruction by content, process and product. Finally, further research is recommended in order to determine the generalizability of these findings regarding the efficacy of the Glogster and cooperative learning differentiated instruction model in improving the research and oral presentation skills of various school subjects other than English and Science and into other socio-cultural contexts.

References

Awada, G., & Diab, H. (2016). Lebanon's 2011 ICT education reform strategy and action plan: Curriculum success or abeyance. *Cogent Education, Taylor and Francis, 3*(1), 1245086. http://dx.doi.org/10.1080/2331186X.2016.1245086.

Bailey, J. P., & Williams-Black, T. H. (2008). Differentiated instruction: Three teachers' perspectives. *College Reading Association Yearbook*, *29*, 133-151.

Block, C. C., Parris, S. R., Reed, K. L., Whiteley, C. S., & Cleveland, M. D. (2009). Instructional approaches that significantly increase reading comprehension. *Journal of Educational Psychology, 101*(2), 262-281. http://dx.doi.org/10.1037/a0014319

Cutter, M. (2015). Using technology with English Language Learners in the classroom. *Education Masters.* Paper 313. https://fisherpub.sjfc.edu/education_ETD_masters/313.

Dean, C., Hubbell, E., Pitler, H., & Stone, B. (2012). *Classroom Instruction that Works: Research-Based Strategies for Increasing Student Achievement*. Alexandria, VA*:* Pearson Teacher Education/Association for Supervision and Curriculum Development.

Pitler, H., Hubbell, E. R., & Kuhn, M. (2012). *Using Technology with Classroom Instruction that Works*. Alexandria, VA.: ASCD.

Gredler, M. (2012). Understanding Vygotsky for the classroom: Is it too late? *Educational Psychology Review, 24*(1), 113-131. https://link.springer.com/article/10.1007/s10648-011-9183-6

Haberman, M. (1995). Selecting 'star' teachers for children and youth in urban poverty. *Phi Delta Kappan*, *76*(10), 777-781.

Jensen, J., & Tunon, J. (2012). Free and easy to use web based presentation and classroom tools. *Journal of Library & Information Services in Distance Learning*, *6*(3-4), 323-334. http://dx.doi.org/10.1080/1533290X.2012.705157

Johnson, R. T., & Johnson, D. W. (1985). Student-student interaction: Ignored but powerful. *Journal of Teacher Eeducation*, *36*(4), 22-26. http://dx.doi.org/10.1177/002248718503600406.

Johnson, D. W., & Johnson, R. T. (2002). Cooperative learning and social interdependence theory. In R. S. Tindale & L. Heath (Eds.) *Theory and Research on Small Groups* (pp. 9-35). Springer US. https://doi.org/10.1007/0-306-47144-2_2

Kagan, S. (1985). Dimensions of cooperative classroom structures. In R. Slavin, S. Sharan, S. Kagan, R. Hertz Lazarowitz, C. Webb, & R. Schmuck (Eds.), *Learning to Cooperate, Cooperating to Learn* (pp. 67-96). New York: Plenum Press.

Martinez-Alba, G., Cruzado-Guerrero, J., & Pitcher, S. (2014). Glogsters and other motivating technology: A multiple case study of English Learners. *Reading*, *14*(2). Retrieved from http://www.readingmatrix.com/files/11-k4o9m112.pdf

McCoy, L. P. (2014). Web 2.0 in the Mathematics Classroom. *Mathematics Teaching in the Middle School*, *20*(4), 237-242. DOI: 10.5951/mathteacmiddscho.20.4.0237

Opitz, M. F. (1999). Empowering the reader in every child. *Instructor-Primary, 108 (5)*, 35-38.

Palinscar, A. (*2012*). Reciprocal teaching. In J. Hattie & E. Anderman (Eds.), *International Guide to Student Achievement* (pp. 369-371). New York: Taylor & Francis.

Tomlinson, C. A., & McTighe, J. (2006). *Integrating Differentiated Instruction & Understanding by Design: Connecting Content and Kids*. Alexandria, VA: ASCD.

Tomlinson, C. A., & Imbeau, M. B. (2012). Common sticking points about differentiation. *School Administrator*, *69*(5), 18-22. Retrieved from http://www.aasa.org/content.aspx?id=23118

Tomlinson, C. A., Brimijoin, K., & Narvaez, L. (2008). *The Differentiated School: Making Revolutionary Changes in Teaching and Learning.* Alexandria, VA: ASCD.

Sharan, S. (1980). Cooperative learning in small groups: Recent methods and effects on achievement, attitudes, and ethnic relations. *Review of Educational Research*, *50*(2), 241-271. https://doi.org/10.3102/00346543050002241

Sharan, S., & Shaulov, A. (1990). Cooperative learning, motivation to learn and academic achievement. In S. Sharan (ed.), *Cooperative Learning*: Theory and Research (pp. 173-202). New York: Praeger.

Sharan, Y., & Sharan, S. (1994). Group investigation in the cooperative classroom. In S. Sharan (ed.), *The Handbook of Cooperative Learning Methods* (pp. 97-114). Westport, CT: Praeger.

Slavin, R. E. (1983). When does cooperative learning increase student achievement? *Psychological Bulletin*, *94*(3), 429-445. http://dx.doi.org/10.1037/0033-2909.94.3.429

Slavin, R. E. (1991). Synthesis of research of cooperative learning. *Educational Leadership*, *48*(5), 71-82.

Slavin, R. (1995). *Cooperative Learning: Theory, Research, and Practice*, 2nd ed. Boston: Allyn and Bacon. https://doi.org/10.1016/0895-4356(94)00097-A

Vygotsky, L.S. (1978). *Mind in Society: The Development of Higher Psychological Processes*. Cambridge, MA: Harvard University Press.

Woolley, C. M. (2008). Meeting the mixed methods: challenge of integration in a sociological study of structure and agency. *Journal of Mixed Methods Research*. *3*(1), 7-25. https://doi.org/10.1177/1558689808325774

LEARNING LSRW SKILLS
THROUGH ACTIVE STUDENT-INVOLVEMENT:
SCREENING AN EDITED FILM

by **Divya John**

SSN College of Engineering

Chennai, Tamil Nadu, India

divyajohn @ ssn.edu.in

Abstract

The aim of the present study was to find out whether students' active involvement in classroom activities can promote language learning. This paper, using practitioner research, examines the active involvement of first-year engineering students in a film activity. The research took place in three phases: (1) the students were divided into five groups and given an assignment each, a month ahead, to edit a full-length movie to one hour without tampering with its story element; (2) the five groups presented five different edited movies on five different days; (3) the data was collected and analysed by the teacher as follows: observing the classroom performance, transcribing the students' spoken language, and collecting the students' written transcripts. The research analysis and discussion show that the whole process of the film task provided a rich input in listening and reading, and subsequently a productive language output in speaking and writing. The feedback conducted states that the students enjoyed the video classes thoroughly and the experience was rewarding because of their active involvement in the practice of LSRW skills.

Keywords: LSRW; film editing; task-based teaching

1. Introduction

Involving students in a learning task effectively is a problem that teachers have faced over the years. Studies have proved that students' active involvement in a task improves their language learning (Prabhu, 1987; Willis & Willis, 2007). At the same time, teachers are aware that films offer a great opportunity for students' language learning (Sherman, 2003; Stempleski & Tomalin, 2001; Willis, 1983). Thus, a film activity or a video activity combined with students' active involvement can facilitate the development of the four skills of the language (Kennedy, 1983; Lansford, 2014; Goldstein & Driver, 2015).

The present study uses practitioner research methodology to investigate and reflect on the students' active involvement that would lead to the active use of the language. To substantiate this point, this teacher-researcher designed an experiment, "Screening an Edited

Film," to find out whether involving students in a film activity could lead to the enhancement of their LSRW skills in English.

2. Literature review

2.1. Video in language teaching

Researchers have shown on many occasions that involving students in a task leads to active language learning. The term "Student Involvement" is derived from the "Student Involvement Theory" of Astin (1984), which refers to the amount of physical and psychological energy that the students devote to academic experience. The amount of student learning and personal development associated with any educational programme is directly proportional to the quality and quantity of student involvement in that program (Astin, 1984). Another closely linked term in education is "Student Engagement," that is, the degree of attention, curiosity, interest, motivation, optimism and passion that students show when they are learning or being taught ("Student Engagement," 2016). Research on student engagement is largely related to improving student learning, that is, when students are actively and experientially involved in the learning process, and the higher the engagement, the more learning takes place. This fundamental concept is based on the constructivist assumption that learning is influenced by how an individual participates in educationally purposeful activities that are likely to lead to high-quality learning (Coates, 2005).

It is an accepted fact that motivated students engaged in activities usually perform higher academically too, and they are better-behaved than their peers; as a result, they show positive feelings and higher thinking abilities. That is to say, behavioural engagement, emotional engagement and cognitive engagement in a particular task enhance student-engagement (Fredricks, Blumenfeld, & Paris, 2004; Fredricks, 2014).

Cooperative and collaborative learning are approaches that make student involvement genuine and thereby promote active learning (Astin, 1984; James, 2015; Stephen, 2015). Stephens (2015) claims that active learning in groups, peer relationships, and social skills are key components to engagement and motivation. Simple learning assignments are not as effective as challenging activities. When students reflect, question, conjecture, evaluate, and make connections between ideas, they are actively engaged. She agrees that motivating students is not an easy task because motivation is intrinsic to the individual. All the same, teachers can definitely play a significant part in encouraging students (Stephens, 2015).

No teacher can underestimate the fact that making or watching videos has become a primary mode of communication universally, especially with youngsters. Way back in 1983, Willis emphasized the uses of the video saying that film promote the active learning of a language as it "brings real life into the classroom." He lists such its aims as contextualizing new language items, giving the language input for a task, providing an authentic sample of language use, and building up confidence of and familiarity with the target environment (Willis, 1983). Sherman gives a few points to demonstrate why video is required for developing speaking skills: to serve its own purpose; to comprehend the spoken language; to use as a language model; to be exposed to culture; to act as a stimulus or input; and to function as a moving picture book (Sherman, 2003). In the foreword to *Film: Resource Book for Teachers*, Maley focuses on the point that culture is dominated by the moving image globally: "The combination of sound, vision and language engages and stimulates our senses and cognitive faculties simultaneously, creating a total impact that dwarfs other mediums" (Stempleski & Tomalin, 2001).

Besides giving practice in listening and speaking, videos can be exploited to develop reading and writing skills by designing appropriate student-centred activities (Goldstein & Driver, 2015). They provide a platform for a wide range of tasks that incorporate the LSRW skills. Lansford (2014) gives six reasons for using the video in the ELT classroom: It speaks to Generation V ('V' stands for 'video'); it brings the outside world into the classroom; it engages learners; it is a great source of information; it provides the stimulus for classroom activities; and it is a good model for learner output. Donaghy (2014) explains why films are such a good resource: learning from films is motivating and enjoyable; they provide an authentic and a varied language; they give a visual context; and they offer variety and flexibility to the classroom. Researchers in the field ascertain that films render a supportive medium to engage learners in the active learning of a language (Goldstein & Driver, 2015; Sherman, 2003; Stempleski & Tomalin, 2001).

2.2. Student involvement in a film activity for language learning

Research into students' involvement has been carried out in the field of education for school students but not much has been done for college students. In higher education, the studies on students' involvement mostly pertain not to the involvement of students on a particular subject but to their overall academic programme. That is, when the concept of "student involvement" was used by Astin in 1984, he referred to the involvement of students not just in the classroom activities but their overall involvement in the academic programme, including

curricular, co-curricular and extra-curricular activities of the college. The term "student engagement" was mainly used with reference to students at the pre-collegiate level.

I would like to use a term "Active Student-Involvement" to refer to the active involvement of the students in the activities of the classroom, so that learning would take place actively. If students are encouraged to involve themselves in video and film activities in the classroom, it would be a great stimulus for them to develop their LSRW skills. Therefore, as an engaging tool to practise language skills, video can make language classes relevant to the learners' lives and thus lead to an active language learning experience. Not many ELT practitioners have experimented with the student involvement theory in English language learning in the colleges. So here is an attempt to fill this gap and prove that students' active involvement in a language learning activity would positively lead to the learning of the language.

3. The study

3.1. Background and aims of the study

The film activity, "Screening an Edited Film," was conducted in the English classes at SSN College of Engineering. The participants are the first year first-semester students of Electronics and Communication Engineering in the year 2010-2011. The said college is one of the 500 plus engineering colleges affiliated to Anna University, a technical university in Chennai, India. Anna University then offered 'Technical English I' in the First Semester and 'Technical English II' in the Second Semester, each a four-credit course of 60 periods, involving the LSRW skills. In the third-year, there is a two-credit course of 60 periods, 'Communication Skills Laboratory', the intention of which is to make students more interactive and thus employable.

The study was based on the hypothesis that students' active involvement in classroom activities promotes language learning. In accordance, this paper raises the research question: "Does the students' active involvement in a film activity promote the LSRW skills in English?"

3.2. Procedure

1. Before the class

The teacher divided each class of 60 students into 5 groups of 12 each, and each group was given an assignment a month ahead to choose a video or film or TV program, edit it by

cutting off the unnecessary details without tampering with the story element. Each group was requested to introduce the edited film in a presentation of 3 minutes and screen the edited version in an hour. Two consecutive periods were set apart for the presentation of each group. The students were also given a follow-up task of writing a report.

2. During the class

During the 3-minute oral presentation of the groups, the teacher recorded the classroom observation in writing. From the students' side, they included two video presentations -- a title clip and a credit clip within the 3-minute oral presentation.

Note: It needs to be recorded here that the spoken language of the students in all the groups contained mistakes in grammar and construction. Therefore, the transcript given here is edited by the teacher-researcher for obvious reasons.

3. After the class

The students were asked to write a report of the activity, based on the following questionnaire given by the teacher:

1. What made you choose this particular film?
2. Write a review of the film.
3. How did you go about the editing part?
4. Write a report on the whole activity.
5. What skills did you develop?
6. Give a feedback of the activity done.

Some of the groups presented handwritten scripts, others sent emails to the teacher. It needs to be recorded here that the written language had spelling mistakes, missing articles, slangs, abbreviations and emoticons, besides the generous use of ellipses, question marks and exclamation marks, denoting their awe and elation. The transcript given here is also edited by the teacher-researcher for understandable reasons.

3.3. Methodology: data collection and analysis

The teacher-researcher adopted the elements of practitioner research such as classroom research and action research to verify the hypothesis and arrive at a conclusion employing reflective practices. The data was collected and analysed by the teacher as follows: (1) using observation notes to monitor the classroom performance and record the involvement of the students, (2) transcribing the students' spoken language to show a productive spoken output

and (3) collecting the students' written transcripts to examine a creative written output. By means of various software, the 5 groups presented the following 5 movies on 5 different days: *The Italian Job*, *Baby's Day Out*, *The Phone Booth*, *The Vantage Point*, and *How to Train your Dragon.* The transcripts of the data thus gathered and analysed are divided into three parts as given below: (1) observing the classroom performance, (2) transcribing the students' spoken language, and (3) collecting the students' written transcripts.

3.4. Results

Group 1: *The Italian Job*

1. Observing the classroom performance

While presenting the task, the leader of the group ascended the platform to give the gist of the movie. The reaction of the class was heartening as they watched the introduction. It was a title clip, a sand-art animation that ended with the display of words, "You have got a friend. It's us." This set the mood for the group-viewing. When the movie ended, the group screened a small credit clip which explained the whole process of editing, and then on the lighter side, they attached another credit clip of the team mates wherein each one of them appeared on the screen with captions highlighting their qualities. They had worked on it using the following software: Windows Live Movie Maker & Windows Movie Maker 2.6, Corel Video Studio PRO X3, Subtitle Workshop, Virtual Dub, Adobe Photoshop, Audacity, and Total Video Converter.

2. Transcribing the students' spoken language

The following are a few samples of the conversation that took place among the students in the class before and after the movie was screened:

> "At the outset, I suggested, *The Italian Job*, and the first reaction from our group mates was, "How on earth are you going to edit a heist movie and reduce it to one hour?" They were partially right because editing a heist movie is challenging as all the events are interlinked and even a small mistake in editing could render the movie illogical! Moreover, the movie had a running length of 105 minutes and we had to bring it down to 60 minutes! There were other suggestions from the group but I was able to convince them that it would be a worthy challenge to meet."

> "Our first task was to choose a production banner for our group. I took the initial alphabet from the names of our group members, arranged them using various permutations and combinations

and finally settled on the following: PLV (RT)^2 S^4. Its first impression was that of a formula in physics!"

"We sat down on a weekend and saw the full film five times and parts of it several times and each time noted down the minute parts that could be edited. By the end of the week, our baby was born with a running length of 69 minutes!

"I supported my friend in choosing this movie because I was sure with his help we could meet the challenge."

"What is special about this movie is that it is a high-voltage action film, a brilliantly-planned heist movie, a freaky fast car flick, etc. all in a single compact film. In short, it combines several features that are a craze for us, teenagers, in the age-group 17-19.

"I love the precision and planning carried out in this movie. Imagine stealing $30 million worth of gold right before the owner's eye without using a pistol or even a knife! This movie does exactly that! Another attraction is that the cast of the film is star-studded with academy award winners, Charlize Theron and Mark Wahlberg in the lead. Jason Statham, Seth Green and Edward Norton too did a good job."

"Our concern was whether to choose the 1969 version or the 2003 version of *The Italian Job*. Finally, we decided on the 2003 version."

3. Collecting the students' written transcripts

The following are the extracts taken from the written transcripts of the different members of the group:

"The D-day arrived, and one of us missed the first period to give the final touches to the movie. We were excited and anxious because we were the first team to perform."

"When the stage was set for the movie to begin, I narrated the gist of the movie, pressed the play button and went back to my seat. Every 15 minutes I summarized the story element for the sake of our regional-medium friends."

"The whole class was amazed by the planning done by our group in secret. Even our English teacher was highly impressed by our enthusiasm."

"I spent too much time designing the credit part but my hard work paid off well, as evident from the reaction of my friends. The expansion of the formula, stated by Group member 2 may be given as follows: PLV (RT)^2 S^4 = Perfect + Lovable + Victorious + Remarkable + Terrific + Successful."

"The finale of our project was a photograph of the group taken along with our loving English teacher! What else would have been a perfect finish to this project?"

Group 2: *Baby's Day Out*

1. Observing the classroom performance

The group conducted an introductory video presentation and then the edited movie of *Baby's Day Out* interpolated with regional music and dialogue. They also showed a video

presentation of the group in action: the process of selecting the movie, the group working at it, the places they went, the time they spent together and the different aspects of editing, using the software: Windows Live Movie Maker, Windows Movie Maker 2.6, Adobe Photoshop.

2. Transcribing the students' spoken language

To put it in the spoken words of the students: "We chose *Baby's Day Out*, because the film does not have much of a story in it and therefore it would be easy to edit it."

3. Collecting the students' written transcripts

The following extracts taken from the students' written transcripts demonstrate their perceptions of the whole process:

> "The response was overwhelming. Everyone enjoyed the movie. They could not stop laughing."

> "The dialogues of Vadivel (a Tamil film Comedian) interposed in between added to the mirth of the audience. To keep the momentum of the film, we added thematic songs that rendered the movie thrilling. To add to the joy of the experience, we distributed lollipops to the class during the intermission."

Group 3: *The Phone Booth*

1. Observing the classroom performance

The group agreed upon a stunt-video presentation for the title. The names of the team members and their qualities for team spirit too were displayed. Some hilarious moments followed when a video clip was shown in which one group member mimicked their English teacher's anglicized pronunciation of Tamil names. In a few minutes, *The Phone Booth* was screened and everybody liked the brilliant portrayal of the psychological thriller. As the movie progressed, the momentum kept building and gradually all eyes were engrossed in the movie. The movie was followed by a series of slides giving quotes on love and friendship. They used the software: Windows Live Movie Maker, Subtitles Workshop. To convert the video to the desired formats, they finally used AVS Video Converter.

2. Transcribing the students' spoken language

Extracts from the students' conversation demonstrate some of the characteristics of the process:

> "We agreed upon *The Phone Booth* because the previous batches had chosen action and comedy films."

"Our group unanimously felt that our choice of the movie was right."

"We decided on this movie hoping that it would grab the attention of all viewers till the very end. And it did."

"Our team said that sometimes bad things become essential while doing good. This movie was about that."

"It was gratifying to find everybody applauding our effort. Some of our classmates were glad to note that the life of a woman is shown as precious – a message very relevant today."

3. Collecting the students' written transcripts

This extract from the students' written transcripts indicates how they became involved in the process, not even becoming aware of the educational dimension of the task:

"We jelled together as a team to present the edited movie. Editing gave us immense satisfaction because we succeeded in conveyed the theme. The mimicking of our English teacher's Tamil accent was taken by the teacher in a jovial spirit. The whole adventure was rich in experience and learning and had a positive impact on us."

Group 4: *The Vantage Point*

1. Observing the classroom performance

The group chose *The Vantage Point* to minimize the editing work, they deleted some title scenes and credit scenes and created their own; kept the other parts of the movie untouched because every part of it was required for comprehension. They spent four days to edit using the software: Corel studio Pr0 X3, Windows live movie maker, Windows movie maker 2.6

The story line was displayed thus: 'The President of the US, who is now in Spain, is going to address the citizens in a public square.' The story is related from different angles – from the angle of an American tourist with a video camera; from the angle of a Secret Service agent who has just returned from medical leave; from the angle of the President of the United States. A remarkable credit video followed.

2. Transcribing the students' spoken language

Extracts from the students' conversation demonstrate their perceptions of the process:

"I selected this movie because I thought it would appeal to our generation and also make them think."

"Deleting some scenes from the title and the credit clips was difficult. Creating our own was even more difficult but we managed somehow."

"Even our group members felt we had done an awesome editing work."

"The other groups told our group that our editing work was the best. We were very happy to hear that."

3. Collecting the students' written transcripts

Extracts taken from the students' written transcripts:

> "Most of our classmates said that our choice of *The Vantage Point* was admirable because it created anxiety and suspense."

> "The dialogue and the scenes and sounds were so enthralling that students sat with rapt attention so much so when one group member attempted an explanation of the storyline, the others silenced him."

> "One of the students who fell ill had an option of leaving the classroom but as the movie was screened he was mesmerized, and took rest in his seat."

> "The class admitted that our group had the credit of selecting a postmodern movie with a journalistic technique of portrayal. They also congratulated our group in a special way for our remarkable editing."

Group 5: *How to Train your Dragon*

1. Observing the classroom performance

The video presentation of the title clip was shown followed by the presentation of the main movie. This was rounded off with a unique credit clip, that of the group members at work. They used the software: Windows Live Movie Maker, VLC Media Player, Adobe Photoshop, and MS Paint.

2. Transcribing the students' spoken language

Extracts from the students' conversation:

> "It was on seeing the other presentations that we decided to choose an animation film, *How to Train your Dragon*."

> "We first decided on *GI JOE* and then changed to *How to train your Dragon*. A lot of time was lost by the change. It was a tight schedule. Some finishing touches had to be done until the last moment, and the work was complete only a few seconds before we entered the class."

> "The entire hostel marvelled at our industrious venture, and even more our cooperation."

> "Our team members felt that we could have done a better job if we had not changed the movie at the last moment. Yet, we were happy with whatever work we did."

> "By chance, all the members of this group were from the boys' hostel and so we could manage in spite of the change of mind at the eleventh hour."

> "We are thankful to our English teacher for entrusting us with such an enterprising task."

3. Collecting the students' written transcripts

Extracts taken from the students' written transcripts:

"Though we decided on the film *GI JOE* at the outset, seeing the excellent presentations, week after week, we changed our idea at the last moment, and chose, *How to Train your Dragon*. Unfortunately, considerable time was lost but we were not disheartened. We delegated the work among ourselves and started working on the film at 8 pm the previous day of the presentation!"

4. Discussion

This paper is inspired by the positive response of the students while doing the activity "Screening an Edited Film." When it was first conducted in 2010-2011, it was highly successful and the teacher-researcher thought she was lucky to have a batch of students with good team skills. Later she realized that the activity worked well because of the students' active involvement. The above-mentioned activity gave students plenty of opportunities for interaction, discussion and collaborative team work. This is in keeping with James's (2015) suggestion of the six elements required while designing and implementing learning activities that involve student engagement: Make it meaningful, Foster a sense of competence, Provide autonomy support, Embrace collaborative learning, Establish positive teacher-student relationships, Promote mastery orientations.

It is true that the presenting group and the listening groups in the class acquired the four skills side by side as the skills are interlinked in any language activity. For example, the students acquired listening skills when they played and replayed the movie several times to reduce its length. Again, when the edited movie was screened in the class, they got input for listening. They also practised speaking skills while rehearsing and presenting the video in the class. Moreover, when they watched the movie with the subtitles on, they enhanced their reading skills. Yet again, to write the written transcripts, they read the reviews of the movie from the Internet several times and thus had further practice of the reading skill. They also practised their writing skills when they were answering the questionnaire given by the teacher. Thus, the film activity assisted them in enhancing the LSRW skills though there is no arbitrarily attempt to teach the skills. The transcripts given here prove that there was a considerable spoken and written output. MacKnight (1983) ascertains that the video enables the students "to experience authentic language in a controlled environment." They develop all the skills side by side as it is impossible to bring in a rigid division between them. Listening and speaking skills are more developed than reading and writing in this activity.

After the presentation, the teacher collected feedback, a few extracts of which are included here with some minor corrections:

An extract from the report of Group 1:

"The first person to thank is of course our English Madam for encouraging us to work on this different concept! Thanks a bunch Ma'am! We learned many things, not only technically, but also how to manage a team, how to be dedicated to the work we do, how to organize our ideas and put them into action effectively etc. We learnt a ton during this whole journey!!! Looking forward to a similar project next semester too, Ma'am! ☺ (sic)."

An SMS from Group 2:

"Good afternoon Ma'am. This is Prasanna here, Ma'am. . . Hope you liked the show today in class . . . *Baby's Day Out* ☺ Thank you so much Ma'am for giving us this beautiful opportunity ☺ looking forward to more interesting tasks like this one, Ma'am ☺ ☺ ☺ Thank you, Ma'am ☺ (sic)."

Group 3:

"The activity had a positive impact on our team. We worked in unison to develop the presentation. Our video editing skills were tested by this constructive activity (sic)."

What was derived from the feedback was that even without intending to teach the students the video editing skills, they learned those by practice, or, through active involvement in the activity. The groups were highly engaged in the activity, and even more than that, the groups that finished their presentation helped the other groups to present their task. There was an overall involvement in the activity thereby proving that they had acquired the elements of active language learning. It is no exaggeration to say that sometimes the classes outperformed the teacher's expectations by their total involvement in the task. Though the teacher anticipated only a simple editing task like stopping, playing and fast forwarding the movie, the students went beyond the expectations and came up with a creative video presentation with a title clip and a credit clip showcasing their imagination. This addition was their own idea not requested to by the teacher. The title clip and the credit clip also portrayed their struggle and satisfaction while editing the movie. The title clip and the credit clip showed the students' sincere involvement in the task. Keddie (2014) suggests that creating a film presentation by students is "a great way to motivate students" and enhance their "creativity, interaction and learning." The teacher's enthusiasm is required for success of the activity.

Graham (2013) provides a list to show that video is useful in the ELT classroom because: it is motivating; it can be relevant; it can be used at different levels; it is easy to use being low tech; it generates real inter-student communication; and it is a great activity for homework.

At this juncture, there is possibility for a natural query: "Should movies be introduced in an ESP classroom?" An engineer only needs to know how to read a journal article, listen to lectures, take notes, etc. Interestingly, Kennedy (1983) points out that the purpose of an ESP programme is to enable students to adapt themselves to real-life situations. This can be made

possible only by introducing videos in the classroom that would motivate them to get involved in the activities and participate in them actively and thus improve their 'social' skills. When films are shown in the class, the students are excited and naturally get into the habit of watching them, a practice that would provide a significant input of language skills and enable the students to become autonomous learners.

5. Limitations of the study and future implications of the research

The above-mentioned activity was successful in one particular class in one particular year. Only 5 English periods were utilized for this activity though the groups spent several hours other than the English periods to listen to movies, decide which movie to work on, and edit the movie. To spend many hours outside the classroom for an English activity is not practical in an engineering scenario. The teacher-researcher reflected on the reason why it was successful in one class and found out that it was because of the particular kind of activity given to them, and also their active involvement during the editing process. Similar research can be carried out to see whether the involvement of the students in other activities would produce the same result and lead to an active language learning experience. Further conclusions can be drawn only after repeated experiments in similar classroom settings, and also after similar experiments in different classes with the same activity and other activities too. As already stated, not much research has been done in the area of Active Student-Involvement in ELT; so, there is scope for future studies in the field.

6. Conclusion

The study was to investigate students' active involvement in classroom activities and to find out whether a film activity can enhance the development of LSRW skills. As already stated, I use the term 'Active Student-Involvement' to refer to the active involvement of the students in the activities of the classroom. The activity explicated here is "Screening an Edited Film," where students are active in groups to present edited movies. The data collected by classroom observation and students' spoken and written transcripts proved that they had several opportunities to practise their LSRW skills. The research analysis and discussion show that editing and presenting the task provided a rich input and output of the language skills. Feedback received stated clearly that the students also enjoyed the video classes because they were totally involved in the activity. The video is an engaging tool to make language classes relevant that leads to the development of their LSRW skills. Thus, when teachers motivate

'Active Student-Involvement' in video and film activities, it would turn out to be an effective language learning experience.

References

Astin, A. W. (1984). Student involvement: A developmental theory for higher education. *Journal of College Student Development*, *25*, 297-308.

Coates, H. (2005). The value of student engagement for higher education quality assurance. *Quality in Higher Education*, *11*(1), 25-36.

Donaghy, K. (2014). How can film help you teach or learn English? British Council Voices. Retrieved from https://www.britishcouncil.org/voices-magazine/how-can-film-help-you-teach-or-learn-english.

Fredricks, J. A. (2014). *Eight Myths of Student Disengagement: Creating Classrooms of Deep Learning*. Los Angeles: Corwin.

Fredericks, J., Blumenfeld, P., & Paris, A. (2004). School engagement: Potential of the concepts, state of the evidence. *Review of Educational Research, 74*, 62-63.

Goldstein, B., & Driver, P. (2015). *Language Learning with Digital Video*. Cambridge: Cambridge University Press.

Graham, C. (2013). Using video in the classroom. Oxford University Press ELT. Retrieved from https://oupeltglobalblog.com/2013/10/14/using-video-in-the-classroom/.

James, N. P. (2015). Golden rules for engaging students in learning activities. Edutopia. Retrieved from http://www.edutopia.org/blog/golden-rules-for-engaging-students-nicolas-pino-james.

Keddie, J. (2014). Video cameras in the hands of learners. Oxford University Press ELT. Retrieved from https://oupeltglobalblog.com/2014/04/11/video-cameras-in-the-hands-of-learners/.

Kennedy, C. (1983). Video in English for Specific Purposes. In J. McGovern (Ed.), *Video Application in English Language Teaching, ELT Documents*: 114 (pp. 95-102). London: Pergamon Press.

Lansford, L. (2014). Six reasons to use video in the ELT classroom. Cambridge Conversation. Retrieved from http://www.cambridge.org/elt/blog/2014/03/six-reasons-use-video-elt-classroom/.

MacKnight, F. (1983). Video and English Language Teaching in Britain. In J. McGovern (Ed.), *Video Application in English Language Teaching, ELT Documents*: 114 (pp. 1-16). London: Pergamon Press.

Prabhu, N. S. (1987). *Second Language Pedagogy*. Oxford: Oxford University Press.

Sherman, J. (2003). *Using Authentic Video in the Language Classroom*. Cambridge: Cambridge University Press.

Stempleski, S., & Tomalin, B. (2001). *Film: Resource Book for Teachers*. Oxford: Oxford University Press.

Stephens, T. L. (2015). Encouraging positive student engagement and motivation: Tips for teachers. Pearson Education. Retrieved from http://www.pearsoned.com/education-blog/encouraging-positive-student-engagement-and-motivation-tips-for-teachers/.

Student Engagement. (2016). In S. Abbott (Ed.), *The Glossary of Educational Reform*. Retrieved from http://edglossary.org/student-engagement/.

Willis, D. (1983). The potential and limitations of video. In J. McGovern (ed.), *Video Application in English Language Teaching, ELT Documents*: 114 (pp. 17-28). London: Pergamon Press.

Willis, D., & Willis, J. (2007). *Doing Task-based Teaching*. Oxford: Oxford University Press.

Volume 18, Issue 2

Teaching English with Technology
April-2018