**Application of Information and Communication Technology Tools
for English Language Teaching in an Omani Context**

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Abstract
ICT (Information and Communication Technology) has become a significant domain of learning in the field of teaching and learning. Recently, educators have shown overwhelming interest in incorporating computers and Internet to improve the effectiveness of education at informal and formal levels of Education. ICT with its numerous tools has immense potential in the field of English Language Teaching (ELT) in terms of facilitating the teaching and learning of listening, speaking, reading and writing skills.The article summarizes some of the merits and the demerits of the use of ICT tools, and the concept of using ICT in ELT based on the researcher's review of recent studies. It also highlights the findings from the researcher's own study on the effectiveness of the application of ICT tools on the EFL (English as Foreign Language) writing performance of Omani EFL learners. The study focuses on effectiveness of Moodle Forum treatment on the quantity of EFL written output in terms of number of words, Language Units and Clauses. The study is considered to be significant in the context of Omani learners being exposed to increased ICT intervention in their social and academic life. A quazi-experimental study was conducted among diploma level students (N=28) at Al Musanna College of Technology under Ministry of Manpower, Oman. The findings and analysis of both quantitative and qualitative data revealed that Moodle Forum intervention can have significant impact on the participants' EFL written output. The study recommends that students and teachers should integrate ICT tools in ELT appropriately.
Keywords: ELT, ICT moodle, Oman, writing,

Introduction

Information and Communication Technology has impacted every aspect of modern life such as learning, working, socializing, playing and so on. This has revolutionized the way the youth access information, communicate, give and take help, and learn. According to Yunus, et al. (2010) ICT integration is a trend in the modern educational system. Modern day tech-savvy youth use technology in their lives for many purposes such as researching or studying, shopping, socializing and gaming (Yilmas & Orhan, 2010). ICT promotes better economic productivity and exchange of information enabling effective people-participation. Considering the immense potential of ICT in economic, social and educational advancement, the Governments and World bodies initiated ICT implementation in almost all fields (UNESCO, 2013; Hu & Webb, 2009). As a result, the growth of ICT use worldwide has increased significantly over the years. For example, the personal use of Internet in 2001 was 8%, but it increased sharply in 2013 i.e. 39%. 15% of mobile subscription in 2000 rose to 96% in 2013; wired broadband and mobile subscriptions increased from 5% and 4% in 2007 to 10% and 26% in 2013 respectively (ITU, 2013-World Statistics). This increase in the use of ICT has positively influenced the different areas of modern Education. Robertson and Al-Zaharani (2012) in their study in the field of education found that the participants have exposure to computers, training and increasing access to resources; and ICT will continue to increase motivation, computing habits of students and teachers in the field. As a result of increased use of ICT in education, a number of educational software is being produced to facilitate the learners' language learning and practicing (Dettori & Lupi, 2010).

Definition

ICT (Information and Communication Technologies) can be generally defined as technologies that compute, transmit, communicate and store information (Hilbert, 2011). In the context of this paper, ICTs (Information and Communication Technologies) is referred as a "diverse set of technological tools and resources which are used to communicate, and to create, disseminate, store, and manage information." (Ghasemi & Hashemi, 2011). The internet, computers, telephony and broadcasting technologies (television and radio) and various other tools (including recent social media and mobile technology) are included in these technologies. Some of these technologies such as radio and television are older than the new internet based technologies.

Technologies that communicate through the use of computers, Internet and telephone have become the focus of most of educational studies in recent times. The modern world is provided with a vibrant Information and Communication Technology (ICT) including Broad-band, wireless and mobile computing consisting social media such as social networking sites, blogging and micro-blogging (Haythornthwaite & Kendall, 2010). ICT with education technology consists of different software and hardware (Kohnke, 2012). Education technology in ICT, therefore can be defined as educational practice based on pedagogical theory, development and administration of resources, process, evaluation and implementation. The four requirements of ICT in educational institutions are the shared vision of administration and staff, the access to ICT, the technical assistance and the staff development (Kohnke,2012) in terms of the importance of ICT, the easy ICT access for students and staff, and the maintenance of ICT labs and devices, and the ICT training and handling.

ICT therefore is an expression of different electronic services, internet (network), software (applications) and devices (hardware) for communication. It's an all embracing concept

consisting of all communication gadgets of modern social life and their using with an aim of promoting information exchange through the process of communication (Vodopivech & Samec, 2012). Thus, ICT (Information and Communication Technology) has become an integral part of modern education including English Language Teaching and Learning (ELTL).

Different Information and Communication Tools

Many EFL studies (So, Choi, Lim, & Xiong.,2012; Mama-Temotheou & Hennessy, 2013) revealed that use of ICT tools in language learning has positive outcomes such as better access to information, providing efficient resources, and increased learning and motivation. Researchers therefore have shown an overwhelming interest in using different ICT tools in facilitating ELL (English Language Learning). Kizil (2011) in her study on the use of ICT in ELL, for instance, found that commonly used ICT tools are the internet, presentation tools, software for processing texts and structure drilling, and communicative language tasks; the participants of the study had positive attitude towards using ICT in EFL teaching and learning, and they regarded ICT integration in education was more advantageous than traditional methods of instructions.

Many other studies (Table 1) examined the effectiveness of ICT tools that range from email (Evans, 2012; Liu, 2011), Wikis, blogs to Chats (Alshumeimeri, 2011; Miyazoea, & Anderson, 2012; Alwi, Adams, & Newton., 2012; Chen, 2012). Podcasting (Rahmi & Katal, 2012), tablets – ipads/ipods and mobile phones (Martin & Ertzberger, 2013; Hu, Hwang, & Chang.,2013) are other latest ICT tools for mobile learning. Moreover, social media such as Facebook and Youtube (Ghasemi, 2011; Lairea, Casteleyn, & Mottart., 2012; Alias, Manan, Yusof, & Pandian., 2012) are also used in ELT. The study (Gitsaki & Alabbad, 2012) on mediated learning revealed how the use of ICT tools positively impacted EFL students' attitude towards ELL (English Language Learning) through technology, and its impact on their language skills. All these studies demonstrate the significance of different ICT tools in facilitating learning and practice of language skills.

Table 1. *ICT tools*

ICT Tools	Author
Internet, Software – text processing, Presentation tools	So, Choi &Xiong, 2012; Mama-Temotheou& Hennessy, 2013
E-mail	Liu, 2011; Evans, 2012
Chat, Forums, Blogs and Wikis	Alwi, et al., 2012; Miyazoea, & Anderson, 2012; Chen, 2012; Alshumeimeri, 2011
Mobile-phones and Tablets-ipads/ipods	Hu, et al. 2013; Martin &Ertzberger, 2013
Podcasting	Rahmi&Katal, 2012
Youtube and Facebook	Ghasemi, 2011; Alias, et al., 2012; Laire, et al., 2012

Advantages of ICT

Following points highlight some of the advantages of ICT with reference to EFL/ESL teaching and learning.

- ICT can be used for pleasure, study and work purposes. EFL/ESL learners can use it for

pleasure in terms of enhancing language skills such as listening, speaking, reading and writing to supplement their classroom language use.

- The use of ICT motivates the learners enabling them do better in their pursuit of knowledge and skill (Punie, 2007) in a new learning environment and experience. This helps learners engage in using authentic language and linguistic resources.

- The language learning through ICT not only enhances the linguistic skills, but also the learner's competence in using technology, which is essential for future employment, higher education, personal development and their role in the modern society (Markovac and Rogulja, 2009). English language proficiency with technical skills increases employability of the graduates.

- ICT eliminates geographical barriers to learning. Students can access information and resources from all parts of the world resulting in increased learning. ICT tools such as Chats, Online Forum Discussions (OFDs), etc. would open opportunities for cross-cultural and continental interaction in the target language.

- ICT facilitates student centered autonomous learning in the absence of face-to-face teaching and learning. Students can study anytime and anywhere according to their needs. This facilitates independent use of EFL/ESL.

Disadvantages of Using ICT
Following points summarize some of the disadvantages of ICT usage in general and ICT in ELT in particular.

- Some scholars (Kirkorian, Wartella and Anderson, 2009) believe that children study better from real-life experiences than from the learning through ICT. The use of ICT limits the learners only to a virtual learning platform away from classroom learning with their peers.

- Young learners are vulnerable and they might be negatively influenced by the numerous contents that they are exposed through ICT. The matured adults or parents have no control over the vast amount of information available to the learners through ICT (Roberts, et al., 1999). ELT practitioners should exercise discretion in involving learners in ICT mediated language learning.

- ICT often encourages passive learning without being actively involved with others in the learning process. The learners spend most of the time in a virtual learning environment resulting in limited personal socio-cultural interaction. This limits the learners' inter-personal relationships and interactions (Bushati, et al, 2012).

- ICT can cause 'digital gap' among the learners. The learners who have more accessibility to ICT would out-do other learners who have less exposure to ICT. Similarly, the learners' familiarity with the ICT tools also affects their learning that the learners who are more skilled in the use of ICT tools tend to take better advantage of learning target language than the learners who are not equally skilled.

- Learners may focus more on technical skills than the learning that is the primary goal of ICT usage especially in ELT. EFL/ESL learners therefore may not be able to utilize the language learning time and effort as they might be distracted by the technical elements in the ICT usage.

- Teachers may not be well equipped and updated with the use of ICT tools resulting in slow teaching and learning process. This will also cause communication gap between the

learners and teachers. EFL/ESL professionals especially the teachers should be trained and updated regularly in using ICT tools that could effectively be used in EFL/ESL teaching and learning.

Caution in using ICT

ELT professionals and EFL/ESL learners therefore should be cautious in using ICT considering its merits and demerits. Jones and Cuthrell (2011) while writing about the positive aspects of ICT tools in EFL teaching and learning, he warns the participants about the quality and content of the ICT materials, the vastness of the resources and the copyright law. They suggest that teachers should critically and carefully choose ICT tools and resources to make use of them in the classes in promoting language learning. However, the significance and relevance of ICT in modern ELT is unquestionable as different instructional methodologies for using ICT tools and online resources are made available to teachers and students (Snelson, 2011). ICT with all its perceived disadvantages therefore can be used to supplement traditional classroom teaching providing examples of authentic use of the foreign language in terms of an integrated framework of all skills – Listening, Speaking, Reading and Writing.

ICT Penetration in Oman

As this study is designed in an Omani context in Arabian Gulf using ICT in EFL, an understanding of ICT use in the region would give a better insight into its importance. The use of Internet and mobile subscriptions increased in Arab countries in general and Oman in particular. For example, In Arab Countries, the Internet usage rose from 8% in 2006 to 38% in 2013; and the mobile subscriptions also increased from 39% to 105% in the same period (ITU, 2013). According to the statistics (TRAO, 2013) Oman has 146% of mobile connection including 98% of its population; the fixed line connection per household is 82%; the active mobile broadband subscription is 53%; and 32% of fixed internet subscription. This accounts for a fast growing trend in using ICT in Oman.

ITA (2012) in its survey on ICT and higher Education in Oman found that 62% of tertiary educational institutions in Oman offer degrees in ICT specialization. The fixed broadband internet connectivity and LAN in tertiary level educational institution in Oman is 99%; and Wifi and email are provided to staff and students in 88% of Omani institutions of higher Education. The survey also found that 90% of Omani employees in those institutions have ICT skills. However, According to Marzban (2011) the use of ICT is a new undertaking in the region; and teachers and educationalists are prompted to give much attention to the importance of integrating ICT in EFL teaching and learning because of its fast growing popularity.

A Study on ICT Application in an Omani EFL Writing Context

Based on the literature review and the researcher's own exposure to ICT in EFL teaching and learning in Sultanate of Oman (as the researcher is a resident in Oman) an empirical study was undertaken using Moodle as an ICT platform with special focus on Writing. The need for the study is evident from the lack of literature in the field of ICT focusing on writing in EFL. Al-Aufi and Al-Azri (2013) found that less study has been done to find the effectiveness of ICT in language teaching and learning with a special emphasize on writing; and they also observed that the ICT integration into language learning could increase the information literacy of learners in Oman. Moreover the learners are found exposed to ICT in their daily social life and academic life in the region. The lack of relevant studies on using these ICT tools in developing writing

skills therefore may deprive language teachers in Oman to comprehend possible areas and causes of ICT that may impact their learners' EFL skills in general and writing performance in particular.

Research Objective and Questions

The study was undertaken with the objective of finding out the effectiveness of using ICT tools for writing on the quantity of EFL written output and the learners' attitude towards ICT intervention in EFL writing. This section therefore focuses on the effectiveness of ICT mediated writing treatment on the linguistic quantity of EFL written output and learner perception on the treatment. Based on the objective, the following research questions with their null-hypothesis are formed to investigate the effectiveness of the ICT mediated writing treatment on the EFL written output.

1) Is there a significant difference between the quantity of words in EFL written output before and after the ICT mediated writing treatment?
2) Is there a significant difference between the quantity of Language T-Units in EFL written output before and after the ICT mediated writing treatment?
3) Is there a significant difference between the quantity of clauses in EFL written output before and after the ICT mediated writing treatment?
4) What are the attitudes of the participants towards ICT mediated EFL writing treatment?

Hypothesis

The following null-hypotheses were formed to test the significance of the findings of the study.

1) There is no significant difference between the quantity of words in EFL written output before and after the ICT mediated writing treatment.
2) There is no significant difference between the quantity of Language T-Units in EFL written output before and after the ICT mediated writing treatment.
3) There is no significant difference between the quantity of clauses in EFL written output before and after the ICT mediated writing treatment?

Methodology and Study Design

A comparative experimental study design was set up. The students were enrolled in an e-learning course on Moodle. The researcher used the Forum tool on Moodle as the ICT tool for the study. 10 topics (Appendix A) were listed on the page for the students to write/discuss electronically following the teacher's instructions. The topics are selected to promote argumentative writing, and they were relevant to the learners' academic and social context. For example, the students were asked to write electronically about *students' using mobile phone in the class*, *working Omani women*, *sports in Omani colleges* and so on.

The participants are 28 Omani EFL learners at the college level, whose mother tongue is Arabic. The participants are selected randomly according their original section grouping by the administration. All the participants have completed their certificate level English writing course, and they are admitted to their Diploma level. The students are aged between 18 – 23, and they are a mixture of males and female participants who are 15 and 16 in number respectively. All the participants have belonged to a homogenous group of native Arabic speakers who are learning EFL writing as part of their Diploma level course in Engineering and IT (Information Technology). All the participants are equally exposed to different ICT uses at the college

commencing from their foundation level courses. All of the participants hail from a semi-urban background that has satisfactory ICT penetration. All of them have smart phones with internet connectivity at college and at home.

A pretest was administered for the students before their writing using Moodle forum tool as the ICT tool. The pretest was a writing task on selected topic for 40 minutes closely following the students' level exit writing exam (LEE) model (administered in the College). The test-format used in the pretest and posttest assesses the learners' argumentative writing ability in EFL. Argumentative essay writing is one of topics taught and practiced in the course. The students should learn to express their arguments and counter-arguments on the topics given in an essay format. Since the discussion tasks on the forum treatment are designed to facilitate the participants to express their opinion or arguments on selected topics, and the learners are prepared for argumentative essay writing in their LEE, the choice of the pretest format is quite suitable to the study.

After the pretest, the students were given training for two weeks on how to use the forum tool for interactive electronic writing using Moodle Forum. The training includes assigning the learners a computer lab equipped with one system for each one. The participants with the help of a technician are demonstrated how to switch on the system, log-in, and log out of their Moodle course. The teacher assigned with the help of the technician has explained various features of Moodle forum, and how the participants can post their views and respond to their friends' post. Appendices A includes screen shots of the list of topics uploaded on the Moodle course page; and some of the forum samples of students' writing. The training has helped the participants know and practice how to use Moodle forum tool for writing. From the third week onwards and the learners were asked to involve in a meaningful Moodle Forum mediated Forum writing for 40 minutes on every Thursday for a period of one semester (10 weeks) on given topics on their own. The learners discussed or wrote online about current topics such as women education, use of mobile phones in classrooms, sports in colleges, etc., which are relevant to their social and educational context, and thus finding it more meaningful and purposeful in contributing to the discussion. The students were regularly given feedback on their writing on Moodle forum. After the treatment period, a post-test was conducted following the same pretest criteria. The quantitative (written output through tests) therefore has been collected through pretest and posttest. The quantitative data was analyzed using descriptive and inferential statistics using SPSS (2.0). The paired sample t-test was used to analyze the quantitative data.

Test Instrument

As mentioned above, the researcher used writing tasks on selected topics based on the learners' Level Exit Exam (LEE) criteria for pretests and post-tests. The learners were given 40 minutes each for the pre-test and post test to write about the topic argumentatively or expressing their opinions. The sample topics were *road accidents in Oman, use of telephone in classrooms*, etc.

Writing Measure (Hirotani, 2009)

The following writing measure (Hirotani, 2009; Table 2) was used to measure the quantitative data - results of pre-test and post-test in terms of the Quantity of EFL written output (Appendix B).

Table 2. *Writing Measure* **(Hirotani, 2009 (Adapted)**

Category	Subcategory	Measure
	Word	Number of words
Language Output	Language Unit	Number of T-Units
	Clause	Number of Clauses

Many researchers have considered language output as the quantity of language produced in terms of number of words, language units (T-Units) and number of clauses (Hirotani, 2009). Egi (2010;p.8) defines that "tokens are number of words in a text or corpus; and types are number of different words". A T-unit refers to "minimum terminable unit" (Nagy & Beers, 2007:p.188), which includes both an independent clause and any number of dependent clauses; and while measuring the quantity, the number of clauses is separately counted.

Interview

A semi-structured interview was conducted to collect qualitative data to get a better insight into the participants' attitude towards Moodle Forum treatment. About 10 questions covering different aspects of the treatments such as the learners' feeling. Difficulty and challenges, language improvement, technical problems were initially prepared and used for qualitative data collection.. The qualitative method enabled the researcher to understand the learners' attitudes towards the Forum intervention in EFL writing. The qualitative method of data collection is found to be significant because the researcher could not have understood the attitudinal aspects of the treatment through the quantitative data collection alone. Three interviewees were selected based on their performance in the Moodle Forum treatment. S1 (Student1) can be considered as one of the best participants and other two (S2, S3) are of moderate as observed by the researcher.   The interview was recorded, transcribed, coded into main categories and subcategories, and interpreted.

Findings

A paired Samples T-Test was conducted to compare the difference between various dependent variables in the Forum mediated writing pretest and the posttest in terms of quantity in accordance with the research questions. This section for the analysis of the finding of the study focuses only on the quantity of language output as a result of Moodle Forum intervention as an ICT tool in writing.

*Question 1***:** Is there a significant difference between the quantity of words in EFL written output before and after Moodle-forum writing treatment?

The paired Samples descriptive Statistics (Table 3) showed that there was a significant difference in the mean scores for the number of words in the pretest (M = 181.03, SD = 74.50) and the post-test (M = 274.57, SD = 55.39); and t (27) = -7.478, p = 0.000 (p < .05) (Table 4) These results suggest that electronic writing (synchronous) does have an effect on the quantity (number) of words in the written output. Particularly, the study result revealed that when Omani EFL learners involve in Moodle-forum mediated writing (online forum discussion synchronously), the number of words increases in their written output

Table 3. *Descriptive statistics for the quantity of words*

Paired Samples Statistics

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	Number of Words (Pre-test)	181.0357	28	74.50	14.08
	Number of Words (Post-test)	274.5714	28	55.39383	10.47

Table 4. *Statistical Test: Number of Words*
Paired Samples Test

	Paired Differences					t	df	Sig. (2-tailed)
	Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
				Lower	Upper			
Words (Pre&Posttests)	-93.54	66.19	12.51	-119.20	-67.87	-7.48	27	.000

Question 2: Is there a significant difference between the quantity of Language T-Units in EFL written output before and after Moodle Forum mediated writing treatment?
        The paired Samples descriptive Statistics (Table 5) showed that there was a significant difference in the mean scores for the number of language T-Units in the pretest (M = 22.39, SD = 8.39) and the posttest (M = 31.79, SD = 7.94); t (27) = -5.510, p = 0.000 (p <. 05) (Table 6). These results suggest that electronic writing (synchronous) does have a statistically significant effect on the quantity (number) of language T-Units in the written output. Particularly, the study result revealed that when Omani EFL learners involve in Moodle Forum writing asynchronously), the number of language T-Units increases in their written output.

Table 5. *Statistics: Quantity of Language T-units*

Paired Samples Statistics

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	Language T-Units (Pre-test)	22.39	28	8.39	1.59
	Language T-Units (Post-test)	31.79	28	7.94	1.50

Table 6. *Statistical Test: Quantity of Language T-units*
 Paired Samples Test

		Paired Differences					t	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower	Upper			
Pair 1	T-Units (Pre&Posttests)	-9.39	9.02	1.70	-12.89	-5.90	-5.510	27	.000

Question 3: There is no significant difference between the quantity of clauses in EFL written output before and after Moodle Forum mediated writing?

The paired Samples descriptive Statistics (Table 7) showed that there was a significant difference in the mean scores for the number of clauses in the pretest (M = 13.82, SD = 6.13) and the posttest (M = 23.18, SD = 8.48); and t(27) = -5.309, p = 0.000 (p <.05) (Table 8). These results suggest that Moodle-forum mediated EFL writing has a statistically significant effect on the quantity of clauses in the written output. Particularly, the study result revealed that when Omani EFL learners involve in Moodle forum writing, the number of clauses increases in their written output.

Table 7, *Statistics: Number of Clauses*
 Paired Samples Statistics

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	Clauses Pre-test)	13.82	28	6.13	1.16
	Clauses Post-test)	23.18	28	8.48	1.60

Table 8. *Statistical Test: Quantity of Clauses*
 Paired Samples Test

		Paired Differences					t	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower	Upper			
Pair 1	Clauses (Pre&Post tests)	-9.36	9.33	1.76	-12.97	-5.74	-5.31	27	.000

What are the attitudes of the learners towards electronic writing?

The interview found that the participants were generally very positive about ICT mediated writing (Moodle forum writing). For example one of the interviewees (Participant 1) said that *I am so happy because it's easy, and it helps to build the future so fast, and I think the other reason that makes me happy: I love electronic things."* Another interviewee (Participant 2) remarked *"I feel comfortable, and I feel pleasure that we used another type of writing; we changed the routine of the old type of writing which is by paper; for that I feel I used something that will ..I will get benefit.."* However, the participants felt some challenges too. One of the interviewees (Participant 3) said *"Bad feeling. Because I lose everything, every information"*.

To summarize the attitudes, the interview analysis helped the researcher to find out themes such as motivation, newness of ICT and its Challenges. Students were motivated to use the new type of writing for their passion for ICT devices such as computers, laptops, ipads, smartphones, etc. The learners also felt that ICT mediated writing, is new to them compared to the traditional paper-and-pen writing, and they felt some practical value in pursuing Moodle forum writing. Nevertheless, the words of the interviewees conveyed that ICT mediated writing posed some difficulties or challenges to them; for example, the abrupt deleting of what the *learners write, their lack of computer or keyboard skills and the malfunctioning of the system while writing..*

Discussion

The study found that ICT mediated writing treatment has statistically significant effect on the EFL learners' writing performance in terms of quantity – number of words, number of Language T-units and number of clauses. One of the reasons could be their motivation to write using ICT tools.

The qualitative data collected through interview was analyzed and found that students were more motivated in the interactive ICT mediated writing tasks such as Moodle forum written exchange in EFL teaching and learning for its newness and students' liking for electronic gadgets such as smart phones, tablets, laptops, etc. The learners had a very positive feeling for the use of the Forum as the ICT tool. The interactive element in the ICT mediated Forum writing distinguished it from individual ICT mediated asynchronous writing. The learners expressed their interest to participate more in ICT mediated writing sessions in their EFL courses.

Limitation of the study

The study included only 28 participants from Al Musana College of Technology, and it lasted only for a period of one semester i.e. about 10 weeks. The study did not consider the demographic distribution of the participants that no separate analysis has been done to see whether the forum treatment has a different effect among males versus females. The cultural and social implication of the use of ICT in ELT could not be studied. The study was mainly focused on the effect of using Moodle Forum on the quantitative EFL written output of the selected participants and their attitudes towards the treatment. A different study including more participants from different parts of the country may yield a different result.

Conclusion and Recommendations

Based on the review of different works on ICT in ELT and the findings of the study, one could conclude that ICT integration can enhance the effectiveness of English Language Teaching and Learning. Though it cannot replace the traditional face-to-face curriculum, it can effectively

supplement it. The use of ICT and its different tools are more appealing to modern day technology oriented learners who are very much used to advanced smart devices such as tablets and smart phones with their numerous applications unlike any other learners of the past. Studies (Vodopivech & Samec, 2012) have revealed that ICT usage can only benefit the learners more than it can disadvantage them. The stake holders and policy makers therefore should give enough emphasis on the integration of ICT in language learning by creating appropriate policies and ensuring ICT infrastructure across the curriculum. Educational institutions should be well equipped with ICT devices and LMS (Learning Management Systems) to meet the learning needs of students. The learners should get free and easy access to ICT tools in their language learning process minimizing the digital gap i.e the social economic inequality in accessing and using ICT tools (Harvey, 2014). The educational institutions world wide, in Oman and Middle East in particular should incorporate ICT in EFL teaching and learning more effectively. The teachers and students should be given due training in the use of keyboard typing, LMS (Learning Management System) such as Moodle, Blackboard, etc. This will not only encourage the learners' ELL (English Language Learning), but also equip the learners to meet ICT demands at job markets.

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References

Al-Aufi & Al-Azri, (2013). *Information literacy in Oman's higher education: A descriptive-inferential approach.* Sultan Qaboos University. Department of Informationstudies.http://lis.sagepub.com/content/early/2013/05/08/0961000613486824.abstract retrieved on July 22, 2013.

Alias, A.A, Manan, N.A, Yusof, J & Pandian, A., (2012).The use of Facebook as Language Learning Strategy (LLS) Training Tool on College Students' LLS use and Academic Writing Performance .*Procedia - Social and Behavioral Sciences*, *Volume 67*, 10 December 2012, Pages 36–48. http://www.sciencedirect.com/science/article/pii/S1877042812052913 retrieved on July 20, 2013

Alshumaimeri, Y. (2011). The effects of wikis on foreign language students writing performance. *Procedia – Social and Behavioural Sciences, Volume 28*. Page 755 – 765. http://www.sciencedirect.com/science/article/pii/S187704281102578X retrieved on July 20, 2013.

Alwi, N.A., Adams, R. & Newton, J. (2012). Writing to learn via text chat: Task implementation and focus on form. *Journal of Second Language Writing*, *Volume 21*, Issue 1, March 2012,

Pages   23–   39.   http://www.sciencedirect.com/science/article/pii/S1060374311000658 retrieved on July 21, 2013.

Balcikanli, C. (2010, January). Long live, YouTube: L2 stories about YouTube in language learning. In *Annals of Language and Learning*. Proceedings of the 2009 International Online Language Conference (IOLC 2009*)* (p. 91). Universal-Publishers.

Bushati, J., Borroli, E., Dibra, G. and Haveri, A. (2012). *Advantages and Disadvantages in Using ICT in Education*. http://bederweb.majdanoz.net/Conferences/ICES   retrieved on March 28, 2015

Evans, S. (2012). Designing email tasks for the Business English classroom: Implications from a study of Hong Kong's key industries. *English for Specific Purposes*, *Volume 31*, Issue 3, July   2012,   Pages   202–212. http://www.sciencedirect.com/science/article/pii/S0889490612000166 retrieved on July 21, 2013.

Chen, K.T.C. (2012). Blog-Based Peer Reviewing in EFL Writing Classrooms for Chinese Speakers. *Computers and Composition*, *Volume 29,* Issue 4, December 2012, Pages 280–291.   http://www.sciencedirect.com/science/article/pii/S8755461512000564   retrieved   on July 21, 2013.

Chen, Y.L. (2008). A mixed-method study of EFL teachers' Internet use in language instruction. *Teaching and Teacher Education24* (2008). 1015 – 1028.

Dettori, G &Lupi, V. (2010). ICT and new methodologies in language learning. *Procedia- Social and Behavioral Sciences2* (2010) 2712–2716.

Fahim, M., Motallebzadeh, K. & Sazegar, Z. (2011). The Effect of E-mailing on Vocabulary Retention of Iranian Lower Intermediate EFL Learners. *Journal of Language Teaching and Research*, *Vol. 2*, No. 6, pp. 1385-1391, November 2011.

Ghasemi, B &Hashemi, M, (2011) ICT: New wave in English language learning/teaching. *Procedia Social and Behavioral Sciences 15* (2011) 3098–3102

Gitsaki, C., &Alabbad, A. (2012). *ICT Integration in Post-Secondary English Teaching and Learning: Evidence from Blended Learning Programs in the Arabian Gulf.* http://www.igi-global.com/chapter/ict-integration-post-secondary-english/68678   retrieved   on   July   23, 2013.

Gold, S., 2001. A constructivist approach to online training for online teachers. *Journal of Asynchronous   Learning   Networks   5   (1),   35–57.* citeseerx.ist.psu.edu/viewdoc/summary?doi=10.1.1.116.8031 retrieved on March 30, 2015.

Harvey,   B.   (2014).   *Bridging   the   Digital   Divide   in   Classrooms.* http://www.edweek.org/tm/articles/2014/07/02/ctq-harvey-digital.html?tkn=YYWDtmTLb%2F6pItvadGxbG1u3Q07nisAk8oug&print=1 retrieved on May 28, 2015.

Haythornthwaite, C., & Kendall, L. (2010). Internet and community. *American Behavioral Scientist.*   http://abs.sagepub.com/content/early/2010/02/19/0002764209356242.full.pdf. retrieved on July 14, 2010

Hilbert, M. (2011). The end justifies the definition: The manifold outlooks on the digital divide and their practical usefulness for policy-making. *Telecommunications Policy*, *35*(8), 715-736.

Hirotani, M. (2009). Synchronous Versus Asynchronous CMC and Transfer to Japanese Oral Performance.*CALICO   Journal   26* (2).https://calico.org/memberBrowse.php?action=article&id=749   retrieved   on   July   18,

2013.

Hu, C, K., Hwang, G.J. & Chang, C.K. (2013). A personalized recommendation-based mobile learning approach to improving the reading performance of EFL students. *Computers& Education, Volume 63*, April 2013, Pages 327–336.http://www.sciencedirect.com/science/article/pii/S0360131512002886

ITU. (2013). *Global ICT developments.* http://www.itu.int/en/ITU-D/Statistics/Pages/stat/default.aspx retrieved on July 23, 2013. 81

Jaris, H. (2013). Computer Assisted Language Learning (CALL): Asian Learners and Users going beyong the Traditional Framework. *Asian EFL Journal, 1* (2013) 190 – 201.

Jones, T., &Cuthrell, K. (2011). YouTube: Educational potentials and pitfalls. *Computers in the Schools*, *28*(1), 75-85. http://www.tandfonline.com/doi/pdf/10.1080/07380569.2011.553149

Kelsen, B. (2009). Teaching EFL to the iGeneration: a survey of using Youtube as supplementary material with college EFL students in Taiwan. Computer-Assisted Language Learning – Electronic Journal, 10(2). Retrieved April 10, 2014 from http://callej.org/journal/10-2/kelsen.html

Kim, K. (2012). L2 Phone-based interaction (PBI) and Development of Communicative competence: A Case Study of An Adult's English Learning in EFL context. *Asian EFL Journal. Volume 14* (2012), Issue 3.

Kirkorian, H. L., Wartella, E. A., nad Anderson, D. R. (2008). Media and young children's learning. *Future of Children, 18,* 39-61. http://www.princeton.edu/futureofchildren/publications/docs/18_01_03.pdf. Retrieved on 30.03.2015

Kizil, S.A. (2011). EFL teachers' attitudes towards information and Communication Technologies (ICT). *5th International Computer & Instructional Technologies Symposium*, 22-24 September 2011, Fırat University , ELAZIĞ- TURKEY. http://web.firat.edu.tr/icits2011/papers/27786.pdf retrieved on July 23, 2013.

Kohnke, L. (2012). Facilitating the Implementation of ICT to teachers. *Asian EFL Journal. 64* (2012). 75 – 84.

Lairea, D., Casteleyn, J. & Mottart, A (2012). Social Media's Learning Outcomes within Writing Instruction in the EFL Classroom: Exploring, Implementing and Analyzing Storify. *Procedia - Social and Behavioral Sciences, Volume 69*, 24 December 2012, Pages 442–448. http://www.sciencedirect.com/science/article/pii/S1877042812054183 retrieved on July 21, 2013.

Leino, K (2014) The Relationship between ICT Use and Reading Literacy. https://ktl.jyu.fi/julkaisut/julkaisuluettelo/julkaisut/2014/t030.pdf. Retrieved on March 30, 2015.

Liu, Y. (2011). Power perceptions and negotiations in a cross-national email writing activity. *Journal of Second Language Writing, Volume 20*, Issue 4, December 2011, Pages 257–270. http://www.sciencedirect.com/science/article/pii/S1060374311000397 retrieved on July 21 2013.

Mahfouz, S.M.&Ihmeideh, F.M. (2009) Attitudes of Jordanian university students towards using online chat discourse with native speakers of English for improving their language proficiency. *Computer Assisted Language Learning*, *22* (3), 207-227, DOI: 10.1080/09588220902920151

Mama-Timotheou, M., & Hennessy, S. (2013). Developing a typology of beliefs and practices

concerning classroom use of ICT. *Computers & Education*. http://www.sciencedirect.com/science/article/pii/S0360131513001504 retrieved on July 23, 2013

Markovac, V. and Rogulja, N. (2009). Key ICT competences of kindergarten teachers. In *8th special focus symposium on ICESKS: Information, Communication and Economic Sciences in the knowledge society* (p. 72-77). Zadar: Faculty of Education , University of Zagreb in ENCSI database. Martin, F. &Ertzberger, J. (2013). Here and now mobile learning: An experimental study on the use of mobile technology. *Computers & Education,* Volume 68, October 2013, Pages 76–85. http://www.sciencedirect.com/science/article/pii/S0360131513001140 retrieved on July 20, 2013.

Marzban, A (2011). Improvement of reading comprehension through computer-assisted language learning in Iranian intermediate EFL students. *Procedia Computer Science*(2011). 3-10.http://www.sciencedirect.com/science/article/pii/S1877050910003789   retrieved   on August 1, 2013.

Mayora, C. A. (2009). Using YouTube to encourage authentic writing in EFL classrooms. *TESL Reporter*, *42*(1), 1-12. *TESL Reporter (42)* 1 − 1 − 12.

Miyazoea, T. & Anderson, T. (2012). Discuss, reflect, and collaborate: A qualitative analysis of forum, blog, and wiki use in an EFL blended learning course. *Procedia - Social and Behavioural Sciences* 34 (2012). Pages 146 – 152. http://www.sciencedirect.com/science/article/pii/S1877042812003357 retrieved on July 21, 2013.

Motallebzadeh, K. (2011). Integrating Emailing Tasks into EFL Reading Comprehension Classrooms. Journal of Language Teaching and Research, Vol. 2, No. 4, pp. 881-886, July 2011.

Pop, A., Tomuletiu, E.A. & David, D. (2011). EFL speaking communication with asynchronous voice tools for adult students. *Procedia Social and Behavioral Sciences,2* (2010) 773–777.

Punie, Y. (2007). Learning spaces: an ICT-enabled model of future learning in the knowledge-based society. *European Journal of Education, 42*. http://onlinelibrary.wiley.com/doi/10.1111/j.1465-3435.2007.00302.x/full. Retrieved 30. 03. 2015.

Rahimi, M &Katal, M. (2012).The role of metacognitive listening strategies awareness and podcast-use readiness in using podcasting for learning English as a foreign language. *Computers in Human Behavior*, *Volume 28*, Issue 4, July 2012, Pages 1153–1161. http://www.sciencedirect.com/science/article/pii/S0747563212000271 retrieved on July 20, 2012.

Roberts, D. F., Foehr, U. G., Rideout, V. J., and Brodie, M. (1999) *Kids and Media @ the New Millenium*. https://kaiserfamilyfoundation.files.wordpress.com/2013/01/kids-media-the-new-millennium-report.pdf. Retrieved on 30.3.2015

Robertson, M., & Al-Zahrani, A. (2012). Self-efficacy and ICT integration into initial teacher education in Saudi Arabia: Matching policy with practice. *Australasian Journal of Educational Technology*, *28*(7), 1136-1151.http://www.ascilite.org.au/ajet/ajet28/robertson.html retrieved on July 23, 2013.

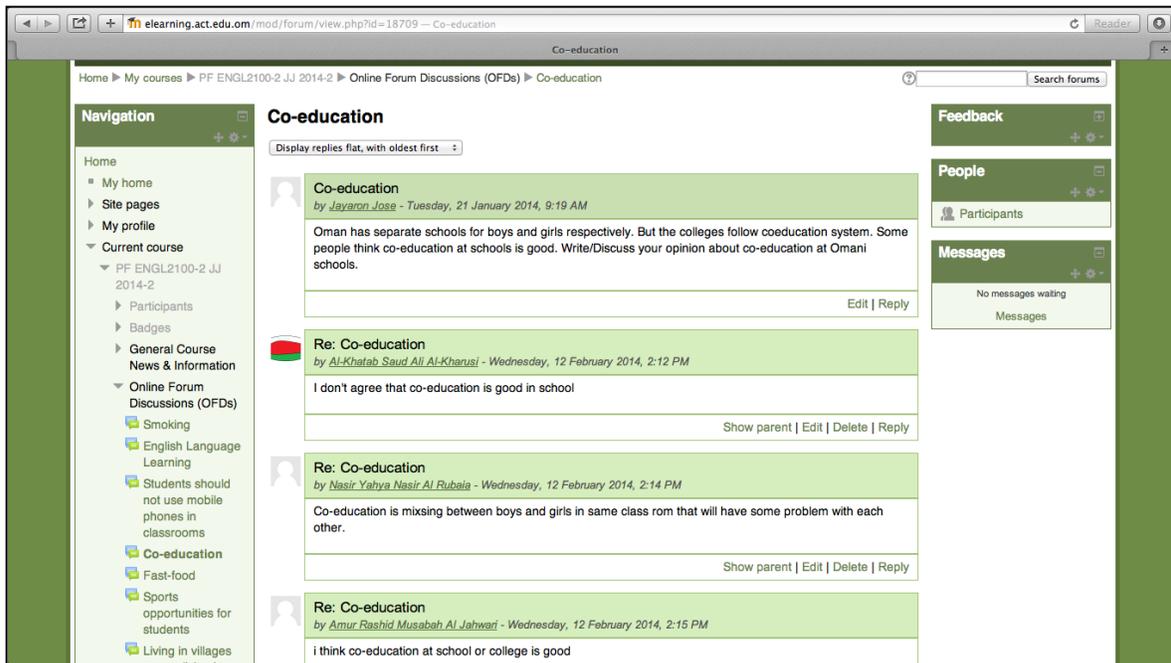Snelson, C. (2011). YouTube across the disciplines: A review of the literature. *MERLOT Journal of Online Learning and Teaching*.http://scholarworks.boisestate.edu/cgi/viewcontent.cgi?article=1010&context=ed

tech_fac pubs retrieved July 23, 2013.

So, H. J., Choi, H., Lim, W. Y., & Xiong, Y. (2012). Little experience with ICT: Are they really the Net Generation student-teachers? *Computers & Education*, *59*(4), 1234-1245. http://www.sciencedirect.com/science/article/pii/S0360131512001297 retrieved on July 23, 2012.

Teale, W. (2013). Better start before kindergarten: Computer technology, interactive media and the education of preschoolers. *Asia-Spacific Journal of Research, Vol.7*.No.2 (2013). http://www.academia.edu/4056866/Better_start_before_kindergarten_Computer_technology _interactive_media_and_the_education_of_preschoolers retrieved on July 25, 2013.

TRAO-Telecom Regulatory Authority of Oman. *(2013). Telecom Market Indicators Report, Q1, 2013*
http://www.tra.gov.om/newsite1/Portal/Upload/Documents/634_OmanTelecomMarketQ12 013.pdf retrieved July 23, 2013.

Venkatesh, V., Thong, J. Y. L., & Xu, X. (2012). Consumer acceptance and use of information technology: extending the unified theory of acceptance and use of technology. MIS Quarterly, 36(1), 157–178.

Watkins, J., & Wilkins, M. (2011). Using YouTube in the EFL Classroom1.*Language Education in Asia, Volume 2, Issue 1,* http://www.camtesol.org/Download/LEiA_Vol2_Iss1_2011/LEiA_V2_I1_09_Jon_Watkin s_and_M ichael_Wilkins_Using_YouTube_in_the_EFL_Classroom.pdf retrieved on July 2013.

Yılmaz, M. B., & Orhan, F. (2010). High school students educational usage of Internet and their learning approaches. *World Journal on Educational Technology*, *2*(2), 100-112.

Yunus, M.Y., Hashim, H., Embi, M.A. and Lubis, M.A. (2010). The utilization of ICT in the teaching and learning of English: 'Tell Me More'. *Procedia Social and Behavioral Sciences9* (2010) 685–691

APPENDIX A
Screenshot of Moodle Forum Writing topics & Sample Forum Writing

APPENDIX B
Quantitative Data Collection Sheet (Sample)

Qualitative Data Collection Sheet (Sample)				
Participant's Name			Participants' Code	
Category	Sub-Category	Measure/Variable	Codes	Number
Language Output	Word	Number of Words	WD	301
	Language Unit	Number of T-Units	LU	40
	Clause	Number of clauses	CL	29