Effectiveness of Online Language Learning

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Abstract— **The study is aimed at understanding the learning trends of students who opt for online language courses and to assess the effectiveness of the same. Multiple factors including use of the latest available technology and the skills that are trained by these online methods have been assessed. An attempt has been made to answer how each of the various language skills is trained online and how effective the online methods are compared to traditional classroom methods when students interact with peers and teaching faculty. A mixed methods research design was followed for collecting information for the study where a survey by means of a questionnaire and in-depth interviews with a number of respondents were undertaken across the various institutes and study centers located in the United Arab Emirates. The questionnaire contained 19 questions which included 7 sub-questions. The study revealed that the students find learning with an instructor to be a lot more effective than learning alone in an online environment. They prefer classroom environment more than the online setting for language learning.**

Index Terms—**effectiveness, language, online learning, skills**

I. INTRODUCTION

THE ever increasing globalization has caused a huge increase in the use of information and communication technology (ICT) in the educational sector which in turn has transformed the way of learning, training and teaching. The extensive use of the various digital technologies along with other suitable forms of learning materials has created an interactive, learner centered, open and flexible environment of online learning. The usefulness of online learning as an effective mode of teaching and learning has not only caught the attention of language educators and practitioners, but has also 'expanded their views on how to create student-oriented and open ended learning environments' [17], the two important aspects of the communicative language teaching.

Communicative approach of language teaching which is considered as the most effective theoretical model since early 1970s demands natural language learning strategies and more open-ended types of activities, such as role-plays, information gap activities, and simulations in a communicative situation, in order to understand the potential communicative functions and social meanings of the linguistic forms [18]. However, research indicates that the communicative approach appears to have brought innovation more on the level of theory than on the level of actual classroom practices [6], [18]. Although challenging, it is necessary to overcome the shortcomings of the traditional language teaching and learning methods by integrating appropriate technologies and instructional strategies in the second or foreign language education field. Therefore, most teachers and students seem to feel that there is a need to make increased use of ICT, particularly computers, CD–ROM multimedia and the Internet in ESL/EFL. This is probably because they think that these materials are flexible, interesting, and entertaining [3].

The Emirate of Dubai launched Dubai Electronic Government in 2001 as part of its initiative to transform itself into a Smart City. The aim of the e-government is not only to facilitate government operations and to provide effective government services, but also to facilitate various e-learning projects. As a consequence of this, several online learning programs have been launched by various educational institutions in the UAE including Hamdan Bin Mohammed Smart University in Dubai to meet an increasing demand of a more flexible learning environment in the country.

According to Abdullah Karam [1], online learning is gaining momentum in the UAE due to the shortage of faculty and staff, the cultural background of male and female students, and the need to continue education. Although online learning system has become a major priority in the UAE [8], there is hardly any evidence of empirical examination of the effectiveness of online language learning. Therefore, it is essential to have a clear understanding of the factors that affect the quality of an online language learning system and are required for an effective implementation of the system. To create an effective, interactive, easily accessible, and distributed online learning system, institutions need to understand and investigate these factors that play a role in online language learning effectiveness.

By studying current trends in online learning around the world and conducting a survey on the same, the current research intends to find out how effectively the online learning programmers are implemented and wants to comprehend the difficulties learners face while learning languages online. Simultaneously, the present study intends to assess whether the latest trends in web technology have been applied in today's teaching scenario, especially with respect to language learning. During the course of the study, the individual's learning of each of these language skills, i.e. reading, writing, speaking and listening was assessed for effectiveness.

Therefore, the main objectives of this research were to:

1) Identify different online tools and examine their effectiveness in online learning.
2) Assess the acquisition of language skills in online environment.

II. LITERATURE REVIEW

A. Tools of Online Language Learning

The use of the internet with regards to learning and teaching has spread rapidly in the education sector. Even in the field of language education, educators have taken interest to model student oriented courses using the latest web tools for courses which have been largely instructor oriented.

There are several tools available to the online language learners. The Yale Centre for Language Study [15] has broadly categorized these tools into audio recording and editing (Vocaroo), photo editing (Pixir), multimedia projects (CLEAR's rich Internet applications), collaborative working and writing (GoogleDocs), presentation (prezi), video-conferencing (Skype), dictionaries and vocabulary learning (wordreference), video-production and editing (Amara), and website and e-portfolios (Weebly). Another researcher Jeong-Bae Son [10] has made a list of online tools that are currently available and freely accessible on the Internet. On the basis of their main functions and features, the online tools have been grouped into twelve categories (Fig.1): learning/content management systems; communication; live and virtual worlds; social networking and bookmarking; blogs and wikis; presentation; resource sharing; Website creation; Web exercise creation; Web search engines; dictionaries and concordancers; and utilities [10].
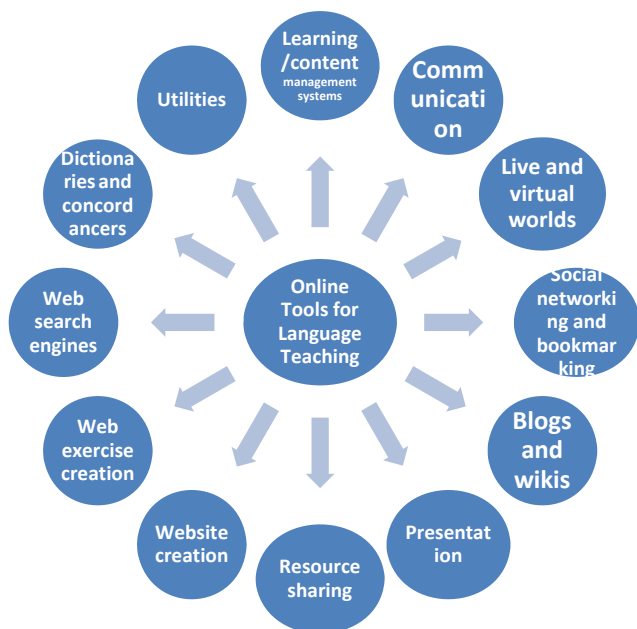

Fig. 1. Categories of online tools of language learning

B. Acquisition of Language Skills

Recently there has been more focus on acquiring communicative skills and improving oral proficiency [3]. This can be achieved through web based instruction (WBI) program, which provides exposure to realistic language learning environments and thus makes the language learning more interactive and lively [3]. A language learning program based on WBI provides practice in the four language skills, reading, writing, listening and speaking.

The review of literature suggests that an online learning environment should be based on the following principles which have been derived from the situated learning theory: (a) provision of authentic activities within contexts, (b) benchmarking experts' thinking and performance, (c) abundant information and multiple points of view, (d) opportunity for practical reflection, (e) cooperative construction of knowledge, (f) clarification of thinking, and (g) coaching [17]. Several researchers have reported that WBI along with computer–mediated communication (CMC), provides learners with rich and authentic language learning environment, and 'an experience of increasing motivation, collaborative learning and social interaction which are meaningful to the learners in the language classroom' [11], [5], [9], [2], [17], [14], [12], [13]. Interestingly, some research studies have found a greater impact of CMC on student's writing proficiency than a face-to-face communication during a semester [14].

Several researchers, however, have also raised doubts about the effectiveness of these online learning systems and have asked questions about the meaningfulness of web-based learning at all levels. According to them, not everyone involved in teaching and learning accepts the claims of the benefits, but rather holds a skeptical view. Such views result either due to lack of awareness of the aims and objectives of WBI, or lack of effective systems necessary for its implementation. Also, the number of research studies carried out on the effectiveness of online language learning including the UAE is quite insignificant. It is worth mentioning here that the literature review did not reveal any research in the UAE about the effectiveness of web based instruction or online language learning in relation to learners' overall language proficiency including the four language skills such as reading, writing, listening, and speaking at any level. Even in the other parts of the world, the available studies are limited to the effective acquisition of writing skills or reading skills in second or foreign language learning [4], [16], [7]. There is very little research done in the area of listening and oral proficiency gained through online learning systems.

Like some earlier studies [14], Cho [4] and Lee's [7] research studies also indicated that writing ability developed more in WBI classes than traditional classes. In another study by Kim [16], however, the finding was different. She reported that in a web-based English reading course, 'the actual output-performance level achieved via CMC interaction was not quite commensurate with previous expectations, especially not in terms of collaborative learning'. Kim [16] carried out one more experiment to evaluate the effects of CMC on students' oral proficiency using a voice-communication CMC

program. She performed this experiment with three different instructional contexts, an FFC-only context, a CMC-only context, and a context where FFC was followed by CMC, and found no significant context effect for the measures of oral proficiency.

III. METHODOLOGY

A. Survey

In order to clearly gauge learner satisfaction in terms of effectiveness, the research material found in previously made studies must be compared to findings based on a custom made survey that takes into consideration the various factors that result in previous learners claiming that online learning was significantly no different from traditional methods used to teach. The four important skills of reading, writing, listening and speaking were included to understand the effective learning of each. All of these skills were assessed to see how effectively they were learnt in an online setting as compared to a classroom environment. A mixed methods research design was followed for collecting information for the study where a survey by means of a questionnaire and in-depth interviews with a number of respondents were undertaken across the various institutes and study centers located in the United Arab Emirates. The survey was made in a manner such that a learner's satisfaction towards online learning takes primary focus. Students were asked the reasons for their choice pertaining to the online method, and their feelings towards the overall effectiveness of learning languages online. They were also asked to rate the effectiveness when learning with fellow students, with an instructor and in a purely online setting. The questionnaire was distributed through social media websites to students who completed their Arabic and English language courses including GRE, IELTS or TOEFL. The questionnaire contained 19 questions which included 7 sub-questions.

B. Participants

Fifty three (53) participants with or without the prior knowledge of the target language were selected for this survey who belonged to the age group of 18-25 years. They lived in different cities of the United Arab Emirates but their institutes offering online courses were located in Dubai. This was the first online language course for all of them.

IV. FINDINGS

As discussed, a wide range of tools are available to be used in the language learning environment. In order to get the answer of the first research question and to assess the online tools used for the language learning, students surveyed for the present study were given multiple options. It is interesting to note from the findings that most of the students were accessing Internet to use reference books in digital format (42%) followed by videos, animations and interactive web exercises (29%) for learning assistance. They also used emails (17%) and online discussion boards (12%). However, none of the students made use of or had

any access to video conferencing facilities to converse with other students or instructors. It is worth noting here that the tools used by the participants are usually used for asynchronous learning which means that students did not use online tools to establish real time contact with peers and instructors.

Interestingly, when students were asked to rate the effectiveness of these tools on a scale of 1-7 with 1= Very ineffective and 7=Very effective, their responses were highly positive (M=5.62) towards e-mails and discussion boards (Table I). The reason stated for the high preference for these tools was their synchronous mode since they provided a connection between students and faculty for resolving issues. Also, none of these students chose the reference books, videos and animations as a standalone means to learn the language; they used videos and animations more as a learning aid rather than a primary tool.

TABLE I
EFFECTIVENESS OF ONLINE TOOLS

Tools	Average
Reference books in digital format	5.32
Videos and animations	5.40
E-mails	5.62
Discussion boards	5.62

As shown in Table II Students were asked to rate the following statements in terms of agreement/disagreement on a scale of 1-5 (indicating 1 for Strongly Disagree to 5 for Strongly Agree).

TABLE II
RESPONSE FOR ONLINE LEARNING ENVIRONMENT

Statement	Average
There are means to interact with fellow students online	3.67
The use of videos and animations has increased the amount of information learnt	4.44
There should be more support material like quizzes, animations, etc.	4.12
There are means to interact with instructors online	3.67
I communicate with my instructor face to face	3.22
I communicate with my fellow students face to face	3.78
If left to work at my own pace, I procrastinate	3.56
I am web proficient	4.12
My instructor is web proficient	3.22

The results show that videos and animations did actually enhance learning. However, the study also revealed that there was a need for more support materials like quizzes, animations, etc. as a large number of students expressed their desire for the same. Although there were means to interact with other students and instructors online, more tools and technological support were required to increase the interaction.

There seemed to be a clear indication by students that a slightly more than occasional interaction with peers and teaching faculty would help them stay focused as compared to being left to study at their pace which tended to slow things down and in turn, affected efficiency. They also mentioned that for online learning with all its flexibilities, external factors such as peer pressure and a mentor's presence are necessary to achieve the goals.

Another interesting finding was that most of the students surveyed found themselves to be above average when it

came to the use of web technology. While on the other hand, many of the students did not feel the same about their instructors. Moreover, students who rated themselves to be Fairly Good (Fig.2) in using web tools averaged a mean of 5.25, while students who were very efficient averaged 5.87. This points out that the lack of knowledge in handling these tools can affect learner's efficiency. Therefore, self-efficacy and technical support are the factors needed to increase the effectiveness of an online language program.
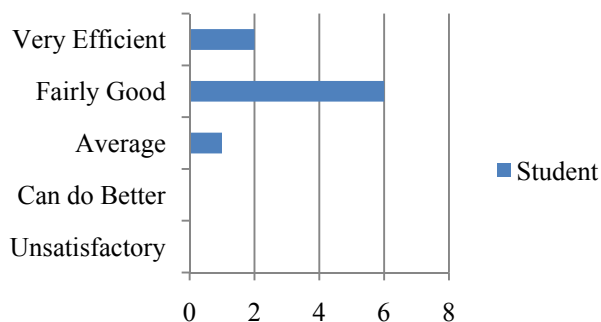

Fig. 2. Student proficiency in web technologies

As for the mode of delivery, majority of the learners (45%) reacted positively to the classroom mode of delivery with an access to online material. And, many of them (34%) preferred a pure classroom learning scenario even without any online support because they felt a classroom environment would be more than enough to learn their respective languages. The main reasons cited for the preference were the interaction with the instructor and time management. This supports the findings of the previous studies that classroom is still a popular mode of acquiring skills despite all the technological advancements. Many learners are not keen to try out new learning technologies due to lack of awareness, training, and ease of use. This view was further supported by the fact that only 11% of students favoured learning online with no classroom support whereas the remaining 10% preferred the online method as long as they had access to a mentor they could converse with face to face. The preferences clearly indicate that the learners still value a classroom environment more than an online environment.

More interestingly, students that claimed to prefer the online method as opposed to the traditional classroom method found the online language learning experience to be more effective than students who felt that learning in a classroom environment was more worth their time. Students who preferred the blended or purely online method averaged their overall online experience at 5.46 on a scale leading up to 7. While students who preferred the purely classroom method averaged only 5.08. This shows that lack of interest in using the online method can affect learning trends, but yet not significantly.

Even though an overwhelming number of these students preferred a classroom environment, 77.7% still felt that the online tools were effective and only 11.1% felt that it was not effective. This shows that students were not against the online method as they felt it was effective to a certain extent, although it is interesting to note that none of the students felt that the online method was very effective.

The second question concerning the acquisition of

language skills in an online setting brought out very interesting points. The findings in terms of descriptive statistics and with regard to the development of the language proficiency are presented in Table III - Table VI.

The responses in Table III are based on 1-5 Likert scale indicating 1 for Strongly Disagree to 5 for Strongly Agree.

TABLE III
OPPORTUNITIES FOR PRACTICE ONLINE

Skill	Average
Reading	4.78
Writing	4.0
Listening	3.88
Speaking	2.67

The responses in Table IV are based on 1-7 scale indicating 1 for Very ineffective to 5 for Very effective.

TABLE IV
EFFECT OF INTERACTIVE SESSIONS WITH STUDENTS

Skill	Average
Reading	5.56
Writing	4.44
Listening	5.56
Speaking	4.34

The responses in Table V are based on 1-7 scale indicating 1 for Very ineffective to 5 for Very effective.

TABLE V
EFFECT OF INTERACTIVE SESSIONS WITH INSTRUCTORS

Skill	Average
Reading	5.89
Writing	5.23
Listening	6.0
Speaking	5.23

The responses in Table VI are based on 1-7 scale indicating 1 for Very ineffective to 5 for Very effective.

TABLE VI
OVERALL EFFECTIVENESS

Skill	Average
Reading	6.44
Writing	5.67
Listening	5.56
Speaking	3.89

In response to the question which of the four language skills (listening, reading, writing and speaking) developed the most in the online setting, reading received the highest points making up 38% of all the skills used to learn online. Listening was the second most used skill in the online learning setting with 33.4%. Students felt that writing deserved only 23.8% whereas speaking was an issue that needed to be addressed while learning languages online as it had the least response with only 4.8%. As shown above, reading seemed to have an edge in the online segment (online M = 6.44) over learning with peers (student interaction M = 5.56). This seems to be a clear indication that reading has more opportunities to be practiced online and more effective when studied through the internet rather than with students learning the same.

Another surprising discovery turned out to be that practicing listening skills online seemed to be no different in terms of effectiveness. Both the online and peer interaction methods yielded the same mean (M=5.56). Even for writing,

the online method had a better average at M=5.67, while learning with other students averaged only 4.44. This shows that peer interaction does not influence writing skills as compared to practicing it online. It is worth mentioning that reading and listening have yielded the improved results when students interact with other students which shows that peer interaction can boost learner's proficiency.

Speaking had the lowest average with a mean of only M = 3.67 with most of the students surveyed responding with a neutral stance on the effectiveness which may show a lack of awareness or requirement for such opportunities. When contrasted against learning with students, it gave a mean of 4.34. It is also important to note that speaking has the lowest average in all 3 settings which may raise the question: Do students have enough opportunities to practice speaking skills?

Students once again showed that while interacting with instructors, the acquisition of the skills was a lot better, with reading and listening proficiency being well above average. An even more intriguing fact is that the overall averages for all the above mentioned skills are higher for students when they interact with instructors than when interacting with fellow students. This shows that students find interactive sessions with instructors a major boost to their learning experience. From the facts analyzed here, it can be concluded that students find learning with an instructor to be a lot more effective than learning with peers or alone.

The results revealed that the issues to tackle were the lack of learning prospects for speaking, as students felt that the only means to learn how to speak was through interactions with a mentor. To put the online speaking activities into proper practice, instructor's assistance and support are required. Even the results of peer interaction provided simply average results; which shows that if students are paired with equally challenged students, the learning experience would be no different. In order to deal with this issue, students must find ways to make contact with the instructor. However, in many cases, this may not be possible as many students find time constraints to be a major obstacle. This leads to less frequent interactive sessions, thus affecting the overall effectiveness of language learning as a whole.

V. CONCLUSION

Looking back at the findings, it can be concluded that effectiveness of online learning is not at par when compared to learning with the help of an instructor. The study showed unsatisfactory results of online learning and unexpected preference for classroom delivery. The learners cited several reasons for not favouring online delivery. The asynchronous tools used in the online setting meant all these students had to learn from canned products. The other limitations of this method were the inadequate interaction, lack of immediate feedback, insufficient opportunities for learning and practicing the skills, and lack of training in using the required technology. It was observed that the overall effectiveness was much higher when students learnt under the supervision of instructors. Another key factor affecting the development of speaking particularly was the lack of speech practice tools online. The data reflected an unsatisfactory improvement of speaking skills which is a

matter of concern. This can be addressed by the use of synchronous tools such as video conferencing and online classroom environments which increases the efficiency of online learning. With the inclusion of synchronous learning, students will be able to converse with other students and teachers, thus improving proficiency in speaking. Additionally, adequate technical support should be provided to students and instructors to improve the effectiveness and overall online experience of the stakeholders.

REFERENCES

[1] A. Karam, "E-learning will mean quality education". Knowledge Village Forum. Retrieved May, 17, 2010 from Knowledge Village Forum Web site: http://www.kv.ae/interactive /weblog/archives/ 00000030.htm, 2002.

[2] A. Relan, and B. B. Gillani, "Web-based instruction and the traditional classroom: Similarities and differences", In B. H. Khan. (Ed.), *Web-based instruction,* 1997, pp. 41-46. Englewood Cliffs, NJ: Educational Technology Publications.

[3] C. Lee and K. Pyo, "A study on the effectiveness of online/offline English language learning at university level", *Multimedia- Assisted Language Learning,* vol.6, no. 1, pp. 90-110, 2003.

[4] D. Cho, A Study on a Web-Based English Composition Class, *English Teaching,* vol. 56, no.2, pp.287-307, 2001.

[5] D. M. Chun and J. L. Plass, "Networked multimedia environments for second language learning" In M. Warschauer & R. Kern (Eds.), *Network-based Language Teaching: Concept and Practice,* pp. 151-170, 2000.

[6] E. Karavas, "Using attitude scales to investigate teachers' attitudes to the Communicative approac", *ELT Journal vol. 50, no. 3:* 1996, pp.187-198.

[7] E. Lee, "Using web-based bulletin board for peer correction in EFL basic writing classes", *Foreign Languages Education,* vol. 9, no. 4, pp. 147-164, 2002.

[8] H. M. K. Iran, "A study on educational technology in dubai challenges and suggested solutions", The British University in Dubai, Dubai, UAE, Dissertation submitted in 2011.

[9] J. Pelletieri, "Negotiation in cyberspace: The role of chatting in the development of grammatical competence", In M. Warschaue (Ed.), *Telecollaboration in Foreign Language Learning, 2000,* pp. 59-86.. Honolulu, Hi: University of Hawaii. Second Language Teaching and Curriculum Center.

[10] J. Son, 'Online Tools for Language Teaching', Teaching English as a Second or Foreign Language, 2011, Available: http://www.tesl-ej.org/wordpress/ issues/volume 15/ ej57/ ej57int/, [16 March 2015].

[11] M. H. Beauvios, "Computer-mediated communication (CMC): Technology for improving speaking and writing.", In M. D. Bush & R. M. Terry (Eds.), *Technology-enhanced language learning ,* 1997, pp. 165-184. Lincolnwood, IL: National Textbook Company.

[12] M. Warschauer, "Motivational aspects of using computers for writing and communication", In M. Warschauer (Ed.), *Telecollaboration in foreign language learning,* 1996, pp. 29-46. Honolulu, Hi: University of Hawaii. Second Language Teaching and Curriculum Center.

[13] M. Warschauer, *Electric literacies: Language, culture, and power in online education.* Mahwah, NJ: Erlbaum. 1999.

[14] N. Sullivan and E. Pratt, "A comparative study of two ESL writing environment: computer-assisted classroom and a traditional oral classroom", *System,* vol. 24, pp. 491-501, 1996.

[15] 'Online Teaching Tools and Resources' 2015, Yale Centre for Language Study, Available: http://cls.yale.edu/online-teaching-tools-resources. [20 March 2015].

[16] S. Kim, "CMC–based interaction for collaboration in a web-based English reading course: A case study", *Foreign Languages Education,* vol. 9. no. 4, pp. 57–91, 2002.

[17] S. Lee, J. Kim, J. Lee, and X. Liu, "The Effectiveness of Online Situated Environments for Language Learning", *Proceedings of 21st Annual Conference on Distance Teaching and Learning,* 2005, pp. 1-4.

[18] S. S. Jabeen, "Implementation of communicative approach", *English Language Teaching,* vol. 7, no.8, pp. 68-74, Aug. 2014.