Integrating Technology into ESL Adult Learning in an Academically-Oriented Learning Environment

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ABSTRACT

English, as a language, has become a common way of communication across the globe, resulting in a need for many to read and understand the language. As various countries have opened up to foreigners who seek to do business, study, or live in non-English-speaking countries, the need for having a common language has led to the establishment of English across the world. Over the years, non-native English-speaking countries have developed curriculums for their citizens, especially adults to enable them to teach themselves English. However, the courses have been rather expensive to undertake, leaving the underprivileged looking for alternatives. This paper seeks to look into the issue of accessibility by introducing the benefits of technology in learning English as a Second Language (ESL) and discussing how it has revolutionised teaching in non-native speaking countries. More specifically, this paper will look at Computer-Assisted Language Learning (CALL) and its importance towards teaching ESL. Additionally, it will highlight the importance of technology towards teaching students ESL through software and websites, as well as shed light towards some of the negative aspects of technology integration in ESL adult learning.

Keywords: ESL, adult learning, technology integration, academically-oriented learning environment

INTRODUCTION

According to Zhang (2013), English has become the most widespread language in the world. It is the language of science, technology, and scientific research. Learners have a variety of ways to study the language, some of which include the traditional classroom with limited learning hours and some of which incorporate the use technology. Integrating of technology has been found to be beneficial due to its promise of accessibility, affordability, and the number of useful tools and applications available for learning a language (Moore, 2009). Integrating technology into adult learning is an option that helps increase flexibility and thus gives learners the chance to extend their learning experience beyond the classroom and home environments (Alfaleh, 2015). The goal of integrating technology is to not only improve English language skills, but also to create a population that is both educated and skilled. Based on TESOL Standards (2008), language learners need to go beyond just the language itself, also demonstrating basic operational skills in using technology tools such desktop computers, laptops, mobile phones, MP3/video players, Internet browsers, and so forth. Therefore, to complement an existing curriculum involving writing, listening, speaking, and reading subskill areas, there is also a need to identify additional effective resources for learning. This integration of language and technological skills is important because of the growing demand to skillfully and successfully work in the scientific and business worlds, both of which use English as the main operating system. Integrating technology helps motivate students to learn. Technology is advancing every day; therefore, new ideas arise to help teach English. Also, technology is flexible. Technology can be found everywhere, which means that students can learn English wherever they are.

The Development of Computer-Assisted Language Learning (CALL)

CALL as a useful concept in the learning process was first brought into the limelight in the 1960s as a reflection of a pedagogical method termed audio-lingualism which developed out of learning theories involving behaviourism and structuralism. The main idea of the theories, and resulting method, was constant repetition. Through this, CALL developers thought that this approach would be especially suitable for a computer program (Diallo, 2014). From this thought, the Programmed Logic for Automatic Teaching Operations (PLATO) and Time-Shared, Interactive, Computer Controlled Information Television (TICCIT) projects came into existence (Levy, 1997). At first, PLATO and TICCIT existed only in universities and special teaching institutions. This was due to the high cost of these programs, which made the learning process limited to institutions that had the financial ability to use them (Beatty, 2013). In the 1980s, newly created CALL programmes continued to be limited due to their size and application complicacy as well (Levy, 1997). The true development of CALL as modern teachers and student know it started in 1990 with the development of more readily accessible computer technology and popularization of the Internet. Because of this, CALL was able to revolutionize ESL learning and reach a large number of people through various mediums, which were now affordable to common citizens. Further, it brought about the end of a monopoly in the language teaching industry as one could easily access lessons from a computer installed with the relevant software.

Methods of CALL

At present, the term CALL is understood as the totality of various kinds of computer and multimedia applications, which are linked by a common goal - the organization and holding of the lesson of an ESL class (Diallo, 2014).   CALL can be installed in a storage

medium or stored in an electronic site program which is designed specifically for language learning lessons and initially does not perform other functions (Stockwell, 2012). Additionally, there are three ways of employing Internet including onsite uses, blended uses, and online learning (Moore, 2009). In onsite uses, the teacher is present as in any other formal classroom setup, where technology only serves to supplement the curriculum. One example of onsite use of technology among the ESL adult learners is computer-assisted instruction (CAI). The most popular means of using onsite technology involves the use of software programs to support the learner. In this case, software programs can be used to enhance listening, reading, and speaking (Kinser, 2006). The second method is blended uses, where in the absence of instructors, the technology is used to supplement curriculum, either within class or in a remote location such as home, community centre, or public library. The third method is online learning, which is Internet based (Kinser, 2006). Teachers may not be involved or are only rarely personally involved, as students and teachers do not meet in person. Communication between students and the teacher for this format occurs online. This mode of learning has been referred as computer-mediated distance education (CMDE). This alternative method provides the learner with an opportunity to learn anywhere and anytime (Reynard, 2003). Looking at the advancement of technology in ESL learning, one can understand its importance and value towards it. However, there are both advantages and disadvantages towards the use of technology in language learning.

Advantages and Disadvantages of Technological Use in the integration of technology into ESL adult learning

Technology acts as a major improvement to the lives of human beings. It makes work easier and faster, hence requiring one to use less skills or effort in conducting their work. However, these advantages brought have about laxity and a lack of concern to some people as they prefer shortcuts whenever they come across a difficult situation. Diallo (2014) points out that most of the ESL learners fail to understand the language due to the use of technology when doing their school work. With translation apps such as *Google Translate,* one can translate any word to English, but, in most instances, where one needs to translate a whole paragraph, the translation is never 100 percent correct. Therefore, the ESL learner fails their test due to lack of personal effort towards the coursework. It is an issue that ESL teachers are trying to solve, but the influence of technology, especially towards the young people, is quite high.

Despite the disadvantages, technology does contain several advantages such as the provision of resources for study. By means of the Internet, a learner and a teacher can access a plethora of resources, which can help a learner to skilfully speak, read, and listen in English. The Internet provides its learners with unlimited access to a variety of free resources that are available online. It has also been discovered that apps, websites, and software can be used to create interactive digital stories (storytelling) among ESL adult learners (Makofsky, 2016) that can improve learner's speaking as well as help pre-service and in-service teachers during the lessons. English learners recognize the value of technology to support autonomy, lifelong learning, creativity, collaboration, and productivity (TESOL Standards, 2008). These advantages may become more apparent by looking at the following example.

Learning the English language is a demand that is increasing by people in many countries, for instance, Saudi Arabia. The English language is taught in Saudi Arabian public schools four hours a week for six school years. The purpose of learning English in Saudi Arabia is not only to pass grade exams but also to help improving individual's oral and written skills in order to achieve goals related to job, family, or further education. Accordingly, since The King Abdullah Scholarship Program has started in 2005, one of the

main admission requirements to be eligible for the scholarship is to complete level one and two in the English Language program that the Saudi government provides for every student who wishes to study abroad. This English program provides basic information about the language and some knowledge regarding the country to which the student will travel (Titmus, 2013). In the first level, students are to learn basic grammar rules and commands while the second level focuses on writing simple paragraphs and emails. This step is very important because it prepares every student for studying and living in the United States or other English-speaking country. After this stage, students are able to speak English, not as fluent as a native but with enough proficiency in order to be able to make hotel reservations and rent a car, among other necessities. What follows in this example addresses specific language learning subskills

SPEAKING AND LISTENING

Speaking and listening are connected. In order for learners to speak fluent English, they need to listen to English speech frequently and learn the correct pronunciation of words. This need is addressed by TESOL as follows: "Language learners can use and evaluate the available technology-based language skill-building tools such as pronunciation practice software and Web-based listening exercises" (TESOL Standards, 2008). In order to address this goal, different Internet sources exist that are useful for practicing and improving speaking skills, several examples of which follow.

One example is TalkEnglish.com which is a website that assists learners to improve their speaking. Such websites offer several listening exercises, which are categorized as beginner, intermediate, and advanced skill levels. In most of the lessons, learners have three options to follow: first, read the sentence; second, click on the sentence to listen to it; and third, practice speaking by repeating after an audio file. These kinds of exercises can be used by teachers during lessons as well as by international learners as a method for strengthening such skills as reading, speaking, and listening.

For beginners who are not fluent in English, TalkEnglish.com also has the instructions for "how to use the site" written in many languages such as Arabic, Turkish, Italian, and Spanish. Moreover, this website has the feature to work offline and without Wi-Fi connection by downloading the app for computers, Androids, or iPhones. The English categories in this program consist of: English basics, business, travel, interviews, idioms and phrases, and pronunciation lessons. The disadvantage, though, is that the offline version is not free. It costs $21, though this is a reasonable price for the provided features and advantages that users can benefit from, such as, available articles on English-speaking fluency and grammar for speaking. These articles are free and can be downloaded and saved for further reading. The other feature is that the site has an account on Facebook and Twitter, which allows learners to practice their English language with other users and learners in the social media.

A second example of an app is one that is applicable for lessons concerning pronunciation. *How to Pronounce* is a free app for Android-Apple users that includes a native-speaker audio to help the user to learn quickly and accurately (Pietrala, 2016). The usage procedure is simple: a learner types in a word or phrase and then listens to its pronunciation. This app is designed to assist learners in improving their pronunciation skills and their knowledge of each word they encounter. The app as well has a speed adjustment feature in which a word is spoken aloud to hear the details of each sound.

READING AND WRITING

Reading and writing are also important aspects, both of which can help carry out tasks and duties in the workplace, in society, or in a school setting. Reading and writing skills are closely related and can easily be mixed together in activities provided by some websites, such as stickyball.net and Marshall Adult Education. Based on TESOL Standards (2008), English language teachers use Internet websites during lessons in order to enhance students' language learning competence. In these websites, learners can use the reading passages for speed reading competitions between them or to challenge themselves to improve their writing and reading skills.

By means of such Internet resources, teachers are able to use different exercises because they are helpful in supporting students' English reading by doing activities after each passage. Students can access this website outside the classroom as well in order to assist them in reading. The lessons in the website have three levels: beginner, intermediate, and advanced lessons (Wadhwa, 2014). Multiple levels of difficulty occur in the passages that are provided in order to meet the needs for different proficiency levels. For instance, in the beginner section, the passages are short and the grammar questions are basic; whereas, in the advanced section the reading passages are somewhat longer and include discussion and comprehensive questions after each passage. The ESL teachers can find these programs helpful in challenging international students to read as fast as they can in the speed-reading feature on this website. In addition, learners are able to practice their writing in this website. Stickyball.net has ESL writing exercises that provide writing and grammar lessons. The website has E-books that are available for purchase by teachers and students, which are written with simple, easy-to-understand directions. These include: grammar, games, ESL idiom worksheets, vocab-builder, and phonics monster e-books.

Another Internet resource for ESL learning is Marshall Adult Education. This website is designed to create levelled reading selections that are appropriate for adult learners to help them become better readers. The reading material on this website focuses on topics such as: civics, employment, housing, health, school, money, and government. Users are able to read presented articles and stories on-line or print the passages for further reading. For example, learners are able to print a two page reading story, which has the pre-reading activity and the story on the first page and the comprehension questions on the second page.

Importance of translation devices in the integration of technology into ESL adult learning

In addition to the above apps, translation devices enable users to translate words from English to their primary languages. This essential learning tool improves reading, writing, and spelling by speaking headwords in a human recorded voice. Some devices also provide full example sentences in a human recorded voice. Voice translation devices, such as Franklin and Ectaco Partner, are widely used among adult ESL learners, both by teachers and learners Such devices can be used for traditional educational purposes as well as community-based learning experiences.

The price of these devices, however, ranges from $46 to $950 based on their functions and features. The expense of such resources is certainly an issue for community programs in the United Sates as well as for many international students. An additional problem is that learners cannot be 100% sure that the offered material will help them in learning the language. It is possible that this method might be inappropriate for this particular person. Consequently, the purchased device will be useless, and the money will be spent in vain. The

other problem is that many learners simply cannot afford to buy the chargeable content; therefore, high prices put obstacles in the ability to utilize computerized learning programs.

Because of the above problems with translation devices, many ESL students prefer to use smartphones as a means to log into the Google Translate site or use the free app. According to Tarantola (2014), Google Translate is still the dominant player in translation apps. This application is a free online translation service with voice input that translates texts or web pages and also supports more than 53 languages (Alves, 2013). Users can use it to search for a word translation from any language into English and vice versa, listen to the word so they can recognize the pronunciation, and learn the synonyms of the needed word.

Students also frequently opt to use online social communication platforms that allow direct responses in order to learn the English language. According to Eaton (2001), another option of using technology while learning is Skype. Eaton argues that the simplicity of Skype is its biggest advantage (2001). It offers interaction with only a very limited number of users at one time. Because many learners are not able to travel abroad to practice language speaking, Skype can provide this service for free. This technology can be used to empower ESL teachers as well as ESL tutors to incorporate the technology in a learning environment. By means of Skype, tutors can also lecture or teach students from a distant place. Additionally, learners are able to have conversations and chat with native speakers with the help of Skype. The only two requirements are an Internet connection and two computers. On the other hand, Eaton continues that Skype is a less successful tool compared to lessons presented in the classroom. Eaton notes that Skype does not have such important tools as white boards, online user surveys, etc., and it is hard and inconvenient to work with more than one student at a time. However, the computer appearing on the side of the students can be connected to a large screen so that the image of the teacher and other details are projected, enabling the students to follow the teacher's instructions. The students can also acquire their own microphones and/or Skype-enabled headsets so that they can interact with the teacher over Skype.

For international students, an effective way of learning a new language is repetition of information. Based on Scarpiello's research (2011), the human brain is practically wired to memorize data that is repeated over and over. Quizlet is a free Internet resource that uses flashcards for learning English vocabulary, as well as other means of studying. The website allows users to create their own flash cards of the information that they need to study. Then it allows them to play games with their cards or just study the information. It is extremely easy to use and the program is completely free. Moreover, because most of the vocabulary that is used in Quizlet is in English, users are able to choose from various categories they are interested in and practice their English skills.

In addition to the technologies mentioned above, teachers/tutors helping adult ESL learners can utilize other instructional materials to supplement technology. Examples of materials that can be effectively utilized include videotapes, audiotapes, and visual aids. These tools have been found to increase learning and influence adult learners to learn English. (Burt, 1999). Other alternative instructional materials include audio tape recorders, photos, slides, charts, TV and radio, flip charts, and video cameras (Kitao and Kitao, 1997). Learners can use these tools to facilitate integrated technology. Investigations by Song and Fox (2005) further suggest that the use of mobile phones (m-technology) can be used to improve learners' performance. This is where the short message service (SMS) can be used to transmit material from a web-based vocabulary platform to a phone integrated into the platform.

Potential Problems in Integrating Technology into the ESL Learning Process

Though there are many advantages to CALL, as noted above, potential problems still exist which will need to be addressed in the future. The integration of information technology and the use of multimedia tools have no effect in many cases, and in some instances its application can even have a negative effect. Stockwell (2012) confirmed that teachers should consider two possible directions of multimedia introduction to the educational process: first, these programs are included in the educational process as a "support" within the framework of the traditional methods of educational system. In this case, the multimedia resources serve as a means of intensification of the educational process, individualizing learning and partially automatizing the routine work of teachers, especially related to accounting, measurement, and evaluation of students' knowledge. A second problem, however, is one that Beatty (2013) argues, that is the curtailment of social contacts that reduce social interaction and communication, thus promoting individualism. In the case of the widespread use of multimedia technology, teachers and students are unable to take advantage of large amounts of information, which is provided by advanced multimedia and Internet facilities. Many are not able to take advantage of technology due to it decreasing communication skills (Tsoroni, 2016). Technology is far beyond social interaction; it is supposed to increase interactions and communications outside of technology. Increased multimedia technology distracts students from the studied material (Beland & Murphy, 2016). It should be remembered that if the student at the same time is demonstrated different types of information, he often denies the possibility of real-world experience.

Finally, technology prevents live communication of teachers and learners, offering them communication in the form of "dialogue with the computer" (Levy, 1997). A student does not gain enough practice in the form of dialogic communication and the formulation of ideas. Further, the excessive and unjustified use of computers can have a negative impact on the health of all participants in the educational process (Cooney, 2017). The rays from computers can damage brain cells (Konerman, 2014). Also, sitting in front of a computer for hours causes bad posture. Bad posture can lead to other health issues such as scoliosis. Also, the display screen can damage eyesight (Chansirinukor, Wilson, Grimmern & Dansie, 2001).

CONCLUSION

Today the requirements for success in ESL teaching and studying are changing rapidly, and, therefore, new methods of ESL teaching have evolved, and, as a result, there is a problem of choosing the optimal method of instruction. The idea of learning and teaching a foreign language with the help of computer technology exhibits a similar history as the development of computers. As well as the history of the use of computers in other areas, the very use of computers in the ESL classroom were originally thought to have great potential with high hopes of both teachers and students. It should be remembered that although computers play an increasingly important role in the language class, they are not a substitute for the traditional role of the teacher in the classroom, but rather a supplement to best practice in teaching and a replacement for obsolete teaching methods.

In order to stay current in the language teaching field, it is essential to create an equal technological platform of integration of technology into ESL adult learning in order to address the educational technology tools that teachers and learners have been using in order to improve the English language skills (Seaman & Fellenz, 1989). The needed skills for learners include: speaking, writing, reading, and listening. Technology in this integration process will create the needed competitiveness, especially for international students at university institutions. The internet associated technology can be employed for facilitating

teacher-mediated and independent learning of ESL adult learners by creating a long-term and sustainable education integration plan. This is because the Internet is always filled with new and updated information about the English language. While learning the English language using these technological tools, learners and adults will be able to apply the knowledge in day-to-day activities, communication, business operations, and delegation of duties among other tasks and responsibilities that are better carried out with increased proficiency in the English language.

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