

BENEFITS AND CHALLENGES OF INTEGRATING TECHNOLOGY INTO ENGLISH AS A SECOND LANGUAGE (ESL) COURSES

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ABSTRACT

Teaching English as a Second Language (ESL) presents challenges. The ESL students learn and adapt to a new language while struggling to make a transition from their native languages. The ESL teachers communicate in a new language that students are not yet familiar with, but want to master. However, integrating technology in the classroom is becoming a necessity. Technology can be a supporting tool that provides a new experience for ESL students to learn and master English. Through systematic review, this study points out the benefits and challenges of integrating technology into ESL courses from teachers' perspectives. The findings of this study may help the novice ESL teachers to integrate technology into the classrooms. In addition, the findings may encourage ESL teachers, school administrators, and researchers to find solutions to the challenges in this article and encourage more ESL teachers to integrate technology in the classroom.

Keywords: ESL Courses, ESL teachers, Integrating technology, English and Technology

INTRODUCTION

The expansion of digital technology in our daily lives over the past decades has naturally influenced our vision for education. Although digital technology tools have shown great potential and benefits in the classroom, its implementation has been slow, relatively ineffective, and not reflected through students' academic performance (Ahmadi, 2018). A common explanation for the slow change from traditional instruction to digital technology-driven instruction pertains to school-level limitations. Among these limitations, the lack of funding and resources, including access to available technology, are often the most represented (Ruggiero & Mong, 2015). However, teachers stated a strong need for training opportunities along with constant guidance and technical support that meets their subject and grade level needs. Furthermore, a large group of teachers seems eager to learn about the best implementation practices of digital tools in the classroom.

ESL teachers have started to incorporate technology into teaching, however their experiences are mixed: On one hand, there are opportunities that technology brings to the English classrooms. On the other hand, ESL teachers face challenges that discourage their interest in integrating technology in English courses. There are lessons to learn from ESL teachers who had used technology in their classrooms. Therefore, this article uses a systematic review to examine the challenges and benefits of integrating technology into ESL courses. This article focuses on the two research questions: a) What are the benefits of ESL teachers in integrating technology into the classrooms and b) What are the challenges of ESL teachers in integrating technology into the classrooms?

LITERATURE REVIEW

Technology in the classroom

Teachers' pedagogical philosophy, beliefs, and mindset about digital technology profoundly influence its implementation in the classroom regardless of its demonstrated potential and benefits. Up until recently, teachers represented the primary source of knowledge in the classroom and teachers may perceive digital technology as a threat to their authority (Collins & Halverson, 2009). However, the appearance of digital technology has progressively shifted our perception of knowledge and challenged teachers' legitimacy as an authoritative figure in the classroom. Teachers' pedagogical beliefs and teaching styles can influence the use of digital technology as pedagogical tools (Ruggiero & Mong, 2015; Pun, 2013). Teachers' perception and attitudes towards computers and digital technology itself is an essential factor of successfully implementing technology in the classroom (Ruggiero & Mong, 2015; Liu et al., 2014).

Adopting technology means changing on two distinct levels. First, adopting technology means changing the tools that teachers have been teaching with for a long time; second, it also means that teachers must rethink their positions in relation with the students as well as their function and legitimacy in the classroom. Despite the slow adaptation of digital technology in the classroom, its potential to revolutionize and reshape the current education system remains (Durbin, 2002). The benefits of integrating digital technology into the classrooms are multiple. Collins and Halverson (2009) explain how integrating technology in education can further help to address the

current change that we observe in our society. For instance, mediums of communication have significantly involved over the past two decades with the appearance of emails and social media (Featro & DiGregorio, 2016). Another benefit of teaching with digital technology is its potential to narrow and customize the content to the learners' needs.

Appropriate and well-thought instructions that combine technology and lecture have also seen positive results in terms of academic performance. Durbin (2002) reported that students who received technology-based instructions (such as slide shows) along with the use of webpage, which included online notes and instructions, performed significantly better than students who only received lectured-instructions. Nevertheless, the learning benefits of implementing digital technology in the classroom come first from teachers' decision on whether a given digital tool can meet the need of students on specific questions, concepts, or issues (Liu et al., 2014). Digital technology gives the ability to connect with people around the world at a faster pace and to a greater extent. Such ability can be transferred over to the classroom by creating a digital environment in which students can broaden their understanding of other cultures' practices and languages (Daniel et al., 2012; Pun, 2013).

Integrating technology in teaching English

The progress of technology has impacted ways of teaching English for in-service and pre-service teachers. Technology allows teachers to create a learning environment for students to learn English by doing (Pun, 2013). Technology also provides invaluable English educational resources that students can explore inside and outside of classrooms. Teachers are using technology to improve the English curriculum, communication among students, and sharing information (Sardegna & Dugartsyrenova, 2014; Morales & Rumenapp, 2017). As technology is becoming one of the twenty-first-century skills requirements, teachers need to incorporate technology in developing, designing, and teaching the English language.

Today's students live in the digital era and use technology regularly at home, schools, stores, transportation, and neighborhoods. Furthermore, technology has connected the world and enabled different ways of communicating through online translation, live videos, videos, audio, and text posting. English is becoming a global language in education and has created an opportunity for native and non-native English speakers to interact, exchange, and create knowledge. As Pun (2013) stated, "the use of multimedia technology in language teaching has created a favorable context for reforming and exploring English language teaching models in the new age" (p. 30). Therefore, integrating technology in teaching English is needed more than ever before. Ahmadi (2018) highlighted that technology "helps learners to develop thinking skills, makes learning and teaching become more student-centered, promotes learners' autonomy and helps them feel more confident, and increases learners' motivation to effectively learn a foreign language" (p. 122). Therefore, integrating technology in teaching English makes learning fun and engaging.

Even though the technology is a valuable tool to teach English language, teachers face two dominant challenges of incorporating technology in classrooms. First, English teachers lack proper training on how to use technology in teaching (Martinez-Alvarez et al., 2018). English teachers feel that it is important to teach with technology, but they do not know how. Second, teachers have limited financial resources that prevent them from having technological resources required in teaching English course topics. In addition to these challenges, teaching English to non-native English speakers is more complicated as non-native English speakers need extra support to acquire skills and knowledge of English native speakers.

Educators and teachers need to share their experiences of teaching English with technology to encourage and motivate non-native English speakers to learn and communicate effectively at the level of native English speakers. Using technology to teach ESL students goes beyond teaching the digital tools and the English language (Ahmadi, 2018; Collins & Halverson, 2009). It involves teaching the culture and values of native English Speakers, creating spaces for non-native English speakers to share their experiences, and being valuable members of the new community. Thus, technology in the English language creates a comfortable zone for English language learners to study and practice the language and overcome barriers of English communication and writing.

METHODOLOGY

This study used a systematic review to search peer-reviewed articles on using technology in teaching the English language. Two researchers in education, the authors of this article, collaborated on this systematic review. One author has a background in language learning and another author does research on technology in education. The authors focused their search on electronic databases, namely Google Scholar, ERIC, ResearchGate, Springer, Elsevier, Sage Pub, Wiley Library, and EBSCOhost.

The inclusion criteria included pre-service, in-service, ESL, bilingual teachers, and any type of technology, such as hardware and software. They limited the search on the peer-reviewed articles with the studies done in the United States. In addition, the authors considered only the articles with full text. They excluded the articles on online, blended, and distance education. The initial search provided 153 articles. Then, the authors limited the search on the peer-reviewed articles published between 2010 and 2020. The new search produced 43 articles. The authors read the articles individually to make sure that they met the inclusion criteria. They also met in multiple sessions to discuss their choice of selection. Finally, they agreed on the final list of eleven articles:

Chang and Martínez-Roldán (2018)
 Daniel and Cowan (2012)
 Daniel et al. (2016)
 Featro and DiGregorio (2016)
 González-Carriedo and Harrell (2018)
 Graziano (2011)
 Liu et al. (2014)
 Martínez-Alvarez et al. (2018)
 Meskill et al. (2002)
 Morales and Rumenapp (2017)
 Sardegna and Dugartsyrenova (2014)

RESULTS

Benefits of integrating technology into ESL courses

For the benefits of using technology to teach English, the following themes emerged in analyzing eleven articles: collaboration among teachers and students, English content development, English learning growth, and differentiated instruction. First, teaching English with technology allowed English teachers to reflect on their teaching practice and to collaborate among themselves and the students. Meskill et al. (2002) discussed and compared the technology experiences of novice and experienced K-8 language and literacy (ESOL) and highlighted that building community among novice and experienced teachers was key to sharing experiences and learning from one another. In another study, Sardegna and Dugartsyrenova (2014) examined the experience of twenty-five pre-service foreign language teachers in preparing and teaching mini-lessons and giving feedback to students. The pre-service teachers pointed out that technology had created an opportunity for the students to have more interactions and created a community of learning. Other studies emphasized that technology helped the students to support each other and provided different ways of representing ideas to students (Morales & Rumenapp, 2017; Graziano, 2011).

Second, teaching English with technology improved content development. Students and teachers used technology to look for the supporting materials that engaged students to understand English content. Liu et al. (2014) stated that technology allowed K-12 students to access multimedia resources, dictionary translations, and English audio pronunciation. In another study, Daniel and Cowan (2012) concluded that bilingual teachers in K-12 who participated in the study supported the idea of using technology to improve the development of English content. Technology created a platform for teachers to connect, discuss, and share ideas on different strategies of developing and improving the content. Also, technology provided the learning resources in the native languages of English language learners (González-Carriedo & Harrell, 2018).

Third, teaching English with technology created an opportunity for deep learning. In their study, González-Carriedo and Harrell (2018) examined nine teachers in dual-language programs. They found that technology became a supporting tool for the students to engage more in learning linguistics. In another study, sixteen pre-service students who participated in the study pointed out that technology had positively changed the learning experiences of students and motivated them to learn English (Graziano, 2011). Other studies highlighted that technology was a powerful tool for students to improve and master English (Featro & DiGregorio, 2016; Daniel et al., 2016).

Finally, technology was a supporting tool for differentiated instruction, including students with different English levels and students with special needs. According to Liu et al. (2014), technology allowed English teachers to give various activities based on their level of English. Technology also made it easier for English language learners to focus on one activity while other students had different activities in the same classroom. In another study, Martínez-Alvarez et al. (2018) emphasized that technology was an essential tool for bilingual teachers who taught students with special needs to provide the required learning accommodations. Furthermore, technology could provide multi-modal instruction (Daniel et al., 2016) and multiculturalism (Chang & Martínez-Roldán, 2018).

The main challenges of ESL teachers in implementing technology

The systematic review focused on teachers' main challenges they faced when attempting to implement digital technology in their classrooms. The main challenges that emerged from the reviewed articles include a lack of access to technology and resources, classroom management, administration micromanagement, a lack of support and training, and time constraints.

The most crucial challenge that teachers faced was the lack of access to available technology. For many teachers, the ratio students-to-computers was often high (Daniel & Cowan, 2012). This high ratio means that teachers needed to be creative about how to approach technology implementation due to technology unavailability. Along with the lack of access to technology, ESL teachers were also dissatisfied with the lack of resources available to teach bilingual students. Specifically, teachers often complained that resources available in English, such as apps and videos, were not offered in a first language of the students (González-Carriedo & Harrell, 2018). A second challenge highlighted by teachers was classroom and activities management due to technology-based instruction. Featro and DiGregorio (2016) explained that pre-service teachers were actively interested in using blogging as a pedagogical tool, but were worried about properly controlling, managing, and organizing the activities. Meskill et al. (2002) compared new and experienced ESL teachers and focused on classroom management differences and suggested that novice teachers tended to exert much control over students to enact their lesson plans. The experienced teachers showed a willingness to go off their plan and used unexpectedly the learning opportunities arising through the lessons.

Teachers also explained that part of their frustration when using technology as an instructional tool was the micromanagement and procedures imposed by schools' administration. Teachers who wished to incorporate technology in their pedagogy felt frustrated by schools censoring software and administrations over controlling access to technology (Daniel & Cowan, 2012; Featro & DiGregorio, 2016). Furthermore, teachers believed that additional support from schools and school districts under the form of professional learning and training would significantly enhance their use of digital technology in the classroom (Meskill et al., 2002; Daniel & Cowan, 2012; González-Carriedo & Harrell, 2018). Meskill et al. (2002) suggested that the lack of training was further noticeable among novice teachers when compared to expert teachers, mostly due to their overall lack of classroom management experience.

The last main challenge for ESL teachers to implement technology in the classroom was time constraints. Time constraints for teachers mostly came from professional tasks, responsibilities, standardized testing, and classes schedule that took up the majority of their personal and professional time (Daniel & Cowan, 2012; Featro & DiGregorio, 2016; González-Carriedo & Harrell, 2018). Daniel and Cowan (2012) emphasized the necessity for teachers to collaborate in order to develop technological expertise. In this context, time was not only essential for planning but also to share, collaborate, and plan in groups. Furthermore, time was also a concern for pre-service bilingual teachers. Featro and DiGregorio (2016) used the example of blogging as a digital instructional tool. Time constraint was first mentioned as one of the main reasons for not using blogging as an instructional tool. Besides, the authors also explained that pre-service teachers should first consider time management when planning to use blogging and to reach out to more experienced teachers to better manage their time. Sardegna and Dugartsyrenova (2014) described how online discussions and forums were sometimes a source of frustration due to delays between responses and tardiness from other students to respond.

DISCUSSIONS

In responding to the first research question, technology helps ESL teachers to create a community with the students as well as their colleagues. The finding of this study is consistent with other studies that emphasized that collaboration between students and other teachers engages both the students and teachers (Ahmadi, 2018; Sardegna & Dugartsyrenova, 2014). In addition to sharing experiences, ESL teachers who use technology have access to different resources that enrich their course content development and facilitate student learning (Collins & Halverson, 2009). The resources include learning spelling from native speakers and online dictionaries and translation in other languages familiar to non-native English speakers. Technology exposes students to enormous resources that extend to what students learn in English textbooks. Furthermore, technology provides an opportunity for non-native English speakers to learn deeply and have a better understanding of what they learn (Pun, 2013). Finally, technology is an essential tool for differentiated instruction (Liu et al., 2014). Through technology, ESL teachers could support students at different levels of English and students with special needs.

In responding to the second research question, ESL teachers lack the required access to technology. The ratio of students-to-computers is very high (Daniel & Cowan, 2012), and teachers do not have the support they need to incorporate technology in teaching English. Also, ESL teachers do not have an opportunity to get trainings in integrating technology in the classrooms. Besides, classroom management is a challenge in English classrooms

when students are working on different activities based on their English levels. However, the lack of experience in teaching technology may be a contributing factor to classroom management. In addition, teachers face the administration pressure that controls what software to access. Due to different policies in schools, teachers do not have equal access to the software, and teachers are frustrated by not having access to the tools that benefit students. Finally, teachers struggle to find the time to incorporate technology in their lessons. Standardized testing and outcomes take too much time in the classrooms, and teachers do not see ways to adjust the time to integrate technology in the classroom.

CONCLUSIONS AND RECOMMENDATIONS

In sum, there are benefits of integrating technology in non-native English speaker courses. These benefits include collaboration among teachers and students, English content development, English learning growth, and differentiated instruction. However, there are also challenges such as lack of access to technology and resources, lack of support and training, classroom management, time constraints, and administration micromanagement. It is the responsibility for us as educators to analyze, discuss, and find solutions based on what works in the classrooms. The benefits and challenges discussed in this article focused on teachers of English to speakers of other languages. However, these benefits and strategies may be useful to teachers who want to integrate technology in other courses as well.

Through our analysis, we were not able to find any research on the use of digital technology to better reach out to minority families for whom English is not the first language. Given the academic and social handicap that not understanding English represents for both the students and the families in the United States, we recommend researchers to address this gap in the literature. Future research on this topic may address not only the use of technology in the classroom but also the impact of technology on student learning at homes and communities.

School policies on the use of technology impact ways teachers integrate technology in the classrooms. This study shows that teachers are eager to incorporate technology in teaching English to non-native English speakers, but the school policies hinder their initiatives. Further research may examine the connection between school policies and teachers' belief on incorporating technology into teaching.

Limitations

The systematic review contained some limitations that prevented the findings from generalization. First, the systematic review was limited to eight electronic databases; therefore, more research might have been available but not accessible to the authors. Second, there are many terminologies around teaching English to non-native English speakers. Therefore, it is probable that the keywords inclusion criteria set by the authors missed potential articles that would have met the inclusion criteria.

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