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# ESL Education in Technology-Based Learning Environments

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## **Abstract**

Educators in the field of English as a Second Language (ESL) select content and design lessons that address the learners' developmental and practical language needs. Of these methods and approaches for ESL instructions, the most preferred recently is the use of technology and online resources. Coincidentally, the unanticipated shifting from face-to-face instructions to online or hybrid has directed both the ESL educators and learners to the extensive use of technology and online resources. Hence, ESL educators nowadays search for easy-to-follow instructions and teaching tools that can set learners up for practical and productive online language learning. This paper will briefly discuss how virtual learning environments foster ESL education, outline a list of online interactive language teaching and learning websites and apps, and examine the difficulties ESL educators and learners may encounter while utilizing technology and online tools in the teaching and learning process.

## **Literature Review**

Pedagogical strategies to teach ESL students modify due to different factors such as new developments in courses of studies in language education and educational technology. In addition, learning a foreign language requires that the students' keen interests are continuously motivated, and the teachers' instructions are efficiently sustained; otherwise, the teaching and learning

process will remain challenging. Ahmadi (2017) said that teachers' approach to developing the language learning process is fundamental for motivation. Therefore, ESL teaching requires that educators continue to be creative in utilizing learning devices and resourceful in discovering the latest language learning pedagogies.

Although various approaches are available to teaching ESL, educational technology and online resources remain necessary to facilitate language learning. According to Becker (2000), technology is essential for language teaching. Foreign language educators and researchers recognize the usefulness of technology in enhancing pedagogical practices. ESL educators also acknowledge that technology and online resources can positively influence students' motivation and interest in the teaching and learning process (Adiyaman, 2009). Technology-enabled language learning tools are often interactive. These interactive activities help increase learning interests (Stepp-Granny, 2000). Also, using technology-based language activities enhances learners' participation (Harmer, 2007). The fun and games introduced into the learning and teaching process using technology (Lee, 2000) encourage participation and collaboration, and these ultimately lead to student motivation (Dunkel, 1990) which is an essential factor in language teaching (Galavis, 1998; Warschauer & Healey, 1998). Furthermore, technology-based approaches in ESL education foster a learner-centered environment that stimulates creative and collaborative behavior (Dawson, Cavanaugh, and Ritzhaupt, 2008). Hence, integrating technology into a language learning and teaching environment improves learning and increases motivation in tasks completion, social interactions, and engagement (Baytak, Tarman, & Ayas, 2011).

Another important outcome of using technology-based approaches and online resources in ESL education is how these teaching tools improve the language learners' academic ability. The training language learners receive through a technology-based approach in ESL education makes them subconsciously respond to other academic activities in the same way. Galavis (1998) and Dunkel (1990) confirm that technology in ESL education improves both the learners' language proficiency and academic performances. Anderson and Speck (2001) also recognize that using technology in the classroom inspires students to be more pro-active during listening, speaking, reading, and

writing tasks and activities (Anderson & Speck, 2001).

Many ESL educators have also proven that using technology and online resources in ESL education successfully improves language learning and innovates teaching approaches. That is why many ESL classrooms now make use of technology and online resources to enhance pedagogical practices. Research proves that technology and online resources boost students' knowledge and significantly supplements teaching methods and approaches (Firggar, 2002; Timucin, 2006). Jonassen (2000) discusses that the use of technology in the ESL classroom not only aids the learning process but also improves teachers' approaches. Technology-based ESL education offers various instructional materials which lessens monotonous use of instructional materials (Patel, 2013). As a result, many ESL practitioners recognize that technology is an essential part of effective language teaching.

Online resources provide language educators with various instructional materials that make ESL Education individualized and personalized, eventually resulting in self-empowered and self-reliant learners (Warschauer, Turbee & Roberts, 1996). ESL educators use online resources because they offer diverse teaching methods and interactive programs and materials useful for language learners. Authentic ESL learning resources are available through the internet, which minimizes the decision for immediate study abroad to study the language (Gonglewski, Meloni, & Brant, 2001; Singhal, 1997; Smith, 1997) because an estimated 85% of the world's electronically stored information is in English (Crystal, 1997). Furthermore, the internet allows ESL practitioners to share their instructional materials and exchange knowledge and ideas with language teachers from other countries while also gathering online instructional resources for their lessons (Warschauer, Shetzer & Meloni, 2000).

## **Websites and Apps for ESL Education**

This paper primarily intends to share the interactive websites and apps for ESL education from the Directory of Learning Tools (<http://c4lpt.co.uk/Directory>). The Directory of Learning Tools contains a comprehensive list of online resources that provide tools and materials helpful in addressing the

language learners' specific and unique needs for language acquisition. Many of them are available subscription-free with a few requiring paid membership for a minimal amount. The following list contains only a select number of the site's online resources. These may be helpful for ESL educators who are looking for technology-based instructions that match with their teaching goals and objectives. These online resources are useful for lesson planning or learning new language skills. The website has a more comprehensive list organized into twenty categories.

#### Websites and Apps for ESL Education

##### A. Blogs and Wikis

- a. <http://www.blogger.com/> - blog
- b. <http://www.edmodo.com/> - blog and wiki
- c. <http://www.livejournal.com/> - blog and journal
- d. <http://www.pbworks.com/> wiki
- e. <http://www.penzu.com/> - personal journal
- f. <http://www.wordpress.com/> - blog

##### B. Dictionaries and Thesauruses

- a. <http://www.dictionary.com/> - online dictionary
- b. <http://www.forvo.com/> - pronunciation dictionary
- c. <http://www.howjsay.com/> - pronunciation dictionary
- d. <http://www.merriam-webster.com/> - online dictionary
- e. <http://www.onelook.com/> - dictionary search
- f. <http://www.visuwords.com/> - graphical dictionary
- g. <http://www.yourdictionary.com/> - online dictionary

##### C. Learning/Content Management System (LMS/CMS)

- a. <http://www.drupal.org/> - free open source
- b. <http://www.joomla.org/> - free open source
- c. <http://www.moodle.org/> - free open source
- d. <http://www.sakaiproject.org/> - free open source
- e. <https://www.off2class.com/> - ESL-focused LMS

##### D. Live and Virtual Tools

- a. <http://www.activeworlds.com/> - 3D virtual world
- b. <https://www.blackboard.com/> - e-learning platform
- c. <https://www.bigbluebutton.org/> - virtual classroom

- d. <https://www.bluejeans.com/> - e-learning platform
  - e. <https://www.braincert.com/> - e-learning platform
  - f. <https://edu.google.com/> - e-learning platform
  - g. <https://www.learncube.com/> - e-learning platform with ESL lessons
  - h. <http://www.livestream.com/> - streaming video
  - i. <http://www.secondlife.com/> - 3D virtual world
  - j. <http://www.wiziq.com/> - virtual classroom
  - k. <https://www.zoho.com/> - meeting platform
- E. PDF and Flipping Book Tools
- a. [http://www.123fileconvert.com/microsoft\\_fileconverter\\_word.asp/](http://www.123fileconvert.com/microsoft_fileconverter_word.asp/) - PDF converter
  - b. <https://pdf.abbyy.com/> - scans and PDF converter
  - c. <https://www.bookletcreator.com/> - create booklet from PDF files
  - d. <https://www.bookletcreator.com/> - documents, scans, and PDF converter
  - e. <https://www.easypdf.com/> - PDF converter
  - f. <https://www.investintech.com/> - PDF converter
- F. Presentation
- a. <http://www.animoto.com> - video slideshows
  - b. <http://www.buncee.com> - creation and communication tool
  - c. <http://www.empressr.com/> - multimedia
  - d. <http://www.prezi.com/> - presentation editor
  - e. <http://www.sliderocket.com/> - presentation editor
- G. Quizzing and Testing Tools
- a. <https://www.classmarker.com/> - customizable online creator
  - b. <https://www.conductexam.com/online-exam-software> - online exam software
  - c. <https://www.cram.com/> - flashcard creator
  - d. <https://www.easytestmaker.com/> - exam generator
  - e. <http://www.exambuddy.com/> - online lesson and activities
  - f. <https://www.gimkit.com/> - game-based quizzing tool
  - g. <https://www.helpsteaching.com/free-test-maker> - online test maker
  - h. <https://www.kahoot.com/> - game-based quizzing tool

- i. <https://www.onlineexambuilder.com/> - exam builders
  - j. <http://www.qarbon.com/presentation-software/viewletquiz/> - flash-based surveys and assessments
  - k. <http://www.questiontools.com/> - online courses and assessments
  - l. <https://quizlet.com/> - flashcards, study, game modes
- H. Resource Sharing
- a. <http://www.box.net/> - files
  - b. <http://www.docs.google.com/> - documents
  - c. <http://www.dropbox.com/> - files
  - d. <http://www.flickr.com/> - photos
  - e. <http://www.schooltube.com/> - videos
  - f. <http://www.slideshare.net/> - slides
  - g. <http://www.teachertube.com/> - videos
  - h. <http://www.techsmith.com/jing/> - visuals
  - i. <http://www.videopress.com/> - videos
  - j. <http://www.vimeo.com/> - videos
  - k. <http://www.voicethread.com/> - group conversations
  - l. <http://www.watchknow.org/> - videos
  - m. <http://www.xtranormal.com/> - movies
  - n. <http://www.youtube.com/> - videos
- I. Web Exercise Creation
- a. <http://www.contentgenerator.net/> - flash-based online quiz tool
  - b. <http://www.esvideo.com/> - flash-based online quiz tool
  - c. <http://www.lingtlanguage.com/> - spoken exercises
  - d. <http://www.listen-and-write.com/> - dictation drills
  - e. <http://www.quia.com/> - JavaScript authoring
- J. Website Creation
- a. <http://www.kompozer.net/> - web authoring
  - b. <http://www.mahara.org/> - e-portfolio system
  - c. <http://www.sites.google.com/> - contains pre-designed templates
  - d. <http://www.snappages.com> – drag-and-drop
  - e. <http://www.webnode.com/> - a website builder
  - f. <http://www.weebly.com> – drag-and-drop
  - g. <http://www.wix.com/> - flash website

## **The Cons of Technology-based ESL Education**

Though technology-based ESL education is innovative it is not always a walk in the park. Indeed, there are some unavoidable barriers that both teachers and learners need to be aware of and to be prepared for.

Firstly, technology resources require internet connection and equipment, particularly computers or processors, which may not be readily available for some schools, and on the part of the students, there is a possibility of the lack of funds (Coghlan, 2004). There are still quite several schools that have limited funds for acquiring computer devices and software (Swiss & Meskills, 2004; Lai & Kritsonis, 2006). The lack of funds for acquiring equipment to access technology-based instructions is frustrating for the teachers and learners. Often, this situation leads to a lack of interest in technology-based education (Mike, 1996). In other cases, a low school budget to support teacher training to improve technological know-how leads to a low frequency of technology-based instructions. The successful execution of technology-based instructions requires teacher competency (Schwab & Foa, 2001). Therefore, there should be sufficient teacher training, practice, and more than enough know-how to effectively execute and use technology-based instructions. The use of technology-based instructions may not be implemented without the appropriate skills, knowledge, and attitude (Baylor and Ritchie, 2002).

Another barrier to using technology-based instructions is the teachers' attitude and perception (Hodas, 1993). Some teachers resist adopting contemporary approaches and find technology-based instructions inefficient (McGrail, 2005). Fang & Warschauer (2004) assert that some educators prefer traditional approaches because of the fear of losing authority and purpose. Some research indicates teachers may deter adopting technology-based instructions in their approaches because of concerns of becoming inefficient educators (Dawes, 2001; Becta, 2004). In addition, educators worry about their skills in using technology, and fear of failure inhibits them from utilizing technology-based instructions (Beggs, 2000).

Since some educators also have other duties aside from classroom instructions, the insufficient time to learn technology-based instructions and the minimal technical support eventually lead them to reluctance in adopting

technology-based instructions (Jacobsen & Lock 2005; King 2003). Respondents of Chanlin et al. (2006) stated that technology-based instructions require more time for preparation than classes that do not use technology in the teaching and learning process. Ismail & Almekhlafi (2010) reported that the teachers' negative perceptions of technology-based instructions in ESL education primarily include time constraints for preparation and time-consuming executions.

The learners' response to the shift from traditional teaching approaches to one that fully utilizes technology-based instructions may show hesitance because of almost the same reasons some educators fear this contemporary approach: lack of knowledge, insufficient resources, time constraints, and insufficient experience and practice in using technology in the learning process, eventually leading to poor academic performance.

## **Conclusion**

This paper has discussed the merits of using technology-based instructions in ESL education. The literature review showed that technology-based instructions in language teaching are valuable for various purposes: motivation, participation, engagement, self-empowerment, improved socio-communication skills, language proficiency, progress in academic performance, collaborative learning development, pedagogical reformation, and provision of contemporary and diverse learning resources. The use of technology in language education is not free from complications. These may include financial constraints, lack of access, insufficient time to create lessons that will incorporate technology in the instructions, lack of adequate teachers' training, teachers' attitude, and students' lack of interest due to factors similar that of the teachers' dilemma in using technology-based instructions. The paper presented the pros and cons of using technology-based instructions in ESL education to provide practitioners and researchers with some essential contextual evidence and useful references.

These days, as ushered by the pandemic, educators find numerous websites and apps available for use in educational settings. Many of them demonstrate sophisticated, user-friendly features that can make it difficult for the teachers

and the learners to decide on the right tools that match their wide variety of specific and unique needs for language instructions and acquisition. Given the needs of language educators to appropriately identify the technology-based instructions they require according to their objectives and goals, it is essential to have a list of websites and apps that contain instructional resources organized into categories and purposes.

ESL education using technology-based instructions may be challenging at the start. The initial requirement to make these instructions successful is a change of mindset from a conventional to a more contemporary point of view. ESL practitioners and learners should be continuously encouraged to improve their knowledge and understanding of the different theoretical, pedagogical, and technical aspects of using technology and online tools in various teaching and learning contexts.

## References

- Adiyaman, Z. (2002). Foreign language teaching via distance education, *TOJET*. 1. Issue 1.
- Ahmadi, M. R. (2017). The impact of motivation on reading comprehension. *International Journal of Research in English Education*. Retrieved April 7, 2020, from <http://www.ijreeonline.com>
- Anderson, R & B. Speck. (2001). *Using technology in K-8 literacy classrooms*. Upper Saddle River, N: J: Prentice Hall.
- Baylor, A. L. & Ritchie, D. (2002). What factors facilitate teacher skill, teacher morale, and perceived student learning in technology-using classrooms. *Computers and Education*, vol. 39, pp. 395-414.
- Baytak, A., Tarman, B., & Ayas, C. (2011). Experiencing technology integration in education: children's perceptions. *International Electronic Journal of Elementary Education*, 3(2), 139-151. Retrieved April 7, 2020, from <https://www.iejee.com/index.php/IEJEE/article/view/233>
- Becker, H. J. (1998). Running to catch a moving train: Schools and information technologies. *Theory into Practice*, 37(1), 20-30.
- Becta (2004). *A review of the research literature on barriers to the uptake of ICT by*

- teachers*. Retrieved April 7, 2020, from <http://www.becta.org.uk>
- Beggs, T. A. (2000). Influences and barriers to the adoption of instructional technology. *Paper presented at Mid-South Instructional Technology Conference proceedings*. Murfreesboro, TN.
- Crystal, D. (1997). *English as a global language*. Cambridge, Cambridge University Press.
- Dawes, L. (2001). What stops teachers using new technology? M Leask (ed.), *Issues in Teaching using ICT*. Routledge, London.
- Dawson, K., Cavanaugh, C., & Ritzhaupt, A. (2008). Florida's EETT Leveraging Laptops Initiative and its impact on teaching practices. *Journal of Research on Technology in Education*, 41(2), 143–159. Retrieved April 7, 2020, from <https://doi.org/10.1080/15391523.2008.10782526>
- Dunkel, P. (1990). Implications of the CAI effectiveness research for limited English proficient learners. *Computers in the Schools*, vol. 7, no. 1/2, pp. 31–52.
- Fang, X., & Warschauer, M. (2004). Technology and curricular reform in China: A case study. *TESOL Quarterly*, vol. 38, no. 2, pp. 301–321.
- Frigaard, A. (2002). *Does the computer lab improve student performance on vocabulary, grammar, and listening comprehension?* ERIC Document Reproduction Service. No. ED476749.
- Galavis, B. (1998). Computers and the EFL class: Their advantages and a possible outcome, the autonomous learner. *English Teaching Forum*, vol. 36, no. 4, 27. Retrieved April 7, 2020, from <http://exchanges.state.gov/forum/vols/vol36/no4/index.htm>
- Gips, A., Di Mattia, P., & Gips, J. (2004). The effect of assistive technology on educational costs: Two case studies, in K. Miesenberger, J. Klaus, W. Zagler, D. Burger (eds.), *Computers Helping People with Special Needs*, Springer. pp. 20–213.
- Gonglewski, M., Meloni, C., & Brant, J. (2001). Using e-mail in foreign language teaching: Rationale and suggestions. *The Internet TESL journal*, 7(3). Retrieved April 7, 2020, from <http://iteslj.org/Techniques/Meloni-Email.html>
- Harmer, J. (2007). *The practice of English language teaching*. Pearson Longman.
- Hodas, S. (1993). Technology refusal and the organizational culture of schools.

- Educational Policy Analysis Archives*, vol. 1, no. 10. Retrieved April 7, 2020, from <http://epaa.asu.edu/epaa/v1n10.html>
- Ismail, A., & Almekhlafi, A. G. (2010). Teachers' perceptions of the use of technology in teaching languages in United Arab Emirates' schools. *International Journal for Research in Education*, vol. 27, pp. 37–56.
- Jacobsen, D. M., & Lock, J. V. (2005). Technology and teacher education for a knowledge era: Mentoring for student futures, not our past. *Journal of Technology and Teacher Education*, vol. 12, no. 1, pp. 75–87.
- Jonassen, D. H. (2000). *Computers as mindtools for schools: Engaging critical thinking*. Upper Saddle River, NJ: Prentice Hall.
- King, K. P. (2003). Keeping pace with technology: Educational technology that transforms-The challenge and promise for higher education faculty. *Hampton Press*, Cresskill, NJ.
- Lai, C. C., & Kritsonis, W. A. (2006). The advantages and disadvantages of computer technology in second language acquisition, *Doctoral Forum: National Journal for Publishing and Mentoring Doctoral Student Research*, vol. 3, no. 1, pp. 1–6.
- Lee, K-W. (2000). English teachers' barriers to the use of computer-assisted language learning. *Internet TESOL Journal*, 6(12). Retrieved April 7, 2020, from <http://iteslj.org/Articles/Lee-CALLbarriers.html>
- McGrail, E. (2005). Teachers, technology, and change: English teachers' perspectives. *Journal of Technology and Teacher Education*, vol. 13, no. 1, pp. 5–14.
- Mike, D. (1999). Internet in the schools: A literacy perspective, *Journal of Adolescent and Adult Literacy*, vol. 40, no. 1, pp. 1–13.
- Murphy, K., DePasquale, R., & McNamara, E. (2003). Meaningful Connections: Using Technology in Primary Classrooms. *Young Children*, 58(6), 12–18. Retrieved April 7, 2020, from <https://www.learntechlib.org/p/101494/>
- Patel, C. (2013). Use of multimedia technology in teaching and learning communication skill: An analysis. *International Journal of Advancements in Research & Technology*, 2(7), pp. 116–123.
- Schwab, R. L. & Foa, L. (2001). Integrating technologies throughout our schools.

- Phi Delta Kappan*, vol. 82, pp. 620–626.
- Singhal, M. (1997). The Internet and foreign language education: Benefits and challenges. *The Internet TESL Journal*, 3(6). Retrieved April 7, 2020, from <http://iteslj.org/Articles/Singhal-Internet.html>
- Smith, B. (1997). Virtual Realia. *The Internet TESL Journal*, 3(7). Retrieved April 7, 2020, from <http://iteslj.org/Articles/Smith-Realia.html>
- Stepp-Greany, J. (2002). Student perceptions on language learning in a technological environment: Implications for the new millennium. *Language Learning and Technology*. pp. 165–180.
- Timucin, M. (2006). Implementing CALL in the EFL context. *ELT Journal*, vol. 60, no. 3, pp. 262–271.
- Warschauer, M., & Healey, D. (1998). Computers and language learning: An overview. *Language Teaching*, vol. 31, no. 1, pp. 57–71. Retrieved April 7, 2020, from <http://catdir.loc.gov/catdir/samples/cam031/2001269254.pdf>
- Warschauer, M., & Meskill, C. (2000). Technology and Second Language Teaching and Learning. In J. Rosenthal (ed), *Handbook of Undergraduate Second Language Education*. Mahwah, NJ: Lawrence Erlbaum.
- Warschauer, M., Shetzer, H., & Meloni, C. (2000). *Internet for English teaching*. Virginia: Alexandria: TESOL.
- Warschauer, M., Turbee, L., & Roberts, B. (1996). Computer learning networks and student empowerment. *System*, 24(1), pp. 1–14.