

Use of technology to learn English in Ecuadorian classrooms: a case study in Morona Santiago province

Uso de la tecnología para el aprendizaje del inglés en las aulas ecuatorianas: Un estudio de caso en la provincia de Morona Santiago

- ¹ Silvia Elizabeth Cárdenas Sánchez  <https://orcid.org/0000-0002-1760-8288>
Escuela Superior Politécnica de Chimborazo, Sede Morona Santiago, Ecuador.
Grupo de Investigación IITMS
Grupo de Investigación "ELT INNOVATORS" - Universidad Técnica de Machala
silvia.cardenas@epoch.edu.ec
- ² Byron Paúl Huera Paltán  <https://orcid.org/0000-0002-1721-2574>
Escuela Superior Politécnica de Chimborazo, Sede Morona Santiago, Ecuador.
Grupo de investigación ESPOCH-AI
bhuera@epoch.edu.ec
- ³ Paúl Hernán Machado Herrera  <https://orcid.org/0009-0004-5216-8654>
Escuela Superior Politécnica de Chimborazo, Sede Morona Santiago, Ecuador.
paul.machado@epoch.edu.ec



Artículo de Investigación Científica y Tecnológica

Enviado: 18/04/2024

Revisado: 15/05/2024

Aceptado: 24/06/2024

Publicado: 31/07/2024

DOI: <https://doi.org/10.33262/ap.v6i3.512>

Cítese:

Cárdenas Sánchez, S. E. ., Huera Paltán, B. P., & Machado Herrera, P. H. (2024). Use of technology to learn English in Ecuadorian classrooms: a case study in Morona Santiago province . AlfaPublicaciones, 6(3), 127–137. <https://doi.org/10.33262/ap.v6i3.512>



ALFA PUBLICACIONES, es una revista multidisciplinar, **trimestral**, que se publicará en soporte electrónico tiene como **misión** contribuir a la formación de profesionales competentes con visión humanística y crítica que sean capaces de exponer sus resultados investigativos y científicos en la misma medida que se promueva mediante su intervención cambios positivos en la sociedad. <https://alfapublicaciones.com>

La revista es editada por la Editorial Ciencia Digital (Editorial de prestigio registrada en la Cámara Ecuatoriana de Libro con No de Afiliación 663) www.celibro.org.ec



Esta revista está protegida bajo una licencia Creative Commons Attribution Non Commercial No Derivatives 4.0 International. Copia de la licencia: <http://creativecommons.org/licenses/by-nc-nd/4.0/>

Palabras**claves:**

Dispositivos
tecnológicos,
internet,
aprendizaje del
inglés

Resumen

Introducción. El uso de Internet se ha convertido en una herramienta esencial en nuestros días. Los estudiantes están más dispuestos a utilizar dispositivos con acceso a internet para realizar sus tareas. En las aulas ecuatorianas, el acceso a internet es limitado en algunos lugares. Por ejemplo, este estudio se llevó a cabo en una escuela primaria pública y la información proporcionada demuestra que no todos los estudiantes tienen acceso a conexión a Internet en casa o el uso de un teléfono celular es el dispositivo más común para completar las tareas en línea. **Objetivo.** El objetivo de este estudio fue explorar la disposición a completar tareas fuera del aula utilizando plataformas con acceso a internet para mejorar el aprendizaje del idioma inglés. **Metodología.** Este estudio se llevó a cabo en un entorno en el que los estudiantes de 8° a 10° curso rellenaron una encuesta sobre el acceso a internet, los dispositivos tecnológicos para hacer los deberes en casa y la disposición a utilizar internet para completar tareas en inglés. Luego los datos fueron analizados y comparados para obtener una visión general de los dispositivos dominantes y la importancia del acceso a internet en casa para completar las tareas. **Resultados.** Fueron 150 los estudiantes que completaron la encuesta y los resultados mostraron que la mayoría de ellos tiene acceso a internet en casa; pero, alrededor de 126 estudiantes afirmaron que utilizan teléfonos móviles para completar tareas o buscar información en internet. Sin embargo, 142 estudiantes mencionaron que estaban dispuestos a practicar inglés en casa o hacer tareas utilizando plataformas que requerían conexión a internet. **Conclusión.** La forma en que los estudiantes aprenden y realizan actividades ha cambiado drásticamente como resultado de las mejoras tecnológicas, especialmente en el campo de la enseñanza del inglés. Es imposible sobrestimar el valor de la conexión a Internet para los estudiantes, ya que les permite acceder a una gran cantidad de herramientas e información que pueden mejorar su educación. Además, la tecnología simplifica la colaboración y la comunicación entre estudiantes y profesores, lo que facilita la obtención de apoyo y retroalimentación. De este modo, los estudiantes podrán aprovechar las ventajas del aprendizaje digital, mejorar eficazmente sus conocimientos de inglés y prepararse para un futuro en el que la competencia técnica no hará sino aumentar. **Área de estudio general:** Educación y Tecnología. **Área de**

estudio específica: Enseñanza del Inglés y Tecnologías de la Información. **Tipo de estudio:** Estudio de caso.

Keywords:

Technology devices,
Internet,
English language learning

Abstract

Introduction. The use of internet has become an essential tool in these days. Students are more willing to use devices with internet access to complete tasks. In Ecuadorian classrooms, the internet access is limited in some places. For instance, this study was conducted in a public elementary school and the information provided demonstrates that not all the students have access to internet connection at home or the use of a cellphone is the most common device to complete tasks online. **Objective.** The aim of this study was to explore the willingness to complete assignments outside the classroom using platforms with internet access to improve English language learning. **Methodology.** This study was conducted in a setting where students from grade 8 to 10 completed a survey about internet access, technology devices to do homework at home and willingness to use internet to complete English assignments. Then the data were analyzed and compared to get a general vision of the dominant devices and the importance of internet access at home to complete assignments. **Results.** There were 150 students who completed the survey and the results showed that most of them have internet access at home; but, about 126 students stated that they use cellphones to complete tasks or look for information on internet. However, 142 students mentioned that they were willing to practice English at home or do assignments using platforms which required internet connection. **Conclusion.** The way students learn and perform activities has changed dramatically because of technological improvements, especially in the field of English language instruction. It is impossible to overestimate the value of internet connectivity for students because it gives them access to a gathering of tools and information that can improve their education. Additionally, technology makes it simpler for students and teachers to collaborate and communicate, which makes it easier to get support and feedback. By doing this, students will be able to take advantage of digital learning, efficiently enhance their English language skills, and get ready for a future where technical competency will only grow.

Introduction

A new era of learning, especially in language acquisition, has been brought about by the incorporation of technology into education. Technological improvements have brought about a considerable revolution in teaching approaches for the English language, which is a global lingua franca. This study explores the usefulness of technology on the study of English as a foreign language (EFL) for middle school students in a specific province in Ecuador which is Morona Santiago.

Like many Latin American nations, Ecuador has difficulties when it comes to English language instruction. According to Orosz et al. (2021), Ecuador's English language proficiency is low. There are different issues that affect EFL practices which are professional development, educational policies, and lack of motivation (Sevy-Biloon et al., 2020). Limited resources, teachers training, and infrastructure are also other factors that have been identified in public schools (Rosero, 2024). However, now teachers must deal with the use of technology to teach English while students are using it to complete tasks. According to Tomczyk et al. (2021), Ecuadorian educators are in favor of limiting smartphone use in classrooms.

According to Checa (2021), the use of technology to learn or teach English differs in Ecuador. The results of the author's study demonstrate that private high schools have greater access to ICTs than public high schools do. Their staff is more prepared to work with these tools, and students have full access to ICTs both at home and at school (Alsulami, 2016). Additionally, the student at private high schools exhibits a positive attitude toward this kind of integration. In contrast, public high schools have inadequate technology resources, underqualified teachers, and students who have little to no access to these tools at home (Reza, 2018). This leads to the conclusion that only private high schools in Ecuador can successfully integrate ICTs into EFL instruction because of their superior position in comparison to public schools (Sung et al., 2015).

This research attempts to offer a comprehensive knowledge of the opportunities and difficulties associated with technology-enhanced EFL training within a specific geographic and sociocultural context by concentrating on a particular province in Ecuador with middle school students. A thorough examination of elements including students access to digital devices, use of technology to complete tasks, and particular preferences when learning English of the target group is made possible by this case study approach.

This study aims to add to the expanding corpus of research on technology-integrated EFL teaching by providing insights into the real-world application of technology and its effects on language learning outcomes.

Data from students at a public middle school in the province of Morona Santiago is used to provide insights about how technology can be used to improve English language proficiency in a place where it is not widely spoken. Through an investigation of the experiences of learners, this study attempts to identify best practices, obstacles, and suggestions for enhancing the use of technology in EFL classes.

Methodology

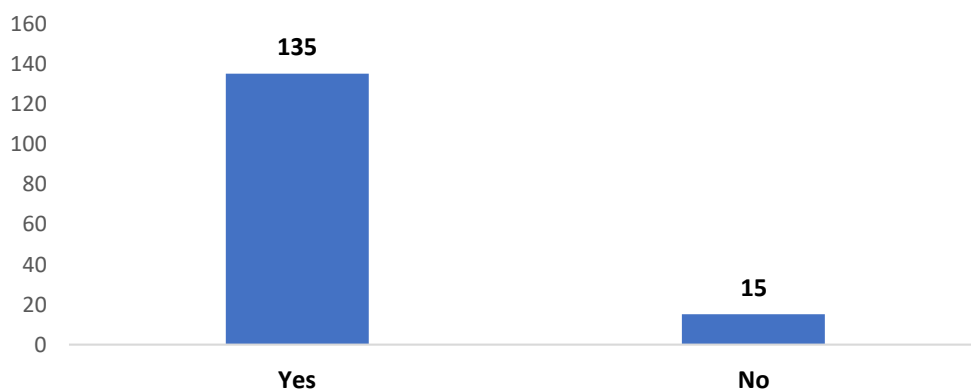
This study used a case study methodology to investigate how technology is used by students in EFL instruction in a particular Ecuadorian province. To collect data from 150 middle school, students enrolled in grades 8, 9, and 10, a survey was applied. There were 67 students from grade 8, 39 scholars from grade 9 and 44 ten graders' students. The structured survey was focused on gathering data on students' access to technology, preferred devices for English tasks, and favorite English activities. Then the information was analyzed to compare usefulness of technology to complete English assignments, internet access and students' motivation to use technology to learn English.

Results

It is notable that a sizable majority of students which is 135 among 150, have access to the internet at home when analyzing the digital divide among students. The availability of digital resources is essential for academic performance because it enables students to participate in virtual learning environments, finish assignments, and interact with online educational content. In contrast, 15 students do not have access to the internet at home, which is a significant hindrance to their academic endeavors (Mohd et al., 2021). Ensuring fair learning opportunities for every student requires addressing this discrepancy. This information can be seen in figure 1.

Figure 1

Internet access at home

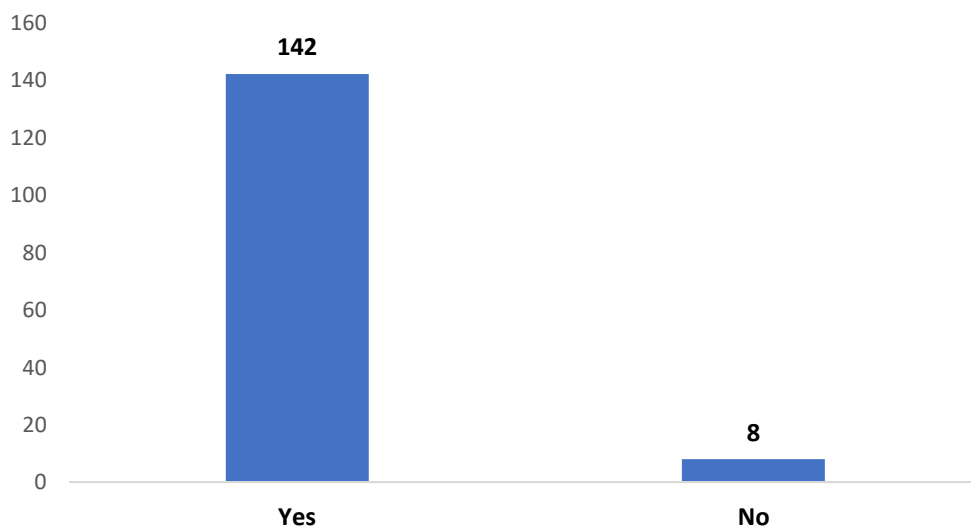


Note: student's internet access at home

The data also revealed that 142 out of 150 students, or a clear majority, choose to use the internet to finish their English homework. This preference demonstrates how important digital technologies are becoming in today's classrooms. Online resources' simplicity and accessibility play a part in this trend by making it simple for students to obtain knowledge, collaborate with classmates, and make use of a variety of educational platforms to improve their learning process. Just a tiny percentage, 8 out of 150 students, do not share this preference; this could be because they prefer conventional study techniques, have restricted access to technology, or have different learning styles. See figure 2. Technology integration in English language instruction has many advantages, including the ability to practice coding, online tests, better exam results, the ability to learn other languages, and the promotion of both solo and group learning. Additionally, it offers chances to practice all language abilities, use a variety of computer programs and multimedia presentations, and access internet resources. The sort of technology utilized, the speed at which technology is developing, the number and size of classes, expenses, time restraints, age considerations, the workload of lecturers, their proficiency with technology, and the accessibility of technological resources are among the obstacles (Rintaningrum, 2023).

Figure 2

Students more willing to do English assignments using internet



Note: student's desire to complete English homework through internet use

According to the research, students heavily depend on mobile technology; 142 out of 150 use their cellphones to finish assignments that require internet access. This trend emphasizes how important mobile devices are to modern schooling because they provide unmatched flexibility and convenience. Students' ability to participate in both formal and informal learning activities is improved by cellphones, which give them access to

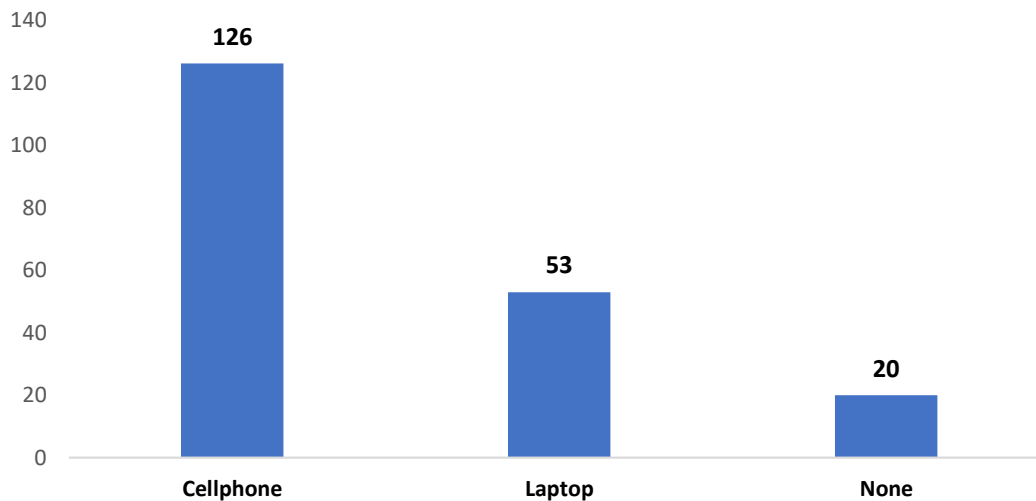
educational resources, allow them to interact with learning platforms, and allow them to speak with peers virtually anywhere (Metruk, 2022).

In addition, 53 out of 150 students use computers to finish their assignments, underscoring the significance of these more conventional yet powerful tools in the classroom. The fact that 20 pupils lack a device to access the internet at home, which puts them at a major disadvantage, is alarming. See figure 3. Their involvement in online learning activities, access to educational materials, and academic performance may all be negatively impacted by this digital divide. Ensuring equitable educational opportunities requires addressing this imbalance. Mudra (2020) conducted a study to find out how EFL teachers and young learners view the advantages and disadvantages of digital literacy. In-depth semi-structured interviews were used to gather data for the qualitative study, which involved eight young learners and five EFL teachers. The results show that digital literacy promotes online cooperation, boosts the use of digital technology, and helps young learners become more proficient writers, readers, listeners, and speakers. Nonetheless, obstacles consist of weak internet connections, challenges with comprehending digital content, and the exorbitant expense of electronic devices. Variations in comprehension levels and the complexity of digital instruments exacerbate these difficulties (Chen et al., 2020). The report provides insightful information on how to successfully integrate digital literacy tools.

The information is consistent with other general trends in education that highlight the growing use of technology in the classroom (Li, 2023). Studies show that using laptops and mobile devices can assist a variety of instructional activities, increase learning outcomes, and increase student engagement (El-Sofany & El-Haggar 2020). However, to guarantee that all scholars benefit from these technical developments, the digital gap continues to be a critical issue that requires attention. Fostering an inclusive and productive learning environment requires equal access to gadgets and internet connectivity (Nugroho & Mutiaraningrum, 2020).

Figure 3

Devices to complete assignments at home



Note: devices used at home to complete tasks and assignments.

Conclusions

- Of the 150 students, 135 have internet connection at home. This makes a significant difference in their academic performance since it allows them to complete assignments, engage with online educational content, and participate in virtual learning. The 15 scholars who do not have access to the internet at home present significant obstacles to their academic achievement, underscoring the necessity of measures to close the digital gap.
- While 142 out of 150 students, or a large majority, said they would rather finish their English homework online, demonstrating the growing significance of digital technology in the classroom today. This decision is influenced by the availability of multiple educational platforms, collaborative opportunities, and easy access to information. The tiny fraction that does not share this choice, on the other hand, can have different learning preferences or have less access to technology.
- Most of the interviewed students use their cellphones for internet-based tasks, demonstrating the high reliance on mobile technology and the crucial role that these devices play in offering flexibility and convenience in the learning process. 53 students also utilize computers for their assignments, highlighting the technology's ongoing importance. But the fact that 20 kids lack a device to access the internet at home draws attention to a serious drawback and emphasizes how

vital it is to overcome these differences to guarantee that all students have fair access to educational materials.

Conflicto de intereses

Los autores declaran que no existe conflicto de intereses en relación con el artículo presentado.

References

- Alsulami, S. (2016). The effects of technology on learning English as a foreign language among female EFL students at Effatt College: an exploratory study. *Studies in Literature and Language*, 12(4), 1-16. <http://dx.doi.org/10.3968/7926>
- Checa Medina, J. (2021). The Integration of ICTs in EFL Teaching in Ecuadorian High Schools: one country, two realities. *Journal of English Language Teaching and Applied Linguistics*, 3(8), 01–13. <https://doi.org/10.32996/jeltal.2021.4.7.1>
- Chen, Z., Chen, W., Jia, J., & An, H. (2020). The effects of using mobile devices on language learning: A meta-analysis. *Educational Technology Research and Development*, 68, 1769-1789. <https://link.springer.com/article/10.1007/s11423-020-09801-5>
- El-Sofany, H. F., & El-Hagggar, N. (2020). The Effectiveness of using mobile learning techniques to improve learning outcomes in higher education. *International Journal of Interactive Mobile Technologies (IJIM)*, 14(08), 4–18. <https://doi.org/10.3991/ijim.v14i08.13125>
- Li, R. (2023). Effects of mobile-assisted language learning on EFL learners' listening skill development. *Educational Technology & Society*, 26(2), 36-49. <https://www.jstor.org/stable/48720994>
- Metruk, R. (2022). Smartphone English language learning challenges: a systematic literature review. *Sage Open*, 12(1). <https://doi.org/10.1177/21582440221079627>
- Mohd Basar, Z., Mansor, A., Jamaludin, K., & Alias, B. (2021). The Effectiveness and Challenges of Online Learning for Secondary School Students – A Case Study. *Asian Journal of University Education*, 17(3), 119-129. DOI: <https://doi.org/10.24191/ajue.v17i3.14514>
- Mudra, H. (2020). Digital literacy among young learners: how do EFL teachers and learners view its benefits and barriers? *Teaching English with Technology*, 20(3), 3-24. <https://www.ceeol.com/search/article-detail?id=884300>

- Nugroho, A., & Mutiaraningrum, I. (2020). EFL teachers' beliefs and practices about digital learning of English. *EduLite: Journal of English Education, Literature and Culture*, 5(2), 304-321. <http://dx.doi.org/10.30659/e.5.2.304-321>
- Orosz, A., Monzón, M., & Velasco, P. (2021). Ecuadorian teachers' perceptions of teaching English: challenges in the public education sector. *International Journal of Learning Teaching and Educational Research*, 20(3), 229-249. <https://doi.org/10.26803/ijlter.20.3.14>.
<http://ijlter.net/index.php/ijlter/article/view/143>
- Reza Ahmadi, M. (2018). The use of technology in English language learning: A literature review. *International journal of research in English education*, 3(2), 115-125. <http://ijreeonline.com/article-1-120-en.html>
- Rintaningrum, R. (2023). Technology integration in English language teaching and learning: Benefits and challenges. *Cogent Education*, 10(1).
<https://doi.org/10.1080/2331186X.2022.2164690>
- Rosero Jara, C. S. (2024). *Challenges for teaching and learning EFL in public elementary and secondary schools of Ecuador: a literature review* [Tesis de maestría, Universidad Estatal de Milagro, Milagro, Ecuador].
<https://repositorio.unemi.edu.ec/xmlui/handle/123456789/7247>
- Sevy-Biloon, J., Recino, U., & Munoz, C. (2020). Factors Affecting English Language Teaching in Public Schools in Ecuador. *International Journal of Learning Teaching and Educational Research*, 19(3), 276-294.
<https://doi.org/10.26803/ijlter.19.3.15>.
https://www.researchgate.net/publication/340852253_Factors_Affecting_English_Language_Teaching_in_Public_Schools_in_Ecuador
- Sung, Y. T., Chang, K. E., & Yang, J. M. (2015). How effective are mobile devices for language learning? A meta-analysis. *Educational Research Review*, 16, 68-84.
<https://doi.org/10.1016/j.edurev.2015.09.001>
- Tomczyk, Ł., Jáuregui, V. C., De La Higuera Amato, C. A., Muñoz, D., Arteaga, M., Oyelere, S. S., Akyar, Ö. Y., & Porta, M. (2021). Are teachers' techno-optimists or techno-pessimists? A pilot comparative among teachers in Bolivia, Brazil, the Dominican Republic, Ecuador, Finland, Poland, Turkey, and Uruguay. *Education and Information Technologies*, 26, 2715–2741.
<https://doi.org/10.1007/s10639-020-10380-4>

El artículo que se publica es de exclusiva responsabilidad de los autores y no necesariamente reflejan el pensamiento de la **Revista Alfa Publicaciones**.



El artículo queda en propiedad de la revista y, por tanto, su publicación parcial y/o total en otro medio tiene que ser autorizado por el director de la **Revista Alfa Publicaciones**.



Indexaciones

