

TEACHING ENGLISH IN VIRTUAL LEARNING ENVIRONMENTS IN LATIN AMERICA

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Abstract

To develop this article, a documentary review of the elaboration and production of research works related to the study of English Teaching in Virtual Learning Environments was carried out in order to know through a bibliometric study the main characteristics of 409 publications registered in Scopus database during the period 2018-2022 at the Latin American level. The results of this database were organized in graphs and figures categorizing the information by variables such as Year of Publication, Country of Origin and Area of Knowledge which allowed to identify through a qualitative analysis, the position of different authors against the proposed theme. The main findings found through this research was that Brazil stood out for having the highest scientific production, leading the list with 104 publications. Likewise, the Area of Knowledge that made the greatest contribution to the construction of bibliographic material related to the study of the variables were the social sciences with 239 published documents.

Keywords: teaching, e-learning, virtual, technological tools, English, second language.

1. Introduction

Although when referring to new technologies we often limit ourselves to thinking about video games, access to the internet and changes in the media, the benefits they have granted to humanity are innumerable since they have been able to adapt to various disciplines such as Learning, which can be defined as the "The body of knowledge, principles, ideas, etc., that are taught to someone (Diccionario de la lengua española, n.d.)" or "the process of transmitting a series of knowledge, techniques, standards, and/or skills. It is based on various methods, carried out through a number of institutions, and supported by a range of materials." (wikipedia,

2022) It is precisely there where the use of virtual methods that contribute to the improvement of learning by students who attend these classes becomes important.

In the specific case of English, the native language of countries such as the United States or the United Kingdom, world leaders in multiple aspects, it has gained importance throughout the world as it allows people to stay in communication within inhabitants of other cultures, as well as access to relevant information in various disciplines and areas of knowledge. Hence, the increase in the demand for English as a foreign language courses by professionals, students and adults seeking to learn a second language or improve their profile to achieve better opportunities in the demanding labor market. However, because it is a complementary study, there is mostly no time to take face-to-face classes, so other alternatives are sought that allow learning in a flexible and dynamic way without affecting the quality of teaching. That is why, this research article seeks to describe the main characteristics of the set of publications attached to the Scopus database and that are directly related to the aforementioned variables, as well as the description of the position of certain authors affiliated with institutions around the world, during the period between 2018 and 2022.

2. General objective

Analyze from a bibliometric and bibliographic perspective, the elaboration of works on the variable s Teaching English in Virtual Learning Environments during the period 2018-2022 at the Latin American level.

3. Methodology

This article is carried out through a research with mixed orientation that combines the quantitative and qualitative method.

On the one hand, a quantitative analysis of the selected information in Scopus is carried out under a bibliometric approach of the scientific production corresponding to the study of English Teaching in Virtual Learning Environments

On the other hand, it is analyzed from a qualitative perspective, examples of some research works published in the area of study indicated above, starting from a bibliographic approach that allows describing the position of different authors against the proposed topic.

It is important to note that all this research was carried out through Scopus, managing to establish the parameters referenced in *Figure 1*.

3.1 Methodological design



Figure 1. Methodological design
Source: Authors.



3.1.1 Phase 1: Data collection

The data collection was executed from the Search tool on the Scopus website, where 409 publications were obtained from the choice of the following filters:

e-learning AND english AND as AND a AND second AND language AND (LIMIT-TO (PUBYEAR , 2022) OR LIMIT-TO (PUBYEAR , 2021) OR LIMIT-TO (PUBYEAR , 2020) OR LIMIT-TO (PUBYEAR , 2019) OR LIMIT-TO (PUBYEAR , 2018)) AND (LIMIT-TO (AFFILCOUNTRY , "Brazil") OR LIMIT-TO (AFFILCOUNTRY , "Colombia") OR LIMIT-TO (AFFILCOUNTRY , "Mexico") OR LIMIT-TO (AFFILCOUNTRY , "Chile") OR LIMIT-TO (AFFILCOUNTRY , "Ecuador") OR LIMIT-TO (AFFILCOUNTRY , "Peru") OR LIMIT-TO (AFFILCOUNTRY , "Argentina") OR LIMIT-TO (AFFILCOUNTRY , "Costa Rica") OR LIMIT-TO (AFFILCOUNTRY , "Uruguay") OR LIMIT-TO (AFFILCOUNTRY , "Cuba") OR LIMIT-TO (AFFILCOUNTRY , "Panama") OR LIMIT-TO (AFFILCOUNTRY , "Paraguay") OR LIMIT-TO (AFFILCOUNTRY , "Venezuela") OR LIMIT-TO (AFFILCOUNTRY , "Bolivia") OR LIMIT-TO (AFFILCOUNTRY , "El Salvador") OR LIMIT-TO (AFFILCOUNTRY , "Honduras") OR LIMIT-TO (AFFILCOUNTRY , "Nicaragua"))

- Published documents whose study variables are related to the study of Teaching English in Virtual Learning Environments.
- Limited to the years 2018-2022.
- Limited to Latin America.
- No limit in areas of knowledge.
- Without distinction of type of publication.

3.1.2 Phase 2: Construction of analytical material

The information collected in Scopus during the previous phase is organized to later be classified by graphs, figures and tables as follows:

- Co-occurrence of Words.
- Year of publication.
- Country of origin of the publication.
- Area of knowledge.
- Type of Publication.

3.1.3 Phase 3: Drafting of conclusions and outcome document

In this phase, we proceed with the analysis of the results previously yielded resulting in the determination of conclusions and, therefore, the obtaining of the final document.

4. Resultados

4.1 Co-occurrence of words

Figure 2 shows the Co-occurrence of keywords found in the publications identified in the Scopus database.

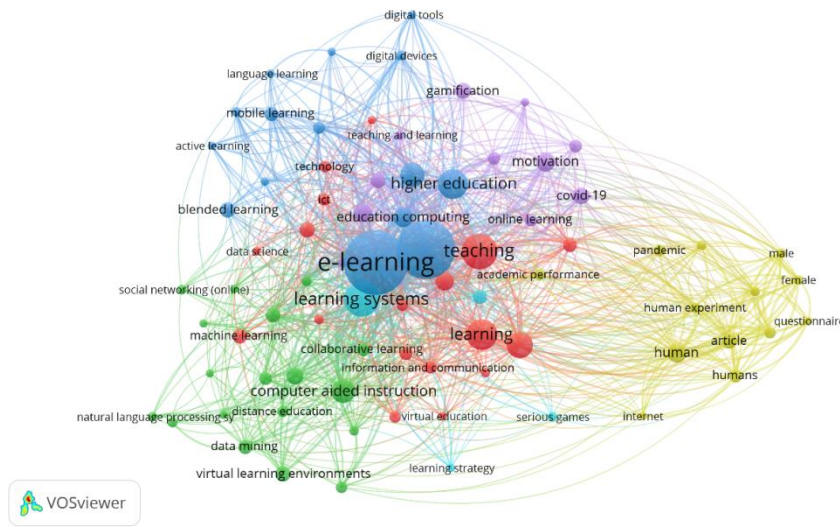


Figure 2. Co-occurrence of words
 Source: Authors. (2023); based on data exported from Scopus.

The data in Figure 2, exported from Scopus, shows us our variables and their relationship with other terms which we will explain below.

E-learning or Electronic Learning is a method used in educational processes that seeks to teach through devices promoting flexibility, practicality and self-motivation on the part of students. Although it is used in different disciplines, it has mostly been implemented for the Teaching of English as a Second Language since it allows all people, regardless of their availability or location, to access information and demonstrate their knowledge through virtual exams.

Being such a primordial resource, today it is normal to find the use of Virtual mechanisms in the different levels of schooling ranging from early childhood to adulthood.

4.2 Distribution of scientific output by year of publication

Figure 3 shows how the scientific production is distributed according to the year of publication.

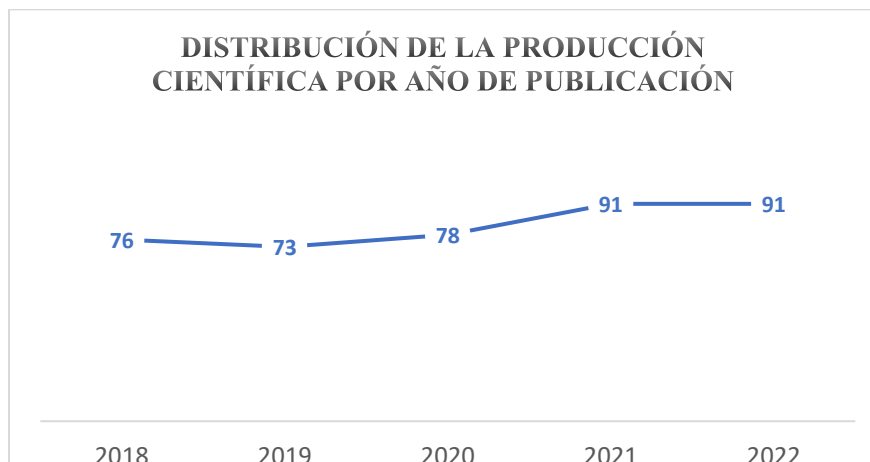


Figure 3. Distribution of scientific production by year of publication.
 Source: Authors. (2023); based on data exported from Scopus

In figure 3 we find the scientific production concerning the variables Teaching English in Virtual Learning Environments at the Latin American level in the period between 2018 and 2022, which resulted in the publication of 409 documents, in the Scopus database, containing the keywords. Likewise, it is evident that throughout the period various changes were experienced. We started with the year 2018 with 76 documents, a number that varies during the following years. During 2019, 73 texts were published, while in 2020 it reached 78 publications. In 2021, the increase continued to achieve the publication of 91 documents, a figure that remained stable in 2022.

From the year 2022, the article "A hybrid methodology to improve oral skills in English language learning using mobile applications" is highlighted, (Criollo-C, Guerrero-Arias, Jaramillo-Alcazar, Luján-Mora, & Vidal, 2022) which emphasizes the importance of implementing a hybrid methodology "that combines traditional methodologies and mobile devices" to complement English teaching (Criollo-C, Guerrero-Arias, Jaramillo-Alcazar, Luján-Mora, & Vidal, 2022) . This arises since it was observed that in Latin America students after completing their studies do not communicate with other people who master the language for which multiple strategies have been reviewed that reinforce weaknesses such as "mobile learning". (Criollo-C, Guerrero-Arias, Jaramillo-Alcazar, Luján-Mora, & Vidal, 2022)

4.3 Distribution of scientific production by country of origin.

Figure 4 shows how scientific production is distributed according to the nationality of the authors.

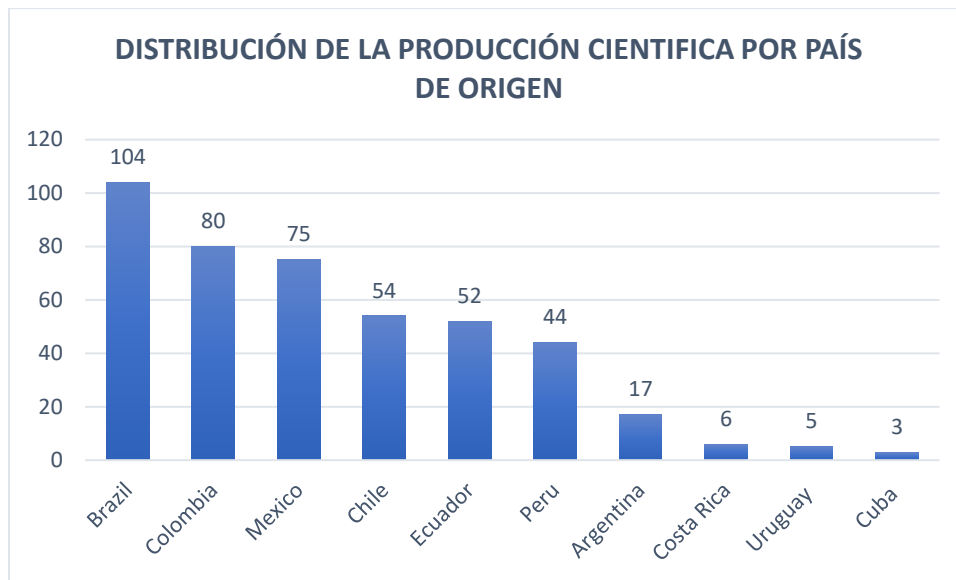


Figure 4. Distribution of scientific production by country of origin.

Source: Authors. (2023); based on data provided by Scopus.

In the study of Teaching English in Virtual Learning Environments in Latin America, Brazil leads the list of documents published with a total of 104 records in the Scopus database during the period of the years 2018-2022, followed by Colombia and Mexico with 80 and 75 texts each.

The conference proceedings entitled "Virtual Playground: an augmented reality application to improve English learning"(Cavalcante, Da Silva, Pereira, Roberto, & Teichrieb, 2020) mentions the benefits and disadvantages that users have discovered when using such applications. For this reason, "this work presents results regarding what are the main teaching needs that developers



and researchers should take into account: intuitive interface, freedom to create and reuse virtual content, offline version to avoid infrastructure limitations, among others" (Cavalcante, Da Silva, Pereira, Roberto, & Teichrieb, 2020) , concluding that this is indeed an application that can be used to obtain better results in teaching processes.

At this point, it is important to note that the preparation of scientific publications in many cases is carried out from collaborations that may involve private and / or public institutions from one or several countries. Therefore, the same publication can be linked to one or more authors with different nationality and thus to more than one country simultaneously, being part of the total number of articles or publications of each of them in the final sum. They will then see, in *Figure 5*, in greater detail the flow of collaborative work by several countries.

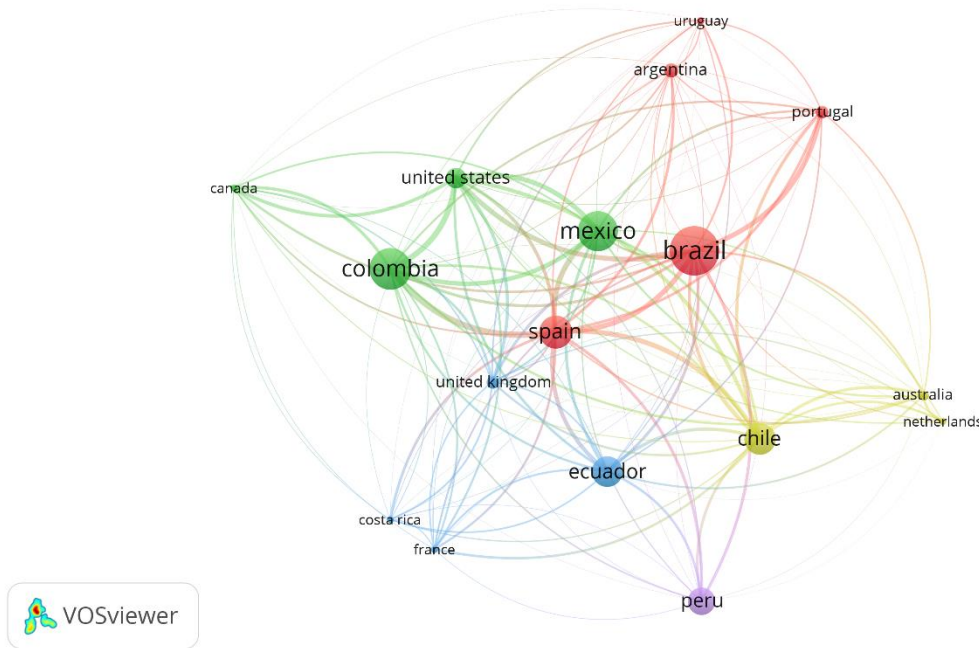


Figure 5. Co-citations between countries.
 Source: Authors. (2023); based on data provided by Scopus.

Figure 5 shows the grouping of research according to the collaboration between authors belonging to various international institutions. There is evidence of outstanding participation among authors affiliated with institutions from Latin American countries such as Brazil, Mexico, Colombia, Peru with countries from other regions such as the United States, Australia, Portugal, Spain, among others.

4.4 Distribution of scientific production by area of knowledge

Figure 6 shows the distribution of the elaboration of scientific publications from the area of knowledge through which the different research methodologies are implemented.

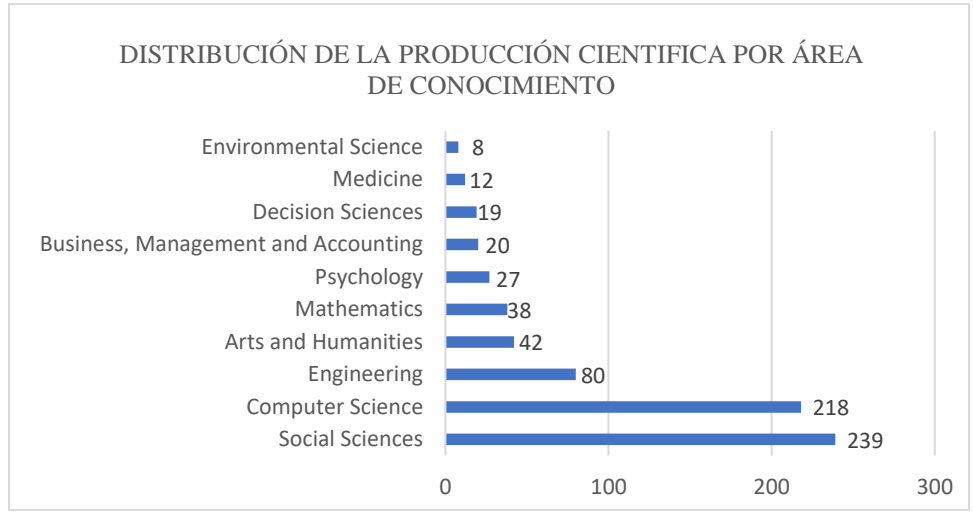


Figure 6. *Distribution of scientific production by area of knowledge.*
Source: Authors. (2023); based on data provided by Scopus.

Due to the nature of our variables it is not surprising that most of the publications found in the Scopus database, on these are made from the social sciences occupying the main position in the publication of documents. Other areas such as computer science and engineering have contributed to the study of these variables, publishing 218 and 80 documents each.

As we can see in *figure 6*, the variables object of this study are relevant in various areas of knowledge, since the Teaching of English is carried out from any discipline with the intention of forming integral professionals who are considered competitive in the demanding labor market. Likewise, for greater practicality, registration for virtual courses that facilitate access to information and provide greater flexibility for those who do not have much time and want to learn a second language is increasingly common.

4.5 Type of publication

In the following graph, you will observe the distribution of the bibliographic finding according to the type of publication made by each of the authors found in Scopus.

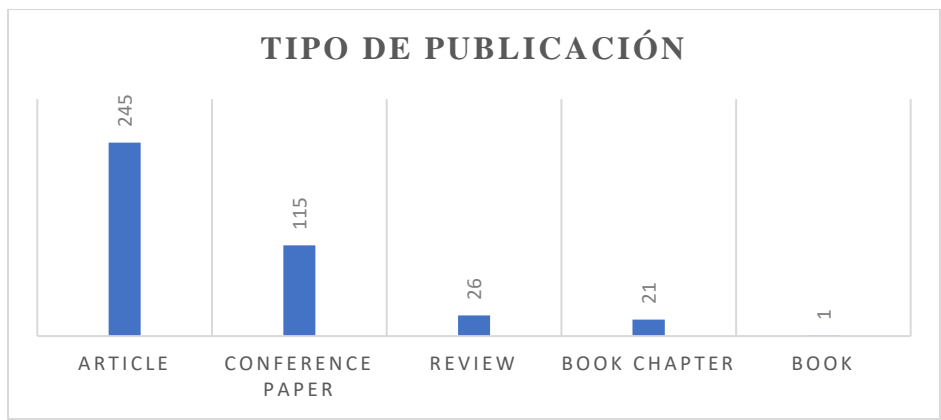


Figure 7. *Type of publication.*
Source: Authors. (2023); based on data provided by Scopus.



Figure 7 clearly shows that the predominant type of publication in the study of English Teaching in Virtual Learning Environments in Latin America was the journal article with a total of 245 documents. In second place, the conference proceedings are located with 115 documents followed by the revisions with 26 publications.

The article "Motivation and E-Learning English as a Foreign Language: A Qualitative Study" in (Escobar Fandiño, Muñoz, & Silva Velandia, 2019) which the factors that influence the motivation of undergraduate students to learn English in "Virtual and Distance modalities -E-Learning-" are analyzed (Escobar Fandiño, Muñoz, & Silva Velandia, 2019). Data collection was carried out through "a semi-structured individual interview", (Escobar Fandiño, Muñoz, & Silva Velandia, 2019) which allowed to determine that their motivation depends mainly on external factors.

5. Conclusions

After the bibliometric analysis carried out in the present research work, it was established that Brazil was the country with the highest number of records published for the variables Teaching English in Virtual Learning Environments in Latin America with a total of 104 publications in Scopus database during the period 2018-2022 and that the area of knowledge with the greatest contribution was They were in the social sciences with a total of 239 texts.


There is no doubt that the implementation of virtual methodologies in the Teaching of English has contributed to the increase in the demand for this type of courses since it allows access to any type of person to learn this second language. As Erazo, Álvarez and García say:

It is the task of teachers to find or design strategies that allow them to develop communicative skills in English. To do this, it must rely on the use of digital tools. The digital age has changed the entire scope of our lives including education. That is, teachers have seen the urgent need to use methodologies to improve the teaching-learning process by adapting them to technology. (Erazo-Álvarez, Carmita, & García-Herrera, 2021)

However, it is necessary to emphasize that in Latin American countries not all inhabitants have access to the internet and other electronic devices, so in many cases they are still immersed in courses with traditional methodologies that are usually considered not very interactive by students. Such is the case of some institutions in Loja, Ecuador that continue with "a teaching process based on text, blackboard, posters and physical space, leaving aside the use of new technologies and digital tools that improve the process of teaching and learning the English language". (Bravo-Reyes & Cango-Patiño, 2020) For this reason and in order to continue generating awareness of the importance of guaranteeing access to these technological tools by all students. We hope to promote with this article the participation of scientific communities in the study of these variables from any scientific profile and area of knowledge, always seeking to provide more alternatives that contribute to the training of better students.

References

1. Alanya-Beltran, J., D' Souza, R., Hipolito-Pingol, G., Sameem, M. A., Shet, J. P., & Tongkachok, K. (2021). "I Teach the way I believe": EFL Teachers' Pedagogical Beliefs in Technology Integration and its Relationship to Students' Motivation and Engagement in the COVID 19 Pandemic Year. *International Journal of Learning, Teaching and Educational Research*, 387-406.
2. Avila, D., & Cancino, M. (2021). Switching to fully online EFL learning environments: An exploratory study on learners' perceptions. *Avila, Daniel; Cancino, Marco.* , 23-42.
3. Bacca-Acosta, J., Baldiris, S., Fabregat, R., Guevara, J., & Kinshuk. (2022). Determinants of student performance with mobile-based assessment systems for English as a foreign language courses. *Journal of Computer Assisted Learning*, 797-810.

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4. Bacca-Acosta, J., Fabregat, R., Guevara, J., Kinshuk, & Tejada, J. (2022). Scaffolding in immersive virtual reality environments for learning English: an eye tracking study. *Educational Technology Research and Development*, 339-362.
 5. Bravo-Reyes, M. Á., & Cango-Patiño, A. E. (2020). The teaching of English in public educational institutions in Ecuador in the digital age. *Pole of Knowledge*, 51-68.
 6. Cabrera-Solano, P. (2020). The Use of Digital Portfolios to Enhance English as a Foreign Language Speaking Skills in Higher Education. *International Journal of Emerging Technologies in Learning*, 159-175.
 7. Cabrera-Solano, P., Castillo-Cuesta, L., & Gonzalez-Torres, P. (2022). Exploring Perceptions of Online Feedback in Teaching EFL Speaking and Writing Skills during the COVID-19 Pandemic. *International Journal of Learning, Teaching and Educational Research*, 330-344.
 8. Calderón Rojas, B. M., & Córdova Esparza, D. M. (2020). B-learning in English as a second language teaching: a systematic literature review. *EDUTEC. Electronic Journal of Educational Technology*, 105-121.
 9. Cárcamo, B., & Pérez, C. (2022). Toward Autonomous Learning: Exploring the Impact of Participating in an Online Second Language Learning Course. *International Journal of Information and Education Technology*, 449-455.
 10. Cárdenas, J., & Inga, E. (2019). Visual Impairment a Challenge to Teach English Using Emerging Technologies. *Proceedings - 2019 International Conference on Information Systems and Computer Science, INCISCOS 2019* (págs. 267-273). Quito, Pichincha: Institute of Electrical and Electronics Engineers Inc.
 11. Castillo-Cuesta, L., & Quinonez-Beltran, A. (2022). Using Digital Comics for Enhancing EFL Vocabulary Learning during the COVID-19 Pandemic. *International Journal of Learning, Teaching and Educational Research*, 478-491.
 12. Cavalcante, P. S., Da Silva, M. M., Pereira, L. F., Roberto, R. A., & Teichrieb, V. (2020). Virtual Playground: An Augmented Reality Application to Improve English Learning. *Proceedings - 2020 22nd Symposium on Virtual and Augmented Reality, SVR 2020* (págs. 83-91). Porto de Galinhas: Institute of Electrical and Electronics Engineers Inc.
 13. Criollo-C, S., Guerrero-Arias, A., Jaramillo-Alcazar, Á., Luján-Mora, S., & Vidal, J. (2022). A Hybrid Methodology to Improve Speaking Skills in English Language Learning Using Mobile Applications. *Applied Sciences (Switzerland)*.
 14. Erazo-Álvarez, C. A., Carmita, F.-M. R., & García-Herrera, D. G. (2021). Virtual Learning Communities: An experience in the English Area. *Interdisciplinary Refereed Journal KOINONIA*, 472-493.
 15. Escobar Fandiño, F. G., Muñoz, L. D., & Silva Velandia, A. J. (2019). Motivation and E-Learning English as a foreign language: A qualitative study. *Heliyon*.
 16. Fuentealba, L. F., & Rojas, V. S. (2021). Game-Based Didactic Resources as a Strategy in Foreign Language Pedagogy. *International Journal of Learning, Teaching and Educational Research*, 195-211.
 17. Garcia, A., & Vidal, E. (2019). Mobile-Learning experience as support for improving the capabilities of the English area for Engineering students. *Proceedings - 2019 International Conference on Virtual Reality and Visualization, ICVRV 2019* (págs. 202-204). Hong Kong: Institute of Electrical and Electronics Engineers Inc.
 18. García-Castro, V., & O'Reilly, J. (2022). Foreign Language Anxiety and Online Engagement During the COVID-19 Pandemic: a Comparison Between EMI and FMI University Students. *English Teaching and Learning*, 273-291.
 19. González Calleros, J. M., Navarro Rangel, Y., Perales-Escudero, M. D., & Sandoval-Cruz, R. I. (2022). Pre-service EFL Teachers' Conceptions of Learning about SLA through online Discussion Forums and WhatsApp in Blended Learning. *RELC Journal*, 165-179.
 20. Knipp, R., & Scarlota, N. (2022). Experiencing emergency remote teaching as an EFL educator in Chile at the onset of the Covid-19 pandemic. *Issues in Educational Research*, 1605-1622.