

Promoviendo la enseñanza del inglés a través del aprendizaje móvil

Promoting ELT through Mobile Assisted Language Learning – MALL

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Recibido: 6 de marzo de 2023
Aceptado: 21 de marzo de 2023

Cómo citar este artículo:

Mendieta, H. A., Rodríguez, K. J., y Díaz, M. I. (2023). Promoting ELT through Mobile Assisted Language Learning – MALL. *Espiral, Revista de Docencia e Investigación*, 13(1), 23-32. <https://doi.org/10.15332/erdi.v13i1.3063>

Abstract

In this qualitative, descriptive, and case study research, the effect of applying Mobile Assisted Language Learning strategies (MALL) in the development of communicative skills in teachers at Universidad Santo Tomás (USTA) was analyzed. To achieve this goal, the following moments were defined: first, some applications focused on the development of language skills in English such as reading, grammar, listening and writing were characterized to define their contribution to the learning process. Second, a mobile learning strategy was implemented to guide and control the use of the applications in order to motivate learning and to encourage the development of different language skills. Along this stage, data was obtained from three varied sources: surveys, workshops and open interviews with a focus group that provided specific information to determine the outcome of the strategy implementation. Finally, the information was analyzed to determine the findings and conclusions. The results showed that teachers maintained their motivation during the process and were willing to learn English with the mediation of mobile learning strategies. Likewise, the participants' performance improved along the whole process. As a final result, the implementation of this strategy helped to consolidate an ICT proposal for the Foreign Language and Cultures International Center (CILCE) at Universidad Santo Tomás (USTA).

Keywords: Mobile learning, ICT, didactics, methodology.

Resumen

En esta investigación cualitativa, descriptiva y de estudio de caso, se analizó el efecto de aplicar estrategias de Aprendizaje de Idiomas Asistido por Dispositivos Móviles (MALL, por sus siglas en inglés) en el desarrollo de habilidades comunicativas en profesores de la Universidad Santo Tomás (USTA). Para lograr este objetivo se definieron los siguientes momentos: primero, se caracterizaron algunas aplicaciones centradas en el desarrollo de habilidades lingüísticas en inglés como la lectura, la gramática, la escucha y la escritura, para definir su contribución al proceso de aprendizaje. En segundo lugar, se implementó una estrategia de aprendizaje móvil para guiar y controlar el uso de las aplicaciones con el fin de motivar el aprendizaje y fomentar el desarrollo de diferentes habilidades lingüísticas. A lo largo de esta etapa, se obtuvieron datos de tres fuentes variadas: encuestas, talleres y entrevistas abiertas con un grupo focal que proporcionó información específica para determinar el resultado de la implementación de la estrategia. Finalmente, la información se analizó para determinar los hallazgos y conclusiones. Los resultados mostraron que los profesores mantuvieron su motivación durante el proceso y estaban dispuestos a aprender inglés

con la mediación de estrategias de aprendizaje móvil. Asimismo, el rendimiento de los participantes mejoró a lo largo del proceso. Como resultado final, la implementación de esta estrategia ayudó a consolidar una propuesta de TIC para el Centro Internacional de Lenguas y Culturas Extranjeras (CILCE) de la Universidad Santo Tomás (USTA).

Palabras clave: Aprendizaje móvil, TIC, didáctica, metodología.

Introduction

With the development of new technologies, the expansion of internet coverage, increasingly stable wireless networks and educational innovation itself, mobile learning systems have taken on greater force and are becoming more recurrent and accepted as teaching tools in the classroom, as they provide a complementary methodology able to support, enrich, motivate and improve the learning experience. Similarly; it is also evident that in the classroom, both teachers and students, are constantly interacting with different types of mobile devices such as cell phones, tablets, iPods, iPads, laptops, among others, which open a fantastic opportunity to expand the limits our traditional teaching classrooms have and create a path to innovate with new teaching and learning strategies under the mediation of different types of resources available when and where the student requires it (FAO, 2017).

It is key to highlight that USTA and specifically the Language Center -CILCE- have policies and guidelines established related to the implementation and inclusion of new technologies in the pedagogical practices of its teachers, an example of it is the Framework Document (2015) that emphasizes the importance of using and incorporating ICT to mediate the pedagogical processes in the classroom not only to impact with appropriate methodologies and didactics but to provide a comprehensive training process to the educational community.

Nevertheless, it is necessary to establish a relation between the effect and the result of implementing a mobile learning model that supports the processes of curricular flexibilization in the English classes through the mediation of mobile devices present in the classroom and at the disposition of teachers and students. Therefore, it is required to transform ICT into Learning and Knowledge Technologies (LKT), which focus on learning and not only on the tool itself. Thus, LKT provide evidence of the progress towards the construction of systematic knowledge that integrates autonomy and meaningful procedures accompanied by resources and strategies aligned with the globalization guidelines (Perlaza, et al., 2021).

Theoretical Framework

Ict - Lkt and Mall

The possibility to access to a large amount of educational tools and resources mediated by ICT is guaranteed with the connection to the global computer network of the internet; however, it is important to adapt these tools and resources to the reality of the classroom, since "digital educational content, such as academic support platforms and other applications, will only be successful in improving learning when they incorporate feedback, the inclusion of problem-solving situations, generate critical thinking and have a connection with the real world" (Coman, et al., 2020). In other words, it is necessary to start a transition from ICT into LKT. In coherence, Pettersson (2018) comments that ICT tools cannot generate knowledge by themselves, they require a complete and purposeful implementation under a pedagogical and methodological criterion.

It is under the previous assertions that Mobile Assisted Language Learning (MALL) arises with the purpose to provide an approach or a specific methodological path to language teaching and learning in a more informal and personal way with a programmed scheme and a systematical

use of mobile devices (Cakmak, 2019). Zhou & Wei (2018) point out that a mobile methodology can open up new techniques to language teaching if the right tools are found and linked with the right strategies to promote learning. Consequently, social networking sites such as Facebook, Instagram or Tweeter or applications designed to promote language learning such as 12 Tenses, Cake, English dictionary – Learn easy, BBC Learning English and Lyrics Training and Quizlet represent potential tools at the service of teaching and learning when their mediation pursues a specific objective.

Mobile learning

Mobile learning is a modality of learning through the dissemination of educational content via mobile devices (Kumar, et la., 2018); in this way, it is distinguished by the permanent capacity to connect to the world wide web through mobile devices such as cell phones, laptops, tablets, or any other device that offers

this opportunity. Likewise, considering that the theory in this regard is broad, it can be said that the general idea of mobile learning is based on the use of mobile devices to develop activities that promote learning either inside or outside the classroom in a synchronous or asynchronous manner.

When the role of the teacher and the student in the mobile learning model is taken into account, it is the teacher who is in charge of establishing the criteria and who provides the strategies that guide the process to true meaningful learning, it is the teacher who selects the objectives to be achieved and who focuses on the students as the fundamental axis of the learning environment (AlShareef, 2018). In a mobile learning academic experience, the students are the ones who decide the when, where and how of their training process. According to Criollo et al., (2021) mobile learning is not just about a mere technological inclusion in the classroom, it is about



focusing on the student, it is about providing technological tools that empower them and favor the development of competencies in real contexts, not just including ICT resources that alone would not have an effect on their learning.

Mobile devices

Mobile learning devices are those electronic communication elements with the capacity to store information and run specialized computer programs. They can be classified as cell phones, smartphones, digital assistants, electronic tablets, laptops, etc. The main characteristic of these elements lies in the possibility of instant and fast communication thanks to the capacity to connect to the internet network. Camilleri & Camilleri defines mobile apps or applications as “a computer program... designed to run on mobile devices, which allow the user to perform one or more operations” (2019). These software applications or apps may have a variety of purposes according to the intention for which they were developed.

Particularly for this research, the focus is on applications whose emphasis is on foreign language learning and especially on those able to support the development of reading and writing skills. Consequently, Hinze, et al., (2022) suggest that the use of these applications on mobile devices should provoke new ways of thinking, which once taken to the field of learning a foreign language will allow the development of autonomous processes that strengthen the learning generated in the classroom with those fostered by the mediation of such technological resources.

Mobile Assisted Language Learning (MALL)

The main characteristic of the mobile learning model lies on the possibility to learn at any time and at any place, making learning more flexible and adapting it to the specific needs of students, their interests and learning styles. According to Alzieni (2019) in

addition to increasing levels of motivation and participation, mobile learning directly affects the development of autonomy processes among its participants, which combined with traditional teaching methods favors active participation in learning especially in the case of the language learner.

Considering the development of communicative competencies through the implementation of the MALL model, Fernández-Batanero, et al., (2021) mention that it is possible to develop competencies such as reading and writing; among others, through a MALL strategy, since it allows the implementation of accurate didactics and methodologies, it is possible to provide feedback and in the best of cases even design and administer evaluation (Khan, et al., 2018). In this context, the participants of this didactic methodology can use mobile technology to create texts, improve composition and perform reading exercises that impact the acquisition of new vocabulary as a complement to oral skills (Fernández-Batanero, et al., 2021).

One clear example of MALL in action is through the development of reading strategies. Due to the acquisition and association of real vocabulary and in real contexts such as current political, social, economic or even about sport issues available on news websites, it is exceptionally effective and practical to develop reading and to enhance comprehension strategies. (López & Puerta, 2019). Likewise, Jaldemark, et al., (2018) state that the use of MALL in the English classroom can also impact collaborative learning as it allows interaction, integration of intercultural communication and decision making in relation to the learning activities proposed by the teacher. On the other hand, Godwin-Jones (2021) presents social networks and spaces available online as the ideal vehicle for practicing writing skills in English since they encourage students to participate in real contexts which contribute to

the strengthening of grammatical, social and pragmatic aspects of the language.

Cakmak (2019) also differentiates Mobile Assisted Language Learning (MALL) and Computer assisted language learning (CALL) by stating that although both are approaches that utilize technology to improve language learning, they differ in terms of the devices and platforms they primarily utilize, as well as their modes of access and usage. In Table 1 some difference between MALL and CALL can be clearly identified:

Table 1. MALL vs CALL.

CRITERIA	MALL	CALL
Devices and platforms	MALL focuses on language learning activities and resources accessed and utilized on mobile devices such as smartphones and tablets. This includes mobile applications, mobile-friendly websites, and other resources optimized for smaller screens and touch interfaces.	CALL typically refers to language learning activities and resources accessed and utilized on desktop or laptop computers. These may include software applications, online platforms, multimedia resources, and interactive exercises specifically designed for computer use.
Mobility and accessibility	MALL emphasizes the mobility and accessibility afforded by mobile devices, allowing learners to engage in language learning activities anytime, anywhere, as long as they have their mobile device with them and an internet connection if needed.	While CALL can also offer flexibility and accessibility, it may not provide the same level of mobility as MALL since desktop or laptop computers are typically less portable than mobile devices.
Context of use	MALL activities are conducive to on-the-go learning experiences, enabling learners to practice language skills in various real-life contexts such as while commuting, traveling, or during downtime.	CALL activities are often conducted in more structured environments such as classrooms, language labs, or home settings where learners have access to desktop or laptop computers.
Interaction and Engagement	MALL activities may leverage touch interfaces, voice recognition, and sensors found in mobile devices for more intuitive interactions.	CALL activities often involve using keyboards and mice for input.

Methodology

For this case study, of a qualitative and descriptive nature, the following aspects were taken into consideration: 1) The study began with a selection and review of didactic resources based on mobile learning that are applied to language teaching. This made it possible to characterize and identify the main pedagogical, didactic and technical aspects of the resources under study. 2) Subsequently, the implementation of methodological strategies based on mobile learning was carried out in the teacher training courses that the researchers were in charge of.

The follow-up process was carried out through Moodle and WhatsApp to obtain specific data on both practice and development of communication skills in a controlled environment. Structured surveys were also applied with the purpose of knowing the teachers' perceptions in relation to the research topic and thus identify the effect of the use of software applications on the research participants.

The data collection culminated with a random group of students who were given an open-ended interview that allowed to know in detail the effect of the mobile learning experience. 3) Finally, the data collected were analyzed following the triangulation process of the instruments previously mentioned using tools such as Microsoft Office Word to transcribe and Microsoft Office Excel to code and categorize the information, which resulted in the identification of the effect of the application of mobile learning strategies for the development of communicative competencies in English with teachers at Universidad Santo Tomás.

For this research, developed during the year 2022 in a 10-month academic period, a representative sample of teachers who are part of the Universidad Santo Tomás (2015a, 2015b,

2016) and whose language levels vary between A1 and B1 according to the Common European Framework of Reference for Languages was taken. This sample corresponded to the academic assignment by payroll of the research professors and included approximately 50 teachers between men and women and with an age that varies between 30 and 55 years old.

Results

According to Table 2, it is evident that most of the teachers recognize mobile devices as elements that can fulfill an academic purpose, since they identify them as easy-to-use devices that, mediated through a specific purpose and methodology, can lead to improve communicative skills in English. Likewise, it is a fact that teachers use their mobile devices to access websites and search for strategies that allow them to practice and achieve their second language goals. Hence, they are willing to continue an academic process of skills acquisition using applications focused on grammar, reading, listening, writing and vocabulary development.

It is important to highlight, as shown in Table 1, that teachers effectively use different tools or applications focused on learning a second language to support their academic process, but they use them autonomously and without a methodology or specialized guidance from a teacher. It means that the real challenge of a mobile learning strategy is to provide a route and to propose a methodology that links the devices the students have and the tools they already know in order to help them consolidate and use in a real context what they have studied in class.

To continue the analysis, Graph 1 shows the teachers preferences at the moment to use applications to improve the different language skills. In this regard, it is evident that most of them focused on learning vocabulary, followed by listening, reading, grammar and, to a lesser extent, writing.

Table 2. *Mobile learning - tools approach.*

	Question	Yes	No	Perhaps
1.	Do you recognize the academic use of mobile devices such as computers, smartphones or tablets?	46	3	1
2.	Are these mobile devices easy to use and effective in improving English communication skills?	41	3	6
3.	Do you use your mobile devices to access the web and practice English?	26	16	8
3.1	If yes to question #3, how much time do you spend per day?	30 minutes a day		
4.	Would you like to develop your English communication skills through specialized applications?	43	3	4
5.	Do you know of applications to develop your English communication skills?	37	8	5
5.1	If yes to question #5, what applications are you familiar with? Duolingo - English live - Worbit - drops - ABC English - Facebook - Babbel - Instagram - English mobile - open English - Voxy - Wibbu - Quizizz - Say Hello - open English - cake - simpler - Bussu - Linguee - lyrics training - oxford app - Memrise - speak - hello - talk - Youglish -			
6.	Do you use any of the applications in question 5.1 to develop your English communication skills?	27	15	8

It can be stated that applications allowed the teachers to maintain a meaningful practice to develop communicative competencies in a second language. Likewise, the participants felt motivated to continue; with alternative strategies, their learning process in asynchronous spaces. The results also showed that the teachers expressed the intention and interest to continue using this type of applications to develop a better English level.

Other relevant aspects that the teachers mentioned along this research can be identified in Table 3. The teachers considered that the use of applications to learn English allowed them a clear and fluent practice anytime and anywhere. It means, they were able to control what they did and what to work on. They also recognized the use of applications as an excellent resource to practice reading and writing and as a strategy able to support their language learning process.

Graph 1. Practice by skill.

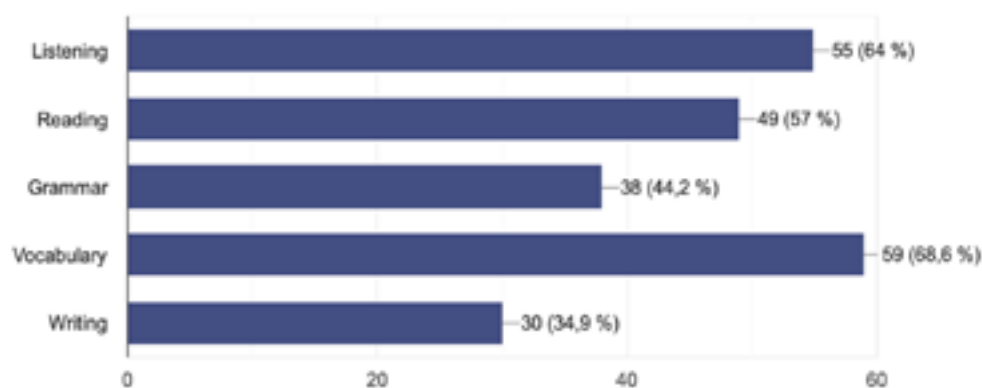


Table 3. Mobile learning- usage approach

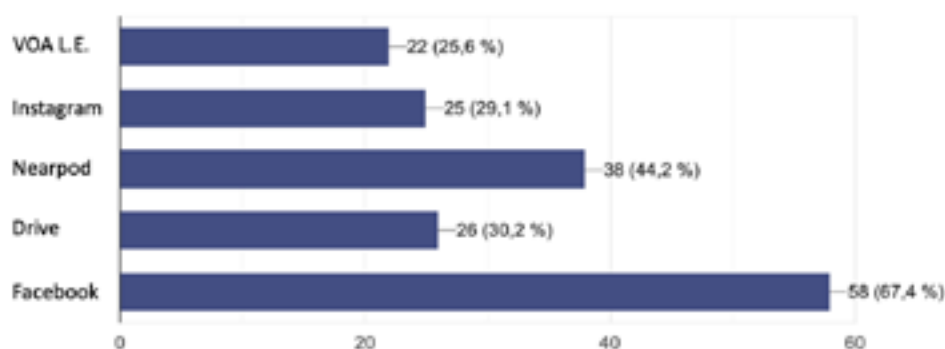
Question	Always	Almost always	Sometimes	Never
Do the different applications allow a clear and fluent practice?	52%	32%	16%	0%
Does the use of mobile applications motivate reading and writing practice?	47%	42%	11%	0%
Does the practice performed in the different applications support the second language learning process?	51%	45%	3%	1%
Will you continue to use apps to study English?	81%	19%	0%	0%

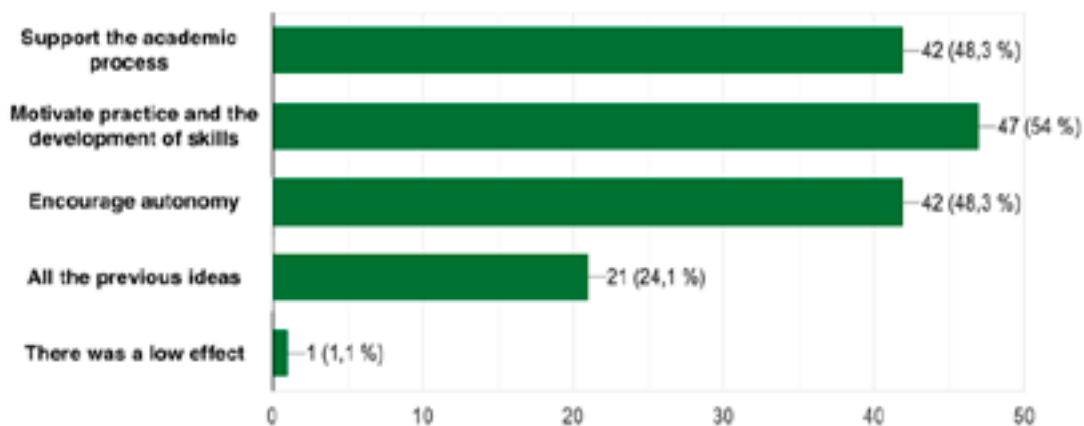
In Graph 2, it is evident the incidence the use of applications has at the moment to develop communication skills in English. Primarily,

teachers chose Facebook as the most used application to practice writing through instant messaging, followed by Nearpod and Google Drive through -Presentations- to practice writing. Then, to a lesser extent they used Instagram for the same purpose. Finally, VOA Learning English was a tool used to support critical reading and writing through reports and comprehension exercises.

Graph 3 elucidates; from the teachers' point of view, the purpose and effect of implementing a mobile learning strategy. First, teachers used mobile devices to motivate the practice and to develop communicative skills in a second language. Second, they used them to encourage autonomy and to provide support for the development of class activities. Only one teacher stated that this type of strategy had no effect along the academic process.

Graph 2. Use of applications



Graph 3. *Purpose of application use*

Conclusions

The implementation of a mobile learning strategy increased the levels of motivation and participation of teachers, directly affecting the development of autonomy and the consolidation of content. Likewise, it was evidenced that it is possible to develop skills such as listening, reinforce grammar, favor reading comprehension and consolidate vocabulary. However, it is necessary to implement this strategy with specific objectives and material designed by the teacher to support and mediate the process.

Some comments from teachers reflect the following:

"... It's an interesting and different way to learn on my own..."

"... the strategy motivates because it is innovative and easy to use ..."

"... these tools increased my motivation to learn English ..."

"... It is a strategy that supports learning if used correctly..."

"... With these tools I practice better what I studied in my classes..."

The implementation of a mobile learning strategy allowed teachers to practice and to use the language through different tools. In addition, they were able to focus on the skills they needed to improve, this goal was achieved using mobile devices and applications with an academic purpose.

Some comments from teachers state the following:

"... helps to improve weaknesses and review previous content..."

"... I can concentrate on specific exercises, and I can learn new things..."

"... I can do exercises according to my own level..."

"... they can be used at any time, they are very useful ..."

"... we always have the mobile devices and I learned to use them for academic purposes..."

"... I can use my cell phone anytime, anywhere..."

With the implementation of mobile learning strategies, it was evident that teachers supported their second language acquisition



process with strategies according to their level and it became clear that it is possible to introduce new methodologies and try new didactics in our classes using the devices they frequently use and with resources that they can easily access online.

In this regard, the teachers stated the following:

"... I learned to read, and I also improved pronunciation..."

"... I have learned a lot; I have also improved my English ..."

"... I learned English and had fun with the free apps..."

"... we were able to study and learn and develop different types of activities..."

"... you can practice anywhere, anytime..."

"...I could improve grammar; practice listening and learn new things...."

References

- AlShareef, F. (2018). The Importance of Using Mobile Learning in Supporting Teaching and Learning of English Language in the Secondary Stage. *Journal of Education and Practice*, 9(15), 71-88. <https://www.iiste.org/Journals/index.php/JEP/article/view/42408/43675>
- Al Zieni, H. (2019). The Effect of Mobile Learning on Learner Autonomy: A Suggested Measurement Tool to Assess the Development of Learner Autonomy. *The Journal of Asia TEFL*, 16, 1020-1031. <http://dx.doi.org/10.18823/asiatefl.2019.16.3.19.1020>
- Cakmak, F. (2019). Mobile Learning and Mobile Assisted Language Learning in Focus. *Language and Technology*, 1(1), 30-48. <https://dergipark.org.tr/en/pub/lantec/issue/42816/517381>
- Camilleri, A., & Camilleri, M. (2019) Mobile Learning via Educational Apps: An Interpretative study. *ICETT 2019: Proceedings of the 2019 – 5th International Conference on Education and Training Technologies*. May, 88-92. <https://doi.org/10.1145/3337682.3337687>
- Coman, C., Tiru, L., Schmitz, L, Stanciu, C., & Bularca, M. (2020). Online Teaching and Learning in Higher Education during the Coronavirus Pandemic: Students' Perspective. *Sustainability*, 12(24), 1-24. <https://doi.org/10.3390/su122410367>
- Criollo, S., Guerrero, A., Jaramillo, A., & Luján, S. (2021). Mobile Learning Technologies for Education: Benefits and Pending Issues. *Open Journal of Applied Sciences*, 11(9), 2-17. <https://doi.org/10.3390/app11094111>
- FAO. (2021). *E-learning methodologies and good practices: A guide for designing and delivering e-learning solutions from the FAO e-learning Academy* (2nd edition). FAO.
- Fernández-Batanero, J., Montenegro, M., Fernández-Cerero, J., & Román, P. (2021). Impact of ICT on writing and reading skills: a systematic review (2010-2020). *Linguagem e Tecnologia*, 14(2), 1-12. <https://doi.org/10.35699/1983-3652.2021.34055>
- Godwin-Jones, R. (2021). Evolving technologies for language learning. *Language Learning & Technology*, 25(3), 6-26. <http://hdl.handle.net/10125/73443>
- Hinze, A., Vanderschantz, N., Timpany, C., Cunningham, S., Saravani, S., & Wilkinson, C. (2022). A Study of Mobile App Use for Teaching and Research in Higher Education. *Technology, Knowledge and Learning*, 28, 1271-1299. <https://doi.org/10.1007/s10758-022-09599-6>
- Jaldemark, J., Hrastinski, S., Olofsson, A., & Oberg, L. (2018). Collaborative learning enhanced by mobile technologies. *British Educational Research Journal*, 49(2), 201-206. <https://doi.org/10.1111/bjet.12596>
- Khan, A., Al-Khanjari, Z., & Sarrab, M. (2018). Integrated design model for mobile learning pedagogy and application. *Journal of Applied Research and Technology*, 16(2), 146-159. <https://www.scielo.org.mx/pdf/jart/v16n2/2448-6736-jart-16-02-146.pdf>
- Kumar, S., Wotto, M., & Bélanger, P. (2018). E-learning, M-learning and D-learning: Conceptual definition and comparative analysis. *E-Learning and Digital Media*, 15(4), 191-216. <https://doi.org/10.1177/2042753018785180>
- López, L., & Puerta, L. (2019). El uso de infografías para mejorar las habilidades de comprensión de lectura en estudiantes. *Colombian Applied Linguistics Journal*, 21(2), 230-242. <https://doi.org/10.14483/22487085.12963>
- Perlaza, L., Macías, A., & Romero, G. (2021). Tecnologías del aprendizaje y el conocimiento en el aprendizaje integrado de contenido y lenguas extranjeras para el desarrollo de la competencia comunicativa intercultural. *Boletín REDIPE*, 10(11), 562-577. <https://doi.org/10.36260/rbr.v10i11.1560>
- Pettersson, F. (2018). On the issues of digital competence in educational contexts – a review of literature. *Educational Information Technologies*, 23, 1005-1002. <https://doi.org/10.1007/s10639-017-9649-3>
- Universidad Santo Tomás. (2015a). *Framework Document Foreign Languages*. Ediciones USTA.
- Universidad Santo Tomás. (2015b). *Guidelines for curriculum updating and design*. Ediciones USTA.
- Universidad Santo Tomás. (2016). *Plan Integral Multicampus*. Ediciones USTA.
- Zhou, Y., & Wei, M. (2018). Strategies in technology-enhanced language learning. *Studies in Second Language Learning and Teaching*, 8(2), 471-495. <https://doi.org/10.14746/ssllt.2018.8.2.13>