

Technological learning resources to develop A1 students English reading skills

Recursos tecnológicos de aprendizaje para desarrollar la competencia lectora en inglés de los alumnos A1

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Abstract

Some problems that have arisen after not knowing how to correctly use technological tools to develop reading skills in the English language have been technical difficulties, since students may face technical problems when using technological resources, such as connection problems to Internet, errors in incompatible software or mobile devices. Therefore, the objective of the research was to implement a technological tool for the development of the reading competence of the English language in the students of the A1 level of the Instituto Superior Tecnológico Cotopaxi. In this research work, a mixed research approach has been used under a multi-method premise, where quantitative and qualitative approaches are mixed. Finally, through the Design Thinking design methodology executed with the help of experts and the PPP foreign language teaching methodology explicitly oriented towards the development of reading competence, it was possible to design technological resources based on web tools that allow the English language learner to appropriate the second language with real communication activities in everyday life.

Keywords: Technological resources, design thinking, reading skills, A1 students' level.

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Resumen

Algunos problemas que han surgido tras no saber utilizar correctamente las herramientas tecnológicas para desarrollar la destreza lectora en el idioma inglés han sido las dificultades técnicas, ya que los estudiantes pueden enfrentarse a problemas técnicos al momento de utilizar los recursos tecnológicos, como problemas de conexión a Internet, errores en software incompatible o en el móvil. dispositivos. Por lo anterior, el objetivo de la investigación fue implementar una herramienta tecnológica para el desarrollo de la competencia lectora del idioma inglés en los estudiantes del nivel A1 del Instituto Superior Tecnológico Cotopaxi. En el presente trabajo de investigación se ha utilizado un enfoque mixto de investigación bajo una premisa multimétodo, donde se mezclan enfoques cuantitativos y cualitativos. Finalmente, mediante la metodología de diseño Design Thinking ejecutada con la ayuda de expertos y la metodología de enseñanza de lengua extranjera PPP orientada explícitamente para el desarrollo de la competencia lectora, se logró diseñar recursos tecnológicos basados en herramientas web que permiten al aprendiz del idioma inglés apropiarse del segundo idioma con actividades reales de comunicación en la vida cotidiana.

Palabras clave: Recursos tecnológicos, design thinking, destrezas de lectura, estudiantes del nivel A1.

1. Introduction

Technological tools are programs and applications that are free of charge and also paid (Alreshoud & Abdelhalim, 2022). These tools help people interaction and are also designed to facilitate work and study; furthermore, they allow resources to be used efficiently by exchanging information and knowledge inside and outside an institution. In education, technological tools are essential because the teacher interacts faster and more efficiently with students, allowing the teacher to choose updated technology that offers quality education in the teaching-learning process (Ahmadovna et al., 2021).

Regarding English language teaching, for students to achieve better development and performance in English, skills should follow the other advice given by experts (Ali & Razali, 2019). It is necessary to mention that the reading skill, due to its complexity, should be given greater importance in its teaching (Alreshoud & Abdelhalim, 2022). Knowing the English language allows access to various opportunities for success and entrepreneurship; for this reason, it is necessary to tend to the learning of the foreign language through the application of technological tools, which allow to improve and deepen the knowledge that leads the student to develop the skill of writing. The teacher must motivate the student to use this medium, emphasizing the importance of learning from it (Arias et al., 2022).

English is the world's Lingua Franca which is considered a must learning complementary subject for those who want a better life and better opportunities at work or professional careers. After some research carried out worldwide by Educational First, the countries that lead the charts regarding English language use are the Netherlands in Europe with a score of 652 points (Carcary,

2020), followed by Singapore in Asia with 611, Argentina in South America with 566, South Africa in Africa 607 (Lucas & Chancay, 2022), and Iran in the Middle East with 483 (Domínguez et al., 2023). All those countries have something in common, they have increased their financial budget to help the population to be successful in their English language proficiency (Stevani & Erikson, 2022).

In Ecuador, learning a foreign language had been very complicated. However, various problems have arisen since the last decade, barring the improvement of the four skills of the population (Fabricio, 2023). They are the following: Poor teacher preparation concerning the development of their language skills, lack of improvement of the supporting material to teach classes, few hours of English in all schools of primary and intermediate level, lack of interest of students to learn English, and limited use of technological tools to improve classes. Technology is an essential instrument in most of the basic activities people do (Gulnigor, 2022). Unfortunately, up to now, some teachers do not know how to use the available technological tools, neither develop different types of tasks to motivate reading and improve the rest of the language skills.

The problem found at “Instituto Superior Tecnológico Cotopaxi” is the lack of dynamic material to practice and reinforce the language process. As in Ecuador, the education system is free of charge in every aspect; laws impede students to get material that could be beneficial to develop the four skills of the language (Gómez, 2023). This aspect forces teachers to use any other material from old books and the internet that are not very beneficial and, in most cases, does not have a sequence like specialized books have. Regarding to the objectives of the present research, the general objective is: To implement a technological tool for the development of English language reading skills in students from the A1 level of the “Instituto Superior Tecnológico Cotopaxi” according to the Common European Framework (CEFR).

TICs

According to Hameed, (2020), ICTs (Information and Communication Technologies) can complement, enrich, and transform education through various ways in which technology contribute to universal access to education, reduce learning differences, improve quality and belonging to learning management and administration of education.

TICs have a significant impact on education, even more when there is accessibility to it. Regarding Ecuador, there are thousands of people that cannot afford to buy technological tools to have access to information on the net and if they can buy it (Ahmadovna et al., 2021). There are technological resources that are not free, and just those programs have trials that limit the student’s learning process. That is why there is the necessity to have newly available tools that could help students learn more interactive.

Online Platforms

Online platforms also called digital platforms, according to Isaqjon, (2022) are spaces on the internet which allow the execution of programs and applications on the same website in order to satisfy different needs. Each online platform has different functions that help users solve any type of problem that may arise. The objective of every platform might vary according to the user's need.

Online platforms in the educational area have had a great reception, Domínguez et al., (2023) mentions that the use of virtual platforms by users (students) is more common today, and this allows the contribution of multiple benefits and advantages such as: encourage cooperation and collaboration, facilitate access to information, encourage debate and discussion, contribute to the development of skills and competences, motivate the learning and participation of young people.

Web Applications

Lucas & Chancay, (2022) mention that the architecture of web applications consists of the interaction of machines connected to a network that can be through the Internet or a corporate intranet, following the client-server scheme, the most current web applications, and with more tools and functionality are created from of the XXI century, in the stage of Web 2.0, with the emergence of fixed access technologies (ADSL, Cable Modem) or mobile (UMTS / 3G, LTE/4G), which expand the bandwidth, giving connections more powerful and accessible to the Internet.

Web applications interface permit that all the content is placed into the database that after can be shared with the different users to promote its use, Regarding the English language and the applications must have a sequence on the content that is going to be related with what students are going to learn. Therefore, the information placed on the app must be significant and also need to very visual to engage students learning.

JavaScript

According to Maldonado et al. (2023), JavaScript is a light programming language and interpreted just in time, implemented with first-class functions. Although it is well known as a scripting language for web pages, also used in non-browser environments such as Node.js, Adobe Acrobat, Apache, and CouchDB, this programming language is based on prototypes with support for object-oriented programming such as functional programming.

Cascading Style Sheets CSS

According to Manoharan & Ramachandran, (2023), in its definition of Cascading Style Sheets (CSS), they are cascading style sheets that allow defining the display rules of the web page in a medium or device, that is, to establish design characteristics such as colors, measurements, size, etc., These characteristics will be reflected on the monitor screen, mobile phones, printers, tablets or television.

Language Skills

According to Centro Virtual de Manoharan & Ramachandran (2023) defines language skills as the ways in which the use of languages is activated. Generally, didactics classify them depending on the mode of transmission, whether oral or written, and their role in communication being productive or responsive. Four skills are presented in a language: speaking, writing, listening, and reading.

Language skills are developed according to the way how people are immersed in the language. In some cases, students develop their skills differently because teachers present activities that are sometimes more motivational and meaningful than others (Wahyuni et al., 2022). The development of receptive and productive skills also depends on the student's ability to perceive the language and how their multiple intelligences are set into their brain.

Reading skills

Nguyen, (2022) considers reading as an activity that allows information to be obtained, which is incorporated into cognitive structures to be processed and conformed to instruction and knowledge for its management in different areas, discipline or subjects, highlighting reading of a procedural nature: reading is a Cognitive process which comprises a series of sub-processes such as information retrieval, information hierarchy, hypothesis formulation, data processing relating what is learned with what is already known, processes that the reader develops as progress is made in the reading

Teaching-Learning

Foreign Language Concerning what was mentioned by Ningsih, (2023), certain elements are immersed in the learning and acquisition of the foreign language, which include those that have already been developed previously in the process of acquisition of the mother tongue, such as the development from creativity, imagination and the construction of logical thinking, these learning elements contribute to restoring thought and the creation of communication links with the new language

Teaching Methods

From Arias et al., (2022) a teaching method is the set of activities and techniques that a teacher uses in order to meet one or more educational objectives; they must be related between the method and the teaching purposes; in this way, the techniques and activities applied in the classroom make sense as a whole and respond to all the learning needs exposed and shared by a scientific community.

2. Methods

Research approach

A mixed research approach has been used in the present research work under a multimethod premise, where quantitative and qualitative approaches are mixed Wahyuni et al. (2022) where, with this approach, the validity of the research was increased through a triangulation of activities in the research process that broaden the comprehensive and complete vision for the development of English language reading skills in A1 level students. Establishing the mixed approach as follows, from the qualitative context from the particular with a workshop of experts in which their expectations and interests were collected to then integrate them in a general way in the development of the proposal and then from the quantitative context the developed proposal was taken from the general point of view, taking it to the particular through hypothesis testing.

Population

The population is defined as the set of people with frequent characteristics that are the subject of research (Shaturaev, 2023). Where the common characteristic of the population of this research is that they are students of the Languages Center of the “Instituto Superior Tecnológico Cotopaxi,” specifically two groups of students of the Beginner A1 level, with eighty-two students in total, where to ensure that the two samples have equal variances, outliers were eliminated, specifically those that had scores lower than 7 points. Because the population is small, the need for a sample is not necessary, using the following data below:

Table 1. Population

Class level	Men	Percentage	Women	Percentage	Total	Percentage
A1	28	38%	46	62%	74	100%

Elaborated by the autor

Research techniques and instruments

The first is a pre-test instrument applied through a “survey,” wherewith its application it is sought to validate three factors raised in the research, which are: the usability of the platform, methodological validity of the technological resources created, and verify compliance with the CEFR for the development of reading skills. To give reliability to each question of the survey, it has been done by applying the Likert scale and establishing a quality relationship with the obtained data (Ahmadovna et al., 2021). Likewise, to give reliability to the results of the instrument, the Cronbach’s Alpha statistic has been used, organized into three factors that link the correlations of each of the survey items (Stevani & Erikson, 2022). Proceeding to calculate the statistic with the SPSS software and accepting the reliability when the statistic is greater than 0.8.

The second is a post-test instrument applied by means of a graded “interview” with an evaluation rubric to the two groups of students who received the experimental treatment and the control group; therefore, after the end of the experimental period, an evaluation was applied to both groups on the dependent variable under study, obtaining a final grade. The interview was established to measure reading skills according to the communicative processes of the CEFR of the language in a qualitative and quantitative way; with the data obtained; the contrast test could be applied in a concrete way to verify the incidence sought in the hypothesis.

Validity and Reliability

For data processing and reliability analysis of the survey, Cronbach’s alpha statistic was calculated using the SPSS software package. This statistic allowed to evaluate the reliability and internal constancy of the set of instruments items. In the present research, the results obtained by Cronbach’s Alpha showed a coefficient greater than 0.8, which means that the instrument has an excellent internal consistency. Below is the Cronbach’s Alpha statistic calculated for the three applied factors:

Table 2. Reliability Analysis–Cronbach’s Alpha

Factors	Cronbach’s Alpha	Related items
Platform usability	0,891	3
Methodological validity	0,838	4
Compliance with the Common European Framework of References	0,852	3

Elaborated by the author.

Research Proposal

The first, with the design methodology “Design Thinking” (Wahyuni et al., 2022), with which it has sought to identify the necessary requirements for the innovative development of technological resources for learning the English language based on teamwork, where experts contribute different points of view and knowledge, to match the needs of experts, technological resources and the development of reading skills in the English language proposed by the Common European Framework of Reference.

The second, with the foreign language teaching methodology “Presentation-Practice Production” (PPP), specifically oriented for the development of reading skills in the English language, with which the PPP stands out as a concrete teaching method oriented to the apprentice as an entity with real communication that needs in daily life, prioritizing the guidelines of the Common European Framework of Reference, because this has become an essential guideline for the teaching of the foreign language (Alreshoud & Abdelhalim, 2022).

Design Thinking Phases (DT)

For the execution of the DT methodology, there are the following phases: Empathize, Define, Idea, Prototype; those that are linked to determine the requirements of the experts towards creating a technological tool with practical resources that develop the reading skills of the English language in students at level A1.

Figure 1. Stages of Design Thinking (DT)



Sources: Rodríguez, 2021

Defined Phase

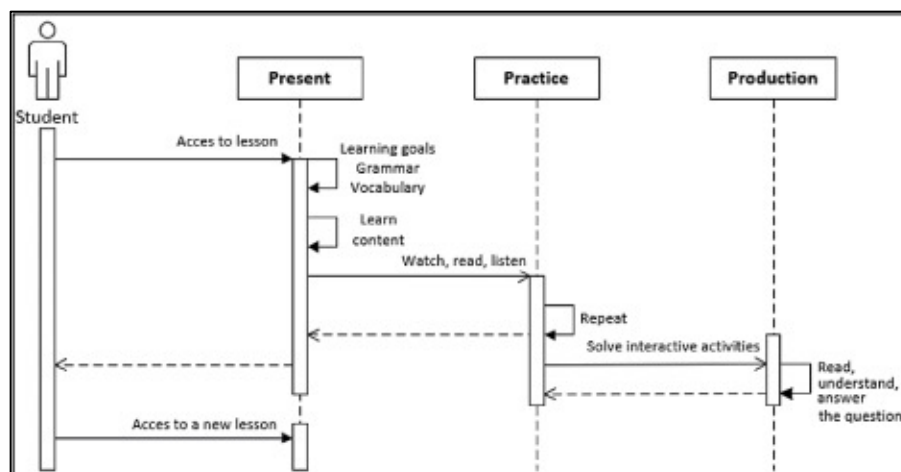
Once the previous empathy phase is finished, the define phase is reached, where at this stage, the different criteria on the development of English reading skills are arranged hierarchically, collected on the empathy map, which will be used to determine the themes to be developed in technological resources. The mental map that collects the criteria of this phase is presented in the figure 2 following.

Figure 2. DT Methodology–Defined Phase–Mind Map



Elaborated by the author.

Figure 3. DT Methodology–Idea phase–Sequence diagram

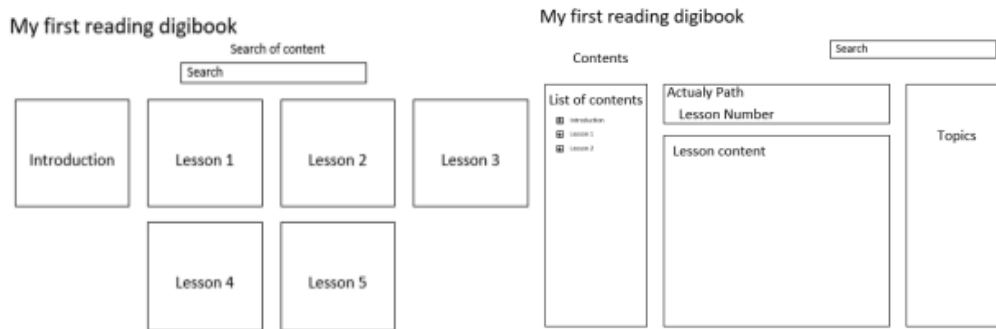


Elaborated by the author.

Prototype Phase

For the development of this phase, the preliminary mockups were carried out, which would guide the development of the interface of the planned technological resources, according to the requirements analysis from the previous phases of the DT methodology. Mockups of the main and content screen are presented below in Figures 4 and 5.

Figure 4. DT Methodology–Prototype Phase–Main Screen Mockup



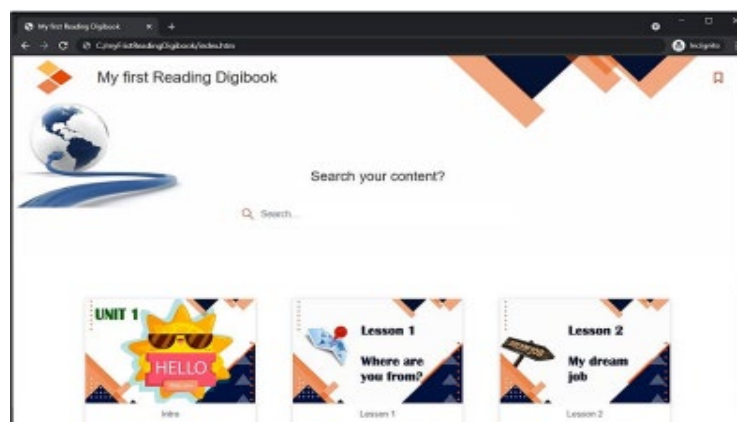
Elaborated by the author.

Test Phase

For this testing phase, technological resources were developed on a web platform making use of the RoboHelp computational package, which allows the integration of multimedia components, such as audio, images, video, CSS styles, and Javascript programming on the client-side, all this over the standard HTML markup language. Also, the advantage of using RoboHelp as an integration tool is that it can be exported to different types of formats that work online or offline. In the specific case of the tool created in this research, it has been exported for use in a subdomain of the institutional website of the Instituto Superior Tecnológico Cotopaxi.

For the testing phase of the tool, a pre-test survey with a 5-point Likert scale was developed, which was filled out by the experts, who have accompanied the entire development of the DT Methodology, in the present investigation, the analysis and processing of the survey it is reflected in chapter 3 of this document. Below, different screenshots are presented that reflect the implementation of the technological tool developed.

Figure 5. Home Screen



Elaborated by the author.

Figure 6 shows the home screen of the technological resource developed as an interactive platform that gathers different information that students will have access to.

In this screenshot, the bookmark access button is located on the top right corner of the site; bookmarks save any pages that students have been interested or it also helps to keep as a reminder of activities that can be practiced later. As can be seen on figure 6.

Figure 6. Title Bar–Bookmark Access Button



Elaborated by the author.

Figure 7. Search Area on the Main Screen – Lesson access Area



Elaborated by the author.

The search area is fundamental for any person that has difficulties of accessibility to the lessons, activities, or any other ova included in the platform. It could also be helpful for people who are getting used to practicing with this technological resource.

The lesson access area is fundamental to start working on the platform; it gives all access to the content that will help students to reinforce their reading skills. On the figure 10, every unit has five lessons divided into different activities to reinforce the student's receptive and productive skills.

Figure 8. Access to Unit 1



Elaborated by the author.

In this section, the students are going to have on the top left side the lesson, when they give a click, the content of the lesson will appear; also, in the middle of the window, the cover of the unit will appear with its introduction where the students will know the main content that he or she is going to learn. As can be seen on figure 8.

In the panel content, every lesson will be visible to all students and the teacher. In unit 1, five lessons are going to be available in which gap filling activities, karaoke reading and other activities to develop the reading skills of the students will be able.

Figure 9. Topics Lesson Pane – Lesson 1



Elaborated by the author.

In the vocabulary section as can be seen in the figure 9, all the items that will be on the reading texts will be shown first. Every word has its respective pronunciation. In this part, a photo-figureic carousel will be available so students can practice as many times as they need while they could practice how the word is written and pronounced.

The activities of every lesson vary to give the students a fresh start in every language element that is presented so they could be motivated to learn by playing, analyzing, and producing the language in an organized way. The way to evaluate the activity is when the student does the activity correctly, the written letters will be colored in green, and if the answer is incorrect.

3. Results

Below is the analysis of the results of the survey carried out with the experts:

Following the data obtained from the survey, 62% of teachers think that the platform's interface is friendly, 25% agree with it, and just 13% are not sure if the interface of the technological resource was developed according to the easiness of its use. Consequently, according to the criteria gotten, the resource to develop the student's reading skills is easy to use.

The 50% of teachers claim that all the information gathered in the technological resource can help develop the student's reading skills as well as 37% agrees with the relevance of the content. However, 13% are unsure if all the information collected is enough to develop the reading skills. Consequently, the information engaged on the technological resource is according to the necessities of the students in their first stage of the A1 level according to the CEFR.

From the data collected from the survey, 37% of the people mentions that the content gathered on the platform has a sequence from content to content as well as the other 25% that they agree with it; however, 25% of the population are not sure whether the content in the resource has a valid sequence. Finally, the 13% agrees with the way how the elements were placed on the platform. From this perspective, the platform uses the content that is necessary to develop the reading skills on the daily basis following a sequence.

38% of teachers state that they neither agree or disagree regarding the interactive content that is immersed on the platform, the 37% agree with the illustrations and the way how the activities are placed, the 13% agree as well as the 12% that believes the technological resource is very figureical and is very attractive to use.

50% of language teachers are unsure whether the environment created on the platform could be beneficial for students' practice. Furthermore, 25% agree that looking at the technological resource is suitable for engaging students in reading practice. Finally, with the same average, the other 25% accept the platform as an alternative way to understand small readings.

38% of the teachers from the area highlight that the karaoke mode is a good activity for students that begins to understand a small familiar text to develop reading skills, as well as the 37% that agree with the same criteria, however, 25% are not sure whether the reading karaoke mode could be beneficial for A1 beginner students.

In this question, it is notable that most of the population that took the survey believes that the application developed creates challenges in the lessons according to the level of the students. Furthermore, there is an acceptance too with 25% of the teachers. Finally, 13% do not know if these features are good to develop the students' reading skills.

The 62% of the teachers, agree that reading activities are immense familiar words and understandable phrases that are good for students starting to get to know the language, with the same acceptance 38% believe that those activities are suitable for those type of learners.

The 38% of teachers are unsure if the reading sets are based on specific situations or personal data. On the other hand, 67% of the teachers agree that the content used to develop the activities have specific information on the reading pieces according to the CEFR that help students from the A1 level to obtain their knowledge gradually.

4. Discussion

To verify the hypothesis of the present investigation, the statistical t-Student test was used for small samples with equal variances. Ali & Razali (2019), mention that the t-Student test is a parametric test that allows the analysis of significant differences on the population means of two groups with small samples, in which the greater the difference between the two means, the greater is the probability that a statistically significant difference exists.

Statement of the hypothesis

For the determination of the statistic, the free software PRQS (Probabilities, Quantiles and Random Samples) was used, considering a “Significance Level” or “Type I Error” of 5% and with $n_1 + n_2 - 2$ degrees of freedom. Where the “Critical Value” found is $t_{\alpha} = 1.994$ that divides the “Acceptance Zone” and the “Non-acceptance Zone” of the normal distribution figure

Null hypothesis:

The use of technological learning resources does not affect the development of the reading ability of the English language in A1 level students.

Alternative hypothesis

The use of technological learning resources affects the development of the reading ability of the English language at the A1 level of students.

Obtaining the Statistic

The statistics were obtained in the SPSS computer package, for a “t-test of two independent samples assuming equal variances”.

Table 3. Statistics for the calculation of the t-Student test

Group	N	Average	Desv. Deviation	Desv. Average error
Value Group 2-Beginners L	33	8,4533	0,59473	0,10353
Group 1-Beginners C	41	8,7302	0,47305	0,07388

Elaborated by the author.

Table 4. Independent samples test

	Levene's equality variances	Test	Of	t	test for quality of means	Diffe- rence of means	Standard error di- fference	95% interv di- fference	Confi- dence on the higher
		Sig.	t	gl	Sig (bila- teral)				
Equal variances are assumed	1,175	,282	2,323	72	,029	-,27691	,12409	-,52427	-,02955
It is not assumed in equal variances			2,177	60,365	,033	-,27691	,12718	-,53129	-,02253

Elaborated by the author.

When carrying out the hypothesis verification, it is evident that there is a level of significance of $\alpha=0.05$ with respect to the final academic performance of two study groups, validating that the use of technological resources for learning has a favorable impact on the development of competence. reader in English in A1 level students, which is finally reflected in the increase in final passing averages.

5. Conclusions

The conceptual and scientific-technical technical bases of technological tools and reading skills have been supported; The same ones that validate the fundamental pillars of this research, assuming a critical evaluative position and a comparative study of other existing tools, supporting the present proposal.

The methodological design, through the hypothetical-deductive research method, guided the guidelines to verify the hypothesis raised in the present investigation using a statistical t-Student test with a significance level of 5%, by comparing the academic performance of two groups study, determining that the use of technological learning resources favorably affects the development of English reading skills in A1 level students.

Through the Design Thinking design methodology executed with the help of experts and the PPP foreign language teaching methodology oriented explicitly for the development of reading skills, it was possible to design technological resources based on web tools that allow the learner of the English language to appropriate the second language with real communication activities in everyday life. Finally, it is concluded that a technological tool based on web resources has been implemented to develop reading skills of the English language in A1 level students of the "Instituto Superior Tecnológico Cotopaxi" according to the Common European Framework (CEFR).

After having used the platform implemented in this research, it is recommended that the “Karaoke Reading” activity be considered in all the learning units, because it stimulates the learner’s hearing and sight. It is recommended to extend this research proposal to the following levels and skills of the languages program of the Common European Framework of Reference, since the teaching of the English language would be strengthened. Manage efforts that allow the training of teachers in web tools, so that they can generate technological resources for the teaching of the foreign language.

References

- Ahmadovna, D., Muxiddinova, N., Hikmatovna, L., Nematullaevna, D., & Shaxrilloevich, I. (2021). Methodology of using innovative technologies in technical institutions. *Psychology and Education Journal*, 58(1), 7505 – 7522. <https://doi.org/10.17762/pae.v58i1.2136>
- Ali, A., & Razali, A. (2019). A review of studies on cognitive and metacognitive reading strategies in teaching reading comprehension for esl/efl learners. *English Language Teaching*, 12(6), 94. <https://doi.org/10.5539/elt.v12n6p94>
- Alreshoud, A., & Abdelhalim, S. (2022). The impact of self-regulated strategy development on enhancing saudi female english majors’ reading comprehension skills and self-efficacy. *Arab World English Journal*, 13(2), 312–327. <https://doi.org/10.24093/awej/vol13no2.21>
- Arias, L., Pardo, K., Saenz, J., & Rodriguez, S. (2022). Estrategias metodológicas para mejorar la comprensión lectora de los estudiantes de cuarto grado básico. *Revista Universidad de Guayaquil*, 134(1), 12–33. <https://doi.org/10.53591/rug.v134i1.1416>
- Carcary, M. (2020). The research audit trail: methodological guidance for application in practice. *Electronic Journal of Business Research Methods*, 18(2), 166–177. <https://doi.org/10.34190/JBRM.18.2.008>
- Domínguez, L., Lubén, Y., & Peinado, Y. (2023). Acercamiento a la comprensión lectora desde experiencias personales y preferencias lectoras Approach. *Maestro y Sociedad*, 20(1), 190–197.
- Fabricio, L. (2023). Methodological strategy as educational innovation to strengthen knowledge in natural sciences and mathematics in the tenth year. *Journal Scientific Investigar*, 7(1), 133–154.
- Gómez, P. (2023). Formative feedback in reading comprehension. *Asian Journal of Education and Social Studies*, 38(1), 1–8. <https://doi.org/10.9734/AJESS/2023/v38i1814>
- Gulnigor, Y. (2022). Challenges in teaching english as a second language to adults, multilingual settings and teaching methods samarkand. *Eurasian Journal of Learning and Academic Teaching*, 12(7), 17–22.
- Hameed, S. (2020). Investigating the techniques used by iraqi teachers in teaching reading comprehension in the university level. *International Journal of Psychosocial Rehabilitation*, 24(10), 3754–3759.
- Isaqjon, T. (2022). Strategies and techniques for improving EFL learners’ reading skills. *Involta Innovation Scientific Journal*, 1(7), 49–55.
- Lucas, M., & Chancay, C. (2022). Estrategia metodológica para fomentar la comprensión lectora en los estudiantes de educación general básica. *Revista EDUCARE*, 26(2), 1–22. <https://doi.org/10.46498/reduipb.v26iextraordinario.1666>
- Maldonado, F., Ulloa, V., Príncipe, B., & Trujillo, B. (2023). Comprensión lectora de textos argumentativos: una revisión sistemática desde el nivel básico hasta el universitario. *Rehuso Revista de Ciencias Humanísticas y Sociales*, 8(1), 132–145. <https://doi.org/https://doi.org/10.33936/rehuso.v8i1.4980>

- Manoharan, A., & Ramachandran, S. (2023). Enhancing reading comprehension skills of prospective teachers using suitable reading strategies. *Journal of Language Teaching and Research*, 14(1), 48–56. <https://doi.org/10.17507/jltr.1401.06>
- Nguyen, T. (2022). The effects of task-based instruction on reading comprehension of non-English major students at a university in the Mekong Delta. *International Journal of TESOL & Education*, 2(4), 1–20. <https://doi.org/10.54855/ijte.22241>
- Ningsih, W. (2023). Guide reading and summarizing procedure (grasp) strategy to improve students' reading comprehension. *Journal of English Language Pedagogy*, 8(1), 32–40.
- Shaturaev, J. (2023). Methodology of teaching english at the primary school level: enhancing english language skills. *Academic Research in Educational Sciences*, 4(1), 152–166.
- Stevani, M., & Erikson, K. (2022). Need analysis of dyslexia students in english reading comprehension instructions. *JEELS Journal of English Education and Linguistics Studies*, 9(2), 327–352. <https://doi.org/10.30762/jeels.v9i2.520>
- Wahyuni, L., Saragih, F., Saragi, C., & Manurung, L. (2022). The effect of applying venn diagram strategy on students' achievement in reading comprehension. *REGISTER Journal of English Language Teaching of FBS-Unimed*, 1(1), 537–544. <https://doi.org/10.24114/reg.v1i1.337>

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