B-Learning Model in the Development of the Listening Skill in the English Language

Modelo B-Learning en el Desarrollo de la Habilidad Escuchar en el Idioma Inglés

Modelo de Aprendizagem B no Desenvolvimento da Habilidade de Compreensão Auditiva na Língua Inglesa

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ABSTRACT

Introduction. The present study aimed to analyze the contribution of the B-Learning model to the development of listening comprehension in English among first-semester university students enrolled in the Pedagogy of National and Foreign Languages program at the Universidad Laica Eloy Alfaro de Manabí (ULEAM), Chone campus. Methodology. The research adopted an applied approach with a mixed-methods design, integrating quantitative and qualitative data. Fourteen students from Parallel A participated in the study. Data collection instruments included a listening comprehension pre-test and post-test, a structured observation checklist, and a student perception survey. The B-Learning model was implemented through ten face-to-face sessions complemented by virtual activities using digital platforms, educational applications, and multimedia resources' focused on listening skill development. Results. The results' showed an improvement in students' listening performance after the intervention, reflected in an increase in the mean score and a decrease in the standard deviation in the post-test. Discussion. Additionally, greater student participation and a favorable perception of the model were observed, highlighting increased motivation and learner autonomy. Conclusion. In conclusion, the B-Learning model represents a relevant methodological alternative for strengthening listening comprehension in higher education contexts.
Key words: B-Learning, listening skill, English as a foreign language, higher education, blended learning.

RESUMEN

Introducción. El presente estudio tuvo como objetivo analizar la contribución del modelo B-Learning al desarrollo de la comprensión auditiva en inglés en estudiantes universitarios de primer semestre del programa de Pedagogía de Lenguas Nacionales y Extranjeras de la Universidad Laica Eloy Alfaro de Manabí (ULEAM), sede Chone. Metodología. La investigación adoptó un enfoque aplicado con un diseño de métodos mixtos, integrando datos cuantitativos y cualitativos. Participaron en el estudio catorce estudiantes del Paralelo A. Los instrumentos de recolección de datos incluyeron un pretest y un postest de comprensión auditiva, una lista de verificación de observación estructurada y una encuesta de percepción estudiantil. El modelo B-Learning se implementó mediante diez sesiones presenciales, complementadas con actividades virtuales mediante plataformas digitales, aplicaciones educativas y recursos multimedia enfocados en el desarrollo de la habilidad auditiva. Resultados. Los resultados mostraron una mejora en el desempeño auditivo de los estudiantes después de la intervención, reflejada en un aumento en la puntuación media y una disminución en la desviación estándar en el postest. Discusión. Además, se observó una mayor participación estudiantil y una percepción favorable del modelo, destacando una mayor motivación y autonomía del estudiante. Conclusión. En conclusión, el modelo B-Learning representa una alternativa metodológica relevante para fortalecer la comprensión auditiva en contextos de educación superior.
Palabras clave: B-Learning, comprensión auditiva, inglés como lengua extranjera, educación superior, aprendizaje combinado.

RESUMO

Introdução. O presente estudo teve como objetivo analisar a contribuição do modelo B-Learning para o desenvolvimento da compreensão auditiva em inglês entre alunos do primeiro semestre do curso de Pedagogia de Línguas Nacionais e Estrangeiras da Universidade Laica Eloy Alfaro de Manabí (ULEAM), campus Chone. Metodologia. A pesquisa adotou uma abordagem aplicada com delineamento misto, integrando dados quantitativos e qualitativos. Quatorze alunos da turma Paralela A participaram do estudo. Os instrumentos de coleta de dados incluíram um pré-teste e um pós-teste de compreensão auditiva, uma lista de verificação de observação estruturada e um questionário de percepção dos alunos. O modelo B-Learning foi implementado por meio de dez sessões presenciais complementadas por atividades virtuais utilizando plataformas digitais, aplicativos educacionais e recursos multimídia focados no desenvolvimento da habilidade de compreensão auditiva. Resultados. Os resultados mostraram uma melhora no desempenho dos alunos na compreensão auditiva após a intervenção, refletida em um aumento na média e uma diminuição no desvio padrão no pós-teste. Discussão. Além disso, observou-se maior participação dos alunos e uma percepção favorável do modelo, destacando-se o aumento da motivação e da autonomia do aluno. Conclusão. Em conclusão, o modelo B-Learning representa uma alternativa metodológica relevante para fortalecer a compreensão auditiva em contextos de ensino superior.

Palavras-chave: B-Learning, habilidade de compreensão auditiva, inglês como língua estrangeira, ensino superior, aprendizagem híbrida.

INTRODUCTION

English is considered the global lingua franca of the 21st century due to its predominance in fields such as business, science, technology, and international communication. Its widespread expansion and use have led to the concept of English as a Foreign Language (EFL), which highlights the need for English language teaching in diverse educational contexts worldwide, particularly in response to globalization processes and the academic, professional, and social opportunities associated with English proficiency (Muñiz Calderón, 2011).

Within English language learning, one of the four fundamental macro skills is listening, which is regarded as a key receptive skill for the development of communicative competence. León (2021) states that listening comprehension constitutes the first step in the proper interpretation of oral messages and, consequently, in the development of oral production. In this sense, a low level of listening comprehension can become a significant obstacle in the process of foreign language acquisition.

According to Cedeño et al. (2020), the teaching of listening comprehension and oral expression in English has undergone significant changes in recent years, driven by the incorporation of new methodologies such as the communicative approach. Nevertheless, listening comprehension remains one of the most complex skills to develop, posing major challenges for the educational system. In this context, the need arises to analyze alternative pedagogical models capable of addressing these difficulties, among which the B-Learning model stands out.

In the Ecuadorian context, there has been a growing incorporation of technological resources into educational processes, fostering the transformation of traditional pedagogical practices. The inclusion of electronic devices and digital platforms has led teachers to combine face-to-face instruction with virtual activities, giving rise to the modality known as Blended Learning or B-Learning, understood as a learning model that integrates face-to-face and virtual strategies mediated by Information and Communication Technologies (ICT) (Zambrano et al., (2018)). However, access to and use of these technologies remain heterogeneous, depending on institutional and socioeconomic contexts.

Likewise, within Ecuadorian educational settings, students demonstrate a greater affinity for digital resources such as applications, videos, music, and interactive content available online. This situation reflects an increasing dependence on technological devices in everyday life, presenting both challenges and opportunities for education. In this regard, pedagogical integration of technology becomes essential to avoid learning gaps and to harness its formative potential (Vergara Romero & Caveda, 2022).

Within this framework, the present study aims to analyze the contribution of the B-Learning model to the development of the listening skill in English among first-semester university students enrolled in the Pedagogy of National and Foreign Languages program at the Universidad Laica Eloy Alfaro de Manabí (ULEAM), Chone campus. Specifically, the study seeks to identify students' initial level of listening comprehension, implement B-Learning-based pedagogical activities oriented toward listening skill development, explore students' perceptions of the model, and describe changes in listening comprehension after the intervention.

METHODOLOGY

This research followed an applied approach (OCDE, 2015), as the B-Learning model was implemented in a real educational context with the purpose of analyzing its contribution to the development of the listening skill in English. The study was framed within a mixed-methods design (qualitative–quantitative), allowing for a comprehensive understanding of the results through the integration of numerical data and interpretative descriptions (Creswell, 2015).

Data were collected using several methodological techniques, including assessment (pre-test and post-test), structured observation, and a survey (Creswell, 2015), (OCDE, 2015). These techniques made it possible to gather both quantitative data related to listening performance and qualitative data associated with student participation and perceptions of the B-Learning model.

The instruments used were a listening test applied as a pre-test and post-test to measure progress in listening skill development, an observation checklist to record student performance and participation during class sessions, and a questionnaire designed to collect students' attitudes and opinions regarding the use of B-Learning in the learning process. The study population consisted of students enrolled in the Pedagogy of National and Foreign Languages (PINE) program at the Universidad Laica Eloy Alfaro de Manabí (ULEAM), Chone campus, during the 2025-2 academic period. The sample comprised 14 students from the first-semester Parallel A group.

RESULTS

Pre-Test

The Pre-Test results revealed a clear heterogeneity in students' listening comprehension, with scores ranging between 3 and 30. In this diagnostic assessment, the mean score reached a value of 18.36, with a standard deviation of 7.967, indicating considerable variability in initial performance, as shown in Table I.

Table I: Descriptive statistics of the listening comprehension pre-tes

	Pre-Test
Participants	14
Media	18.36
Standard deviation	7.967
Range	27.00
Minimun	3.000
Maximun	30.00

Implementation of the B-Learning Model

The B-Learning model was implemented over ten face-to-face sessions, complemented by virtual activities through the use of different platforms, applications, and multimedia resources. One of the virtual resources applied was the Sounter application, in which a class group was created and several activities were assigned. This application allowed the registration of students' participation in different tasks, showing their daily and weekly performance. A more active participation was evidenced among some students; however, the majority satisfactorily complied with the assigned activities (Fig. 1).
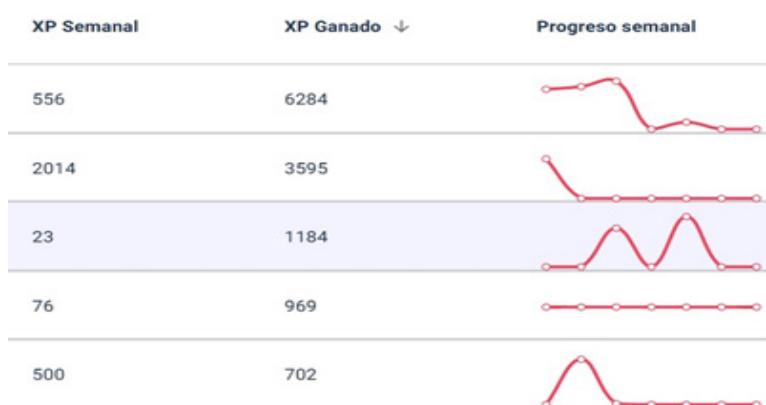
Figure 1: Sounter Weekly Participation

Other instruments used were the ELLO and British Council websites, virtual platforms through which different listening activities were developed, offering students a variety of resources adapted to their interests and learning needs. In these virtual environments, students could access audiovisual content, such as audios and videos produced by native speakers, accompanied by questionnaires and reinforcement activities focused on vocabulary and grammar. Additionally, through the British Council platform, students had access to several podcasts with interactive activities.

Another highly dynamic support tool was the Pearson platform, which students used as a complement to their physical textbook. Through this platform, classes and activities were carried out, including vocabulary repetition, videos and audios on various topics, listening comprehension workshops, and collaborative tasks assigned as autonomous work.

To verify that these activities were developed effectively and meaningfully for students, a checklist was designed with indicators oriented toward the pedagogical process and classroom interaction. This instrument made it possible to record students' participation and performance during the sessions conducted under the B-Learning model. As shown in Fig. 2, structured observation evidenced progressive participation in listening comprehension activities, as well as a higher level of attention during class development. Likewise, an improved and more appropriate use of technological resources was observed, which facilitated the execution of the proposed activities and favored interaction with auditory materials. Students demonstrated greater willingness to follow instructions, complete assigned tasks, and apply listening strategies, reflecting advances in the learning process during the intervention.
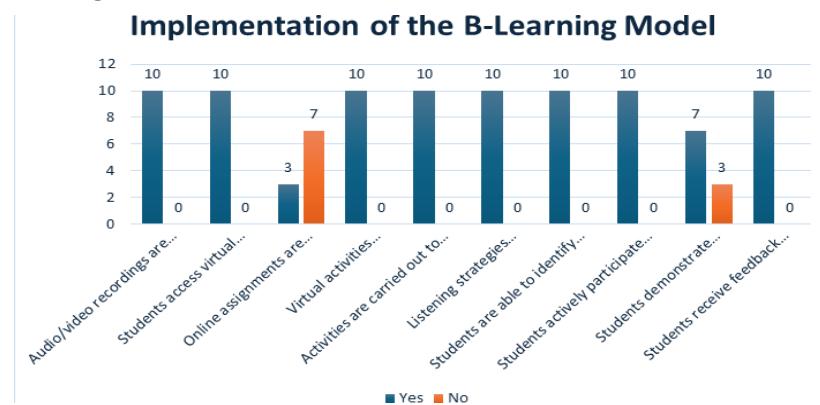

Figure 2: Results of the checklist on student participation and performance.

Most of the indicators were effectively fulfilled; however, two of them showed lower levels of achievement, revealing that not all online activities were periodically reviewed in class and that certain students did not demonstrate full commitment when completing tasks outside the classroom. Nevertheless, the majority of indicators showed full compliance with both virtual and face-to-face activities, suggesting that the implemented planning was appropriate for the B-Learning model.

Post-Test Results

After the implementation of the B-Learning model, the Post-Test results evidenced an overall improvement in students' listening comprehension performance. The mean score increased to 21.71, and the median reached 21.50, suggesting a shift in performance toward higher levels. The decrease in the standard deviation to 5.78 indicates greater homogeneity in the results obtained after the intervention (Fig. 3).
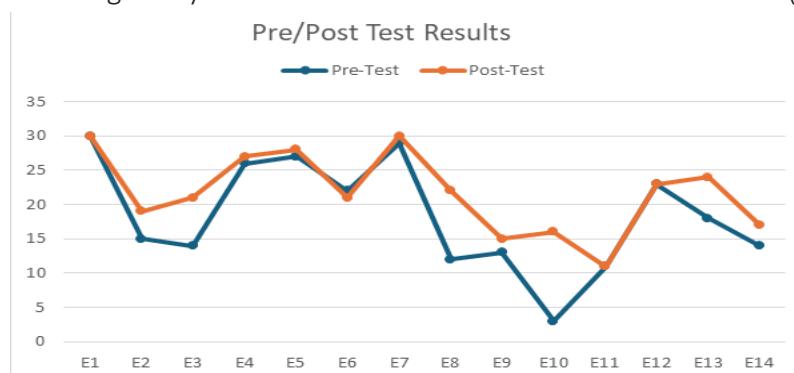

Figure 3: Comparison of mean scores in the pre-test and post-test of listening comprehension

The minimum score recorded in the Post-Test was 11, which evidences a substantial improvement among students who initially presented greater difficulties, while the maximum score remained at 30, reflecting the stability of performance among students with higher proficiency levels. The total sum of scores reached 304, confirming a general increase in the group's performance.

The positive progression evidenced in the Post-Test demonstrates that the application of the B-Learning model had a considerable influence on students' academic performance. Table II presents the comparative analysis between both tests, showing a clear difference between the assessment conducted before the implementation and the one carried out afterward, with an improvement of more than three points in the mean score and a much lower standard deviation in the Post-Test. This indicates not only an overall improvement in group performance but also a reduction in the knowledge gap, giving rise to a more equitable and productive learning environment.

Table II: Comparison of pre-test and post-test listening comprehension results

	Pre-Test	Post-Test
Valid	16	16
Mean	18.24	21.70
Std. Deviation	7.432	5.385
Range	27.00	19.00
Minimum	3.000	11.00
Maximum	30.00	30.00

This improvement in scores was not only reflected in listening skills and auditory comprehension but also had a positive influence on other language skills, as writing, speaking, vocabulary acquisition, and grammar learning were simultaneously fostered, taking listening-based activities oriented toward different purposes as a starting point.

Students' Perception of the Implementation of the B-Learning Model

The survey applied to students to identify their perceptions and opinions regarding the B-Learning model and its application in English classes revealed a predominantly positive perception of its implementation. The results shown in Fig. 4 indicate that most students stated that the use of technological resources contributed to strengthening their listening skills in English.
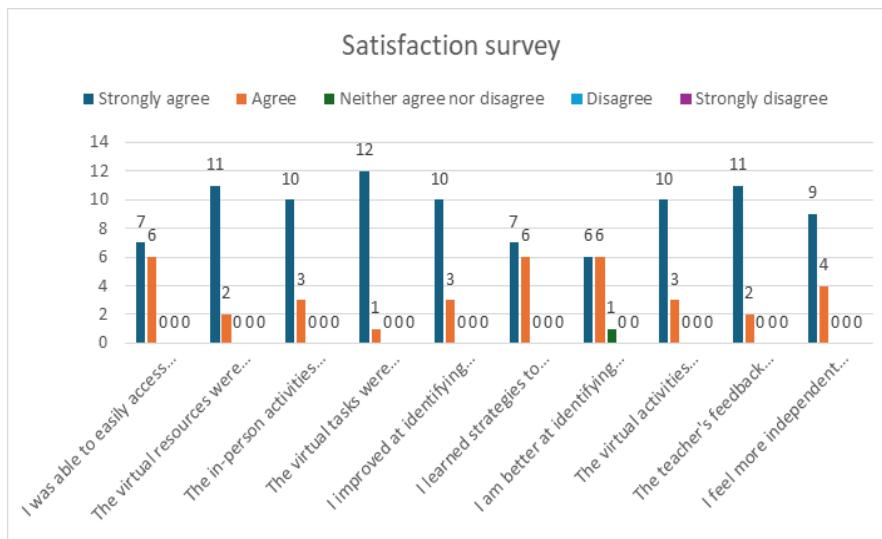

Figure 4: Student perception of the implementation of the B-Learning model

Similarly, students reported that the activities developed through the B-Learning model facilitated the comprehension of auditory content and increased their motivation and autonomy in learning the language. Overall, the responses reflect a favorable acceptance of the model as an innovative and relevant strategy for the teaching–learning process. Additionally, students pointed out that activities involving music and podcasts were the most useful for their learning and suggested that writing skills should also be further developed through technological resources.

DISCUSSION

The results obtained in the present study show that the implementation of the B-Learning model had a positive impact on the development of English listening skills among the participating students. The improvement observed between the pre-test and post-test, reflected in the increase in the mean score and the reduction of the standard deviation, suggests not only an advance in overall academic performance but also greater homogeneity in listening comprehension levels. These findings are consistent with those reported by Andrade Velázquez (2015), who found significant improvements in oral comprehension following the application of blended learning in university contexts.

From a theoretical perspective, these results are supported by the conception of B-Learning as a model that integrates face-to-face instruction with virtual environments, promoting active and autonomous student learning. In this regard, González, Padilla y Rincón (2011) point out that blended learning allows the articulation of constructivist and cognitive principles, optimizing teaching–learning processes through the pedagogical use of technology.

Likewise, the use of multimedia resources and digital platforms focused on listening comprehension is directly related to the findings of Barreno y Egüez (2020), who argue that virtual environments enhance meaningful learning of the English language by facilitating constant exposure to authentic auditory input. Similarly, Albiladi y Alshareef (2019) highlight that blended models foster the development of language skills by combining face-to-face interaction with digital activities, strengthening learner autonomy and engagement.

Regarding listening strategies, the results support the contributions of Pourhosein y Sabouri (2016) y Gómez y Larenas (2020), who argue that the systematic practice of listening activities supported by technological resources contributes to the development of both bottom-up and top-down cognitive strategies, which are essential for oral comprehension in a foreign language.

Furthermore, the positive perception expressed by students in the survey reinforces the quantitative results obtained. The motivation generated through the use of technology and digital resources is consistent with previous studies that emphasize the role of ICT as a key factor in increasing interest and autonomy in foreign language learning (Zambrano et al., (2018)). This aspect is particularly relevant considering that listening is one of the most complex skills within the communicative process and represents a fundamental component in the development of communicative competence in English (Namaziandost et al., (2019)).

Nevertheless, certain limitations were also identified, particularly regarding the commitment of some students to virtual activities conducted outside the classroom. This issue has been identified by Vergara Romero y Caveda (2022) as one of the main weaknesses of B-Learning when continuous teacher monitoring is lacking, highlighting the importance of pedagogical support to maximize the benefits of the model.

CONCLUSIONS

The present study allowed us to conclude that the implementation of the B-Learning model contributed positively to the development of English listening skills among first-semester students of the Pedagogy of National and Foreign Languages program at ULEAM – Chone Campus. The results obtained from the pre-test and post-test reveal a significant improvement in overall academic performance, reflected in an increase in the mean score, a reduction in the standard deviation, and an increase in the minimum score, indicating progress at both the individual and group levels in listening comprehension.

Additionally, it was identified that students' initial level of listening comprehension showed marked heterogeneity, which evidenced the need to implement innovative methodological strategies. In this regard, the application of B-Learning activities through the use of digital platforms, multimedia resources, and educational applications made it possible to address different learning paces and styles, thus promoting greater equity in the educational process.

Furthermore, structured observation made it possible to verify progressive student participation during the sessions conducted under the B-Learning model, as well as improved use of technological resources and a greater willingness to follow instructions and complete listening activities. Although certain difficulties were observed in the completion of some virtual tasks outside the classroom, most of the indicators reflected an adequate development of the pedagogical process, demonstrating the feasibility of the model in real

educational contexts.

Regarding student perception, the survey results revealed a favorable acceptance of the B-Learning model as a teaching–learning strategy. Students reported that the use of technology, music, and podcasts facilitated the comprehension of listening content, increased their motivation, and strengthened their autonomy in learning English—key aspects for the development of language skills.

Finally, it is concluded that the B-Learning model constitutes a relevant and innovative methodological alternative for strengthening English listening skills by effectively integrating face-to-face and virtual instruction. However, the need for future research that extends the intervention period, includes larger samples, or incorporates control groups is acknowledged, in order to further analyze the impact of the model and strengthen the validity of the results obtained.

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Conflict of interest

The authors declare that they have no conflicts of interest.

Declaration of responsibility of authorship

We, the authors of the aforementioned manuscript, DECLARE that we have directly contributed to its intellectual content, as well as to the genesis and analysis of its data; therefore, we are able to take public responsibility for it and accept that their names appear on the list of authors in the order indicated. Furthermore, we have complied with the ethical requirements of the aforementioned publication, having consulted the Declaration of Ethics and Publication Malpractice.

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