



## **Integrating Digital Music Platforms in EFL Instruction: Effects on Listening Comprehension and Vocabulary Acquisition**

### ***Integración de Plataformas Digitales Musicales en la Enseñanza de EFL: Efectos en la Comprensión Auditiva y la Adquisición de Vocabulario***

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#### **RESUMEN**

El desarrollo de la comprensión auditiva y la adquisición de vocabulario en inglés como lengua extranjera (EFL) continúa siendo un desafío en contextos educativos donde predominan metodologías tradicionales y limitadas oportunidades de exposición al idioma. En este estudio se analizó el impacto de la integración de plataformas digitales basadas en música como estrategia pedagógica para mejorar estas habilidades lingüísticas en estudiantes de nivel



secundario. La investigación adoptó un enfoque mixto con diseño cuasi-experimental, utilizando instrumentos cuantitativos y cualitativos para evaluar el progreso de los estudiantes antes y después de la intervención. Se aplicaron pruebas diagnósticas (pre-test) y finales (post-test), así como encuestas y observaciones, con el fin de medir cambios en la comprensión auditiva, el uso del vocabulario y la motivación hacia el aprendizaje del idioma. La intervención consistió en la implementación de actividades estructuradas mediante una plataforma digital que utiliza canciones y ejercicios interactivos basados en letras musicales. Los resultados evidenciaron una mejora significativa en la capacidad de los estudiantes para comprender información auditiva, reconocer vocabulario en contexto y participar en actividades de escucha activa. Asimismo, se observó un incremento en la motivación y el interés por el aprendizaje del inglés, atribuible al carácter dinámico e interactivo de las herramientas digitales utilizadas. Estos hallazgos sugieren que el uso de plataformas musicales digitales constituye una estrategia efectiva para potenciar habilidades lingüísticas clave, promoviendo un aprendizaje más significativo, autónomo y contextualizado en entornos EFL.

**Palabras clave:** Comprensión auditiva, Plataformas digitales musicales, Adquisición de vocabulario

## ABSTRACT

The development of listening comprehension and vocabulary acquisition in English as a Foreign Language (EFL) remains a significant challenge in educational contexts where traditional teaching methods limit exposure to authentic language input. This study aimed to analyze the effects of integrating digital music-based platforms as a pedagogical strategy to enhance these linguistic skills among secondary-level students. A mixed-methods approach with a quasi-experimental design was employed, combining quantitative and qualitative instruments to evaluate students' progress before and after the intervention. Pre-test and post-test assessments, along with surveys and classroom observations, were used to measure improvements in listening comprehension, vocabulary acquisition, and student motivation. The intervention consisted of structured activities using a digital platform that incorporates songs and interactive exercises based on lyrics. The results demonstrated a significant improvement in students' ability to understand spoken English, recognize vocabulary in context, and engage in active listening tasks. Additionally, an increase in motivation and interest in learning English was observed, attributed to the interactive and engaging nature of the digital tools. These findings suggest that integrating music-based digital platforms into EFL instruction is an effective strategy for enhancing key language skills, fostering meaningful learning, and promoting learner autonomy.



**Keywords:** Listening comprehension, Digital music platforms, Vocabulary acquisition

## INTRODUCTION

The learning of English as a Foreign Language (EFL) has become essential in contemporary education due to its global role in communication, science, and technology. However, the development of listening comprehension remains one of the most challenging skills for learners, particularly in contexts where exposure to authentic language input is limited. Listening is not a passive activity but a complex cognitive process that involves decoding sounds, interpreting meaning, and responding appropriately (Nadig, 2013). Despite its importance, this skill is often underdeveloped in traditional classroom environments, where emphasis is placed primarily on grammar and written production (Zhang, 2009).

In addition, vocabulary acquisition plays a crucial role in language learning, as it directly influences learners' ability to understand spoken and written discourse. Students with limited lexical knowledge often struggle to comprehend audio input, which negatively affects their communicative competence. Continuous exposure to language through meaningful contexts is necessary to expand vocabulary and improve comprehension (Lieb, 2008). Therefore, integrating strategies that simultaneously develop listening and vocabulary is essential for effective EFL instruction.

In recent years, the integration of Information and Communication Technologies (ICT) in education has transformed language teaching methodologies. Digital tools provide interactive, flexible, and student-centered learning environments that enhance engagement and facilitate skill development (Cradler & Bridgforth, 2002). Among these innovations, music-based digital platforms have gained attention as effective pedagogical resources, as they combine audio, visual, and textual elements to create meaningful learning experiences.

The use of music in language learning has been widely recognized as a powerful tool for improving listening comprehension and vocabulary acquisition. Songs provide authentic linguistic input, expose learners to natural pronunciation, rhythm, and intonation, and introduce contextualized vocabulary (Kao & Oxford, 2014). Furthermore, music enhances motivation and emotional engagement, which are key factors in successful language acquisition (Erinta & Listyani, 2022). Through repetition and interaction with lyrics, students can internalize language patterns and improve their listening skills in an enjoyable and meaningful way.

From a theoretical perspective, listening comprehension involves multiple stages, including receiving, understanding, remembering, evaluating, and responding to auditory input (DeVito, 2000). These processes require active participation and cognitive engagement, which can be enhanced through the use of interactive digital tools. Additionally, cognitive strategies



such as repetition, prediction, and contextual inference support learners in processing auditory information more effectively (Gagné, 2002) .

This study focuses on the integration of digital music platforms in EFL instruction as an innovative approach to improve listening comprehension and vocabulary acquisition. The research is grounded in the need to address students' low motivation, limited vocabulary, and difficulties in understanding spoken English, which have been identified as key challenges in language learning contexts .

Regarding the variables of the study, the independent variable is defined as the integration of digital music platforms, understood as the use of online tools that incorporate songs, lyrics, and interactive exercises to facilitate language learning. These platforms provide opportunities for repeated listening, contextual vocabulary exposure, and autonomous practice, which are essential for skill development.

The dependent variables are listening comprehension and vocabulary acquisition. Listening comprehension refers to the learners' ability to understand and interpret spoken language, including recognizing sounds, identifying meaning, and responding appropriately (Nadig, 2013) . Vocabulary acquisition, on the other hand, involves the process of learning and using new words in context, which is fundamental for effective communication and language proficiency (Lieb, 2008) .

The significance of this study lies in its contribution to the field of EFL teaching by providing empirical evidence on the effectiveness of integrating music-based digital platforms. By combining technology, music, and interactive learning, this research aims to offer innovative strategies that enhance students' linguistic skills, increase motivation, and promote meaningful learning experiences.

## METHODS

### Research Design

This study adopted a quasi-experimental design within a mixed-methods approach, combining quantitative and qualitative data to evaluate the effects of integrating digital music platforms on listening comprehension and vocabulary acquisition. Quasi-experimental designs are appropriate in educational contexts where random assignment is not feasible, allowing researchers to compare learning outcomes before and after an intervention (Creswell, 2014).

The study also followed a socio-educational research approach, focusing on real classroom conditions and learners' experiences. This approach enables the analysis of both measurable outcomes and contextual factors influencing the teaching-learning process . Additionally, the research incorporated descriptive elements to identify patterns related to students' performance, motivation, and engagement.

### Participants



The participants consisted of secondary-level students aged between 12 and 13 years, representing a typical EFL learning context. The sample included students from multiple groups, ensuring a broader perspective of the learning process. The selection of participants was based on a non-probabilistic sampling method, considering students who exhibited difficulties in listening comprehension and limited vocabulary knowledge. Previous classroom observations revealed that learners struggled to recognize words in audio input, often relying on repetition or translation to understand meaning. These characteristics made the group suitable for evaluating the effectiveness of the proposed intervention.

## **Instruments**

To ensure a comprehensive analysis, multiple data collection instruments were employed:

- **Pre-test and Post-test:** These assessments were designed to measure students' listening comprehension and vocabulary acquisition before and after the intervention. Listening comprehension was evaluated through audio-based tasks, while vocabulary was assessed through contextual recognition and usage activities. Pre- and post-testing is a widely used strategy to determine the effectiveness of educational interventions (Fraenkel et al., 2012).
- **Survey Questionnaires:** Surveys were administered to gather information about students' attitudes, motivation, and perceptions regarding the use of digital music platforms. These instruments helped identify affective factors influencing learning.

## **Data Analysis**

The data analysis in this study combined quantitative and qualitative approaches to ensure a comprehensive evaluation of the intervention. Quantitative data obtained from pre-test and post-test assessments were analyzed using descriptive statistics, including percentages and mean scores, to determine improvements in listening comprehension and vocabulary acquisition. Comparative analysis was applied to identify differences in students' performance before and after the implementation of the digital music platform (Fraenkel et al., 2012).

In parallel, qualitative data collected through surveys and classroom observations were examined using thematic analysis to identify patterns related to motivation, engagement, and learning behaviors (Braun & Clarke, 2006). This mixed-methods integration allowed for a deeper understanding of both measurable outcomes and students' learning experiences within authentic educational contexts

## **Ethical Considerations**

This study adhered to ethical principles in educational research, ensuring respect, confidentiality, and voluntary participation of all participants. Students were informed about the purpose of the study and participated with prior consent, guaranteeing that their involvement was entirely voluntary and without any academic consequences. Personal data were treated with strict confidentiality, and anonymity was maintained throughout the research process.



Additionally, the study ensured that the activities implemented did not negatively affect students' academic development but instead contributed to their learning process. The research followed ethical guidelines for classroom-based studies, promoting a safe and respectful environment for all participants (Cohen et al., 2018).

## RESULTS AND DISCUSSION

### Pre-test and Post-test Comparison

The comparison between pre-test and post-test results revealed a clear improvement in students' listening comprehension and vocabulary acquisition after the implementation of the digital music platform. In the initial stage, most students demonstrated limited ability to understand spoken English, particularly when dealing with authentic audio materials. This difficulty was mainly associated with reduced vocabulary knowledge and lack of exposure to listening activities, which are common challenges in EFL contexts (Zhang, 2009). After the intervention, students showed increased comprehension accuracy, suggesting that repeated exposure to songs and contextual learning contributed positively to their development.

Furthermore, the quantitative analysis showed a noticeable increase in performance across all evaluated dimensions. Students improved not only in recognizing words and phrases but also in interpreting meaning within context. This aligns with previous findings indicating that music-based learning enhances listening skills by combining rhythm, repetition, and contextual input (Kao & Oxford, 2014). The integration of visual and auditory elements through the platform facilitated deeper cognitive processing, allowing learners to retain and apply new vocabulary more effectively.

In addition, the results highlight the importance of interactive learning environments in language acquisition. The post-test results demonstrated that students became more confident in processing spoken language and engaging with listening tasks. This improvement supports the idea that listening comprehension is an active process that can be strengthened through meaningful practice and exposure (Nadig, 2013). Overall, the data confirms that the intervention had a significant positive impact on students' performance.

**Table 1**

Pre-test and Post-test Results

<b>Dimension</b>	<b>Pre-test (%)</b>	<b>Post-test (%)</b>	<b>Improvement (%)</b>
<b>Listening Comprehension</b>	48%	79%	+31%
<b>Vocabulary Recognition</b>	50%	82%	+32%
<b>Understanding Context</b>	45%	77%	+32%
<b>Overall Performance</b>	<b>48%</b>	<b>79%</b>	<b>+31%</b>

### Students' Perceptions and Motivation



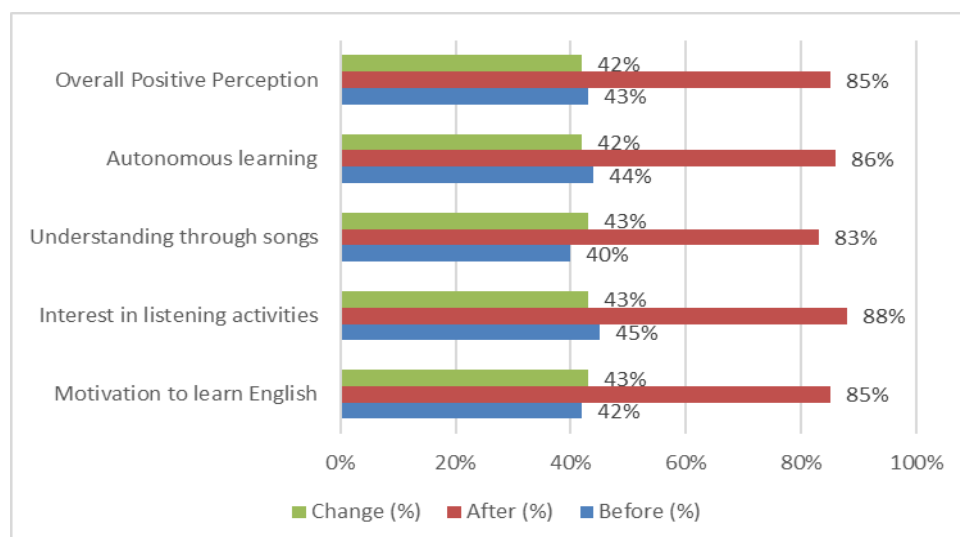
The survey results revealed a significant change in students' attitudes toward learning English after the intervention. Before the implementation of the digital music platform, many students reported low motivation and limited interest in listening activities. This lack of engagement can be attributed to traditional teaching methods that often fail to provide meaningful and interactive experiences (Cradler & Bridgforth, 2002) . However, after the intervention, students expressed a more positive perception of learning English, highlighting the role of music and technology in making lessons more engaging.

Moreover, students reported that learning through songs helped them better understand pronunciation, rhythm, and vocabulary in context. The use of lyrics allowed them to connect meaning with sound, which facilitated comprehension and retention. These findings are consistent with research suggesting that music enhances emotional engagement and motivation, which are essential for effective language learning (Erinta & Listyani, 2022) . The interactive nature of the platform also encouraged students to participate more actively in classroom activities.

Additionally, the results indicate that students developed a greater sense of autonomy in their learning process. Many participants reported practicing listening activities independently outside the classroom, which contributed to their improvement. This supports the idea that digital tools promote self-directed learning and continuous practice, key elements in second language acquisition (Gagné, 2002) . Overall, the intervention had a positive impact not only on performance but also on students' motivation and engagement.

**Figure 2**

Survey Results (Students' Perceptions)





## CONCLUSIONS

The findings derived from the pre-test and post-test results demonstrate that the integration of digital music platforms had a significant positive effect on students' listening comprehension and vocabulary acquisition. The comparative analysis showed a clear improvement in students' ability to understand spoken English, recognize key vocabulary, and interpret meaning within context. These results confirm that structured exposure to audio-visual materials, such as songs, enhances learners' listening performance through repetition and contextual learning.

In addition, the survey results revealed a substantial increase in students' motivation and interest in learning English after the intervention. Prior to the implementation, students reported low engagement and limited enthusiasm for listening activities. However, after participating in music-based learning tasks, they expressed more positive attitudes toward language learning, highlighting the role of interactive and dynamic resources in fostering motivation. This suggests that emotional engagement plays a key role in improving learning outcomes in EFL contexts (Erinta & Listyani, 2022).

Furthermore, the data indicates that students developed greater autonomy in their learning process, as reflected in their willingness to engage in independent practice outside the classroom. The combination of improved performance in test results and positive perceptions in the survey supports the effectiveness of integrating digital music platforms as a pedagogical strategy. Overall, the evidence confirms that this approach not only enhances linguistic skills but also strengthens motivation and learner engagement, contributing to more meaningful and effective language learning experiences.

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