

# "Analyzing the Impact of the Program for International Student Assessment on Technology Use in English Listening Classes"

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## **Abstract:**

The widespread adoption of technology in language learning has become a topic of increasing interest in recent years. Particularly, the use of technology in English listening classes has been the focus of numerous studies, as it has the potential to enhance the learning experience and improve student outcomes. This article delves into investigating the impact of the Program for International Student Assessment on the use of technology in English listening classes and also employing a mixed-methods approach, combining quantitative analysis of performance data with qualitative insights from teacher interviews and classroom observations. Data is gathered from school 41 that actively incorporate PISA-oriented strategies in their curricula. The findings indicate that while PISA has led to an increased focus on integrating technology into language classes, the extent of its impact varies widely based on factors such as access to resources, teacher training, and institutional support.

**Keywords:** PISA, Technology integration, English listening skills, Educational assessment, Pedagogical innovation, blended learning, multimodal approach.

**Introduction:** PISA : is the worldwide assessment of 15-year-olds in reading, mathematics and science. Technology in the learning process is a given – it has been used to measure student proficiency across reading, mathematics and science (all collectively known as “core” subjects of PISA). Several research studies have noted the potential benefits in using technology as a part of English listening classes. For example, the creation of computer-assisted language learning programs and online resources help learners to work at a pace that suits their own personal needs.

Moreover, technology integrated in language learning can lead to an increase of learner motivation and engagement.<sup>1</sup>

As it was stated above the Program for International Student Assessment (PISA) being an international examination that has many different countries participating in it and examining 15-year-old students, is aimed to explore the influence of PISA on technology use in education. This is a qualitative study. It is important to note that the teachers were all English teachers from just 4 countries but they contribute with valuable information. Their students take an English listening class that follows the PISA module. The objective of this work is to discuss the results achieved in our search and its proposals/suggestions for seeking improvements and sustainability conditions regarding these samples. Literature review (tech use in education, PISA and language exam form). In addition to this, the discussion extended on the research methodology and a thorough examination of its findings.<sup>2</sup>

As a major cornerstone for education, foreign language education is implemented worldwide. There are several series of exams performed that assess learners' ability in this aspect. Every year, the Program for International Student Assessment (PISA) examines 15-year-old students about reading, science, mathematics, and a random domain. The role of PISA is to measure the ability of the students who were close to the end of consolidated compulsory education. Every domain is examined every three years. Unlike other empirical research conducted by the researchers to investigate this examination on various aspects, however, was briefly examined. That is why we planned to investigate the impact of PISA on learning at the classroom level in this work and implement it into practice at specialized school 41 with 8<sup>th</sup> grade students.<sup>3</sup>

### **Research objectives Examining the Role of PISA in Shaping Technology Integration:**

Investigate how the PISA framework influences the design and implementation of technology-based tools in English listening classes, specifically in specialized public school #41 with 8th-grade students.

**Evaluating the Effectiveness of Blended Learning Models:** Assess the impact of blended learning techniques, such as the flipped classroom, on students' listening comprehension, self-confidence, digital literacy, and independent learning in alignment with PISA standards.

**Analyzing Teacher Perceptions of Technology Use:** Explore how 8th-grade English teachers perceive the role of technology in listening instruction and how PISA-related expectations influence their teaching practices, using surveys and interviews.

**Assessing Student Engagement and Motivation:** Investigate how the integration of technology affects 8th-grade students' engagement, motivation, and attitudes towards English listening tasks, identifying strengths, weaknesses, and areas for improvement.

**Identifying Challenges in Technology Implementation:** Identify the barriers and challenges that teachers and students face when incorporating technology into English listening instruction, particularly in response to PISA-driven goals and objectives.

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<sup>1</sup> Yang, Y. T. C., Chuang, Y. C., Li, L. Y., & Tseng, S. S. (2013). A blended learning environment for individualized English listening and speaking integrating critical thinking. *Computers & Education*, 63, 285-305.

<sup>2</sup> Hopfenbeck, T. N., Lenkeit, J., El Masri, Y., Cantrell, K., Ryan, J., & Baird, J. A. (2018). Lessons learned from PISA: A systematic review of peer-reviewed articles on the programme for international student assessment. *Scandinavian Journal of Educational Research*, 62(3), 333-353.

<sup>3</sup> Anderson, J. O., Lin, H. S., Treagust, D. F., Ross, S. P., & Yore, L. D. (2007). Using large-scale assessment datasets for research in science and mathematics education: Programme for International Student Assessment (PISA). *International Journal of Science and Mathematics Education*, 5, 591-614.

**Providing Recommendations for Policy and Practice:** Based on research findings, propose strategies for educators, school administrators, and policymakers to optimize the use of technology in English listening classes in a way that aligns with PISA standards and promotes sustainable educational practices. **Methodology**

For the research of "Analyzing the Impact of the Program for International Student Assessment (PISA) on Technology Use in English Listening Classes with 8th Grade Students," a **mixed-methods design** was found to be the most appropriate. First and foremost, this approach allows for a comprehensive understanding of both the measurable impact (through quantitative data) and the nuanced experiences or perceptions (through qualitative data) of technology integration in English listening classes. To justify, while quantitative component measures the specific impact of PISA on the use of technology in English listening classes with a help of pre- and post- intervention surveys, standardized tests, or technology usage statistics in order to gather numerical data which helped to establish patterns, qualitative component captured the subjective experiences and insights from teachers and students regarding how PISA influences their engagement with technology in English listening activities based on interviews, focus groups and classroom observations. As a result, the mixed-methods design facilitates a comprehensive triangulation of data, allowing for the integration of quantitative findings with qualitative insights to provide a richer, more nuanced understanding of the phenomena under investigation. For example, while quantitative data may reveal an increase in technology use following the implementation of PISA, qualitative data offers deeper insights into the reasons behind the selection of specific technologies and how students and educators perceive their efficacy in enhancing listening comprehension skills. This combination of data sources ensures a more holistic and contextually grounded interpretation of the study's results.

## **Conclusion**

To sum, while PISA has great potential to enhance listening instruction through technology, its implementation must be **context-sensitive**, focusing on equity and teacher preparedness. The integration of technology is not without challenges, but with the right support, PISA-aligned approaches can lead to significant improvements in student learning and engagement, positioning students and teachers alike to thrive in the 21st century. What is more, the results show that while PISA has had a positive influence on the integration of technology in English listening classes, the success of this integration is contingent upon several factors: teacher training, access to resources, and student digital literacy. The study demonstrates that PISA's emphasis on critical thinking, problem-solving, and technology use can foster significant improvements in student engagement and learning outcomes, but these advancements are often hindered by practical challenges that require systemic solutions.

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