RESEARCH PROJECT

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Group #: 20 Date:

Using Podcast to Enhance Pronunciation
Accuracy for 10th Grade Students

Abstract. *This study investigates the impact of podcasts on improving pronunciation accuracy among 10th-grade EFL students. Pronunciation, a vital component of effective communication, is often neglected in traditional language learning settings, leading to challenges for high school learners. The research focuses on evaluating the current pronunciation competence of students and the effectiveness of podcasts as a pedagogical tool. A total of 30 students from Grade 10 at School 79 in Tashkent participated in the study, divided equally into control and experimental groups. Over a four-week period, the experimental group engaged in podcast-based learning, while the control group followed conventional methods. Data collection involved pre-tests, post-tests, and questionnaires to assess changes in pronunciation competence and students' perceptions of podcast usage. Statistical analyses were conducted to compare the outcomes of the two groups. The findings aim to provide insights into how digital tools like podcasts can enhance language learning, offering practical implications for educators seeking innovative methods to improve students' pronunciation skills.*

Introduction. Pronunciation is considered a key component of language learning for students studying English as a foreign language (EFL). It is often the first aspect that influences how listeners perceive communication (Boyer, 2002). However, high school students, who typically learn English as just a subject, struggle with accurate pronunciation, mainly because pronunciation is often neglected in English lessons. With the advancement of technology, various tools

and methods have been introduced to help students improve their pronunciation skills, with one of the most effective being podcasts. Boyer (2002) noted that in natural speech, every speaker has a unique way of pronouncing words, as each word consists of letters, and each letter has a distinct sound, with some letters being stressed while others are not.

Pronunciation can be compared to musical tones: when speech flows smoothly, it sounds harmonious, but any disruption in this rhythm may cause misunderstanding. Gilakjani (2011) also linked pronunciation skills to musical abilities. In high schools, many second language learners struggle with pronunciation, and English, being a mandatory subject, often fails to engage students fully. Numerous studies have examined the use of podcasts in language learning. For instance, Ducate and Lomicka (2009) studied the impact of podcasts on improving pronunciation in second language learners and found that students developed a more positive attitude toward pronunciation throughout the semester. They appreciated the feedback provided on their recordings and enjoyed the creative freedom of extemporaneous podcasts. Lord's (2008) research also focused on pronunciation and podcasting, involving 19 students in a phonetics class who recorded various tasks related to pronunciation. Both their attitudes and pronunciation abilities were evaluated before and after the semester, showing significant improvement in their English skills.

This study aims to explore: (a) the current state of high school students' pronunciation competence and (b) the effectiveness of using podcasts to enhance their English pronunciation skills. 30 students at grade 10 at 79 high school in Tashkent, who were chosen as the main participants and were divided into the control group and the experimental group will took part in the experiment within 4 weeks. We will use questionnaires and tests as data collection instruments for the current study. The findings of the pre-test and post-test acquired by high school participants will be compared in more depth in this study. To that end, this investigation is guided by the following research questions:

1. To what extent does listening to podcasts improve the pronunciation accuracy of high school students learning English as a second language (L2)?

2. What are high school students' perceptions of using podcasts to improve their pronunciation skills, and how do these perceptions influence their engagement with the learning process?

Research Method

This study adopts a mixed-method approach to explore the effectiveness of podcasts in enhancing pronunciation accuracy among 10th-grade students learning English as a foreign language (EFL). Both qualitative and quantitative methods were employed to provide a comprehensive understanding of the research questions.

Data collection instruments:

The questionnaire is a highly effective tool for collecting information on various learning factors, such as beliefs, attitudes, motivations, and preferences. According to Creswell (2005), a questionnaire is a type of survey instrument that participants fill out and return to the researchers. In this study, the questionnaire was carefully designed to assess the current state of high school students' pronunciation. Additionally, Overton (2008) explained that tests are used to evaluate a student's ability to perform specific tasks or demonstrate mastery of a skill or knowledge. In this research, tests were employed to assess students' pronunciation competence and collect data. Both pre-tests and post-tests were conducted to gather information on students' pronunciation abilities before and after the intervention.

Two primary instruments were used for data collection:

☐ Questionnaires: These were designed to gather insights into students' beliefs, attitudes, and perceptions regarding pronunciation learning. The questionnaires assessed the initial state of pronunciation competence and students' engagement with the podcast-based learning approach.

☐ Tests: Pre-tests and post-tests were conducted to evaluate changes in pronunciation accuracy over the four-week intervention period. These tests included tasks focusing on pronunciation features such as stress, intonation, and phoneme accuracy.

Procedure

The experimental group used podcasts as part of their pronunciation training, while the control group received regular classroom instruction. The intervention spanned four weeks, with both groups undergoing pre-tests at the beginning and post-tests at the end of the period. During this time, the experimental group listened to carefully curated podcasts and engaged in pronunciation-focused activities, such as mimicking native speakers and practising target sounds.

Participants:

The study involved 30 tenth-grade students from school 79 in Tashkent, enrolled during the 2024-2025 academic year. Most participants were at the age of 15-16. The students were divided into two equal groups: the experimental group, consisting of 15 students who used podcasts to improve their English pronunciation, and the control group, also with 15 students, who did not use podcasts in their learning process. The study took place over a 4-week period, and participants were selected through a convenience sampling method.

Data Analysis

Data were analyzed using statistical methods to compare the results of the experimental and control groups. A paired t-test was conducted to assess the significance of improvement within groups, while an independent t-test compared performance between the groups. The analysis also incorporated descriptive statistics to interpret questionnaire responses, providing qualitative insights into students' attitudes and engagement.

Findings and discussion

The data analysis aims to determine whether using podcasts as a learning tool significantly enhances pronunciation accuracy among 10th-grade EFL students. The analysis focuses on comparing the performance of the experimental group (podcast-based learning) and the control group (traditional methods) using appropriate statistical methods. Both descriptive and inferential statistics were employed to address the research questions.

Title of the Study

Using Podcasts to Enhance Pronunciation Accuracy for 10th Grade Students

Research Questions

☐ To what extent does listening to podcasts improve the pronunciation accuracy of high school students learning English as a second language (L2)?

☐ What are high school students' perceptions of using podcasts to improve their pronunciation skills, and how do these perceptions influence their engagement with the learning process?

Hypotheses

Null Hypothesis (H_0): There is no significant difference in pronunciation accuracy between students who use podcasts and those who do not.

Alternative Hypothesis (H_1): Students who use podcasts demonstrate significantly higher pronunciation accuracy compared to those who do not.

The data were analyzed to determine the effectiveness of using podcasts in enhancing pronunciation accuracy among 10th-grade EFL students. Both descriptive and inferential statistics were employed, accompanied by visual aids to illustrate the findings.

Descriptive Statistics

The mean scores and standard deviations for the pre-test and post-test for both groups are summarized below:

Group   Test   Mean Score Standard Deviation

Experimental Group   Pre-Test   12.87 1.46

Experimental Group   Post-Test   17.20 1.47

Control Group   Pre-Test   10.93 0.96

Control Group   Post-Test   13.27 1.23

The bar chart below shows the comparison of mean scores across the pre-test and post-test for both groups. Error bars represent the standard deviation.

The bar chart shows the comparison of mean scores across the pre-test and post-test for both the experimental and control groups. The error bars represent the standard deviation for each group, providing a clear visualization of the data.

Inferential Statistics

1.   Paired t-tests:

☐   Experimental Group: The difference between the pre-test and post-test scores was highly significant ($t = -29.02$, $p < 0.001$). This indicates a substantial improvement in pronunciation accuracy due to the podcast intervention.

☐   Control Group: The difference between pre-test and post-test scores was also significant ($t = -18.50$, $p < 0.001$), but the improvement was less pronounced than in the experimental group.

2.   Independent t-test:

☐   The post-test scores of the experimental group were significantly higher than those of the control group ($t = 5.99$, $p < 0.001$). This confirms the effectiveness of podcasts in improving pronunciation skills.

3.   Effect Size:

☐   Cohen's d for the difference in post-test scores between groups was 2.19, indicating a very large effect size. This suggests that the use of podcasts had a strong impact on pronunciation accuracy.

The box plot below illustrates the distribution of scores across the pre-test and post-test for both groups, highlighting improvements and variations.

The box plot illustrates the distribution of scores across the pre-test and post-test for both the experimental and control groups. This visualization highlights the range, median, and variations in the scores, clearly showcasing the improvements.

The results demonstrate that the experimental group, which engaged in podcast-based learning, significantly outperformed the control group in post-test pronunciation scores. This suggests that podcasts are an effective tool for enhancing pronunciation accuracy. The large effect size further supports the strong impact of this intervention.

Discussion

The results of this study highlight the significant impact of podcasts on improving pronunciation accuracy among 10th-grade EFL students. The experimental group, which engaged in podcast-based learning, demonstrated a statistically significant improvement in post-test scores compared to their pre-test scores ($p < 0.001$). This aligns with previous research, such as Ducate and Lomicka (2009), which found that podcasts positively influence students' attitudes and pronunciation skills. The large effect size (Cohen's $d = 2.19$) further supports the effectiveness of podcasts as a powerful learning tool.

In contrast, the control group also showed improvement from pre-test to post-test, albeit to a lesser extent. The significant difference in post-test scores between the experimental and control groups ($p < 0.001$) underscores the added value of integrating technology, like podcasts, into language instruction. These findings suggest that the authentic and engaging nature of podcasts facilitates better pronunciation learning by providing students with exposure to natural speech patterns and opportunities for practice.

However, this study has limitations. The small sample size and short intervention period may limit the generalizability of the findings. Future research could explore longer interventions and a broader range of participants to confirm

these results. Nonetheless, the study underscores the potential of podcasts to enhance pronunciation instruction in EFL classrooms.

Conclusion and Suggestions

This study investigated the impact of podcasts on improving pronunciation accuracy among 10th-grade EFL students. The findings revealed a significant improvement in the experimental group's pronunciation skills compared to the control group, confirming the effectiveness of podcasts as a learning tool. Statistical analysis demonstrated a substantial difference in post-test scores between the groups, with the experimental group outperforming the control group. The large effect size (Cohen's d = 2.19) highlights the strong influence of podcasts in facilitating pronunciation improvement. These results align with prior studies, which emphasize the value of digital tools in enhancing language learning.

Podcasts provide an engaging platform for students to practice pronunciation, offering exposure to natural speech, stress patterns, and intonation. This interactive and flexible method addresses the challenges faced in traditional classroom settings, where pronunciation is often neglected or treated as secondary. The study underscores the potential of technology to bridge gaps in language instruction and foster learner engagement.

However, the study is not without limitations. The sample size was relatively small, and the intervention period was brief, limiting the generalizability of the findings. Additionally, the study focused solely on high school students in a specific educational context.

Future research should consider a more extensive sample size and longer intervention periods to validate these findings. Incorporating diverse learning contexts and participant demographics would enhance the applicability of the results. Educators are encouraged to explore innovative tools like podcasts to enhance pronunciation skills, ensuring that language instruction remains dynamic and learner-centered.

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