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# From Playback to Proficiency: The Role of English Podcasts in Developing EFL Learners' Speaking and Vocabulary Skills in EFL Contexts

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**Abstract**

In recent years, podcasts have become increasingly popular as a means of supporting language development, particularly in terms of incidental vocabulary learning and speaking fluency. Although podcasts are increasingly integrated into educational settings, research specifically focusing on their effectiveness in EFL classrooms remains relatively scarce. This study explores the impact of three English-language podcast series: All Ears English (AEE), Splendid English (SE), and Coffee Break English (CBE) on vocabulary acquisition and speaking performance among EFL learners. A quasi-experimental approach was used, involving 139 Iranian participants who were assigned to one of four groups: three experimental groups, each exposed to a different podcast series over a 13-week period, and one control group (CG) that continued with conventional instruction without access to podcasts. Standardized tests evaluated vocabulary and speaking abilities at both the beginning and conclusion of the intervention period. All three podcast groups achieved better results than the CG did in both vocabulary and speaking assessments after the intervention. The experimental groups showed no significant differences in their outcomes which indicates that each podcast series provided equivalent benefits. The research demonstrates that podcast-based instruction in any format can effectively support traditional EFL teaching methods. The flexible nature of podcasts makes them suitable for educators to select multiple resources which provide authentic language exposure and support incidental learning for their students.

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## 1 Introduction

During the past few years, the way people interact with digital content has undergone a fundamental transformation through technological advancements. Podcasts have emerged as a leading innovation in the developing digital environment. The combination of smartphone technology and internet access and on-demand audio platforms has driven podcasts to become more accessible to worldwide listeners (Abdous et al., 2012). Podcasts enable users to access content at their convenience through flexible engagement options (Heilesen, 2010). Podcasting has evolved through digital tool advancements to incorporate interactive features which include transcription, voice navigation, and live streaming capabilities that enhance listener experiences (Gromik, 2008).

Podcasting functions as a method to distribute audio or video content through RSS (Really Simple Syndication) feeds according to Faramarzi & Bagheri (2015) and Wi & Boers (2025). Users can automatically receive new episodes through this technology which simplifies their access to regular content. The on-demand availability of podcasts distinguishes them from traditional broadcast media because learners can select their own listening times and locations (Rosell-Aguilar, 2013). The flexible nature of podcasts makes them an effective educational tool especially useful for language learning. Growing research evidence supports how podcasts provide authentic input to EFL and L2 learners while enabling self-paced learning (McGarr, 2009; Rahimi & Katal, 2012; Rosell-Aguilar, 2007; Thorne & Payne, 2005). Podcasts afford learners gain the ability to control their learning experience by pausing and rewinding episodes which helps them enhance their language engagement (Rosell-Aguilar, 2013). The ability to control playback functions proves beneficial for students who focus on mastering pronunciation and vocabulary and grammar fundamentals.

Podcast's portability and accessibility provide benefits for educational applications. Students can access content through various devices which include mobile phones and tablets and laptops and MP3 players (Şendağ et al., 2018). The ability to move podcasts makes them suitable for students who need to manage their time or travel frequently. The time-efficient nature of podcasts makes them suitable for students who want to incorporate language exposure into their daily activities. The "on-the-go" learning model which podcasts support enables students to organize their study time independently and flexibly according to Lee and Chan (2007). Research indicates that podcasts serve as an educational supplement to traditional classroom teaching because they help students build vocabulary while improving their listening and speaking abilities through repeated exposure (Facer et al., 2009). The format of podcasts enables students to parse their learning into smaller sections which helps them retain information better (Chinnery, 2006). Higher education institutions have started using podcasts as additional learning resources because they help students prepare for assignments and exams while reinforcing textbook information (Bongey et al., 2006; Edirisingha & Salmon, 2007; Hakobyan, 2023; Huntsberger & Stavitsky, 2007; Stanley, 2006).

Podcasting functions as an educational technology which delivers advantages that extend past traditional classroom learning environments. The repeated exposure to real-world language use through podcasting supports independent self-directed learning especially in language education (Abdous et al., 2009). The Web 2.0 tool podcasting transforms educational content delivery so students can take a more active role in their learning process. Students who listen repeatedly to spoken language can review challenging material while enhancing their comprehension through self-paced learning. The authentic content of podcasts matches student interests which leads to higher motivation and longer learning periods (Bueno-Alastuey & Nemeth, 2020). The diverse podcast formats including interviews, monologues, storytelling, and analysis commentary enable podcasts to support different learning approaches. The educational role of podcasts in EFL instruction will expand through technological advancements which will introduce innovative methods to build linguistic skills and enhance student learning.

The research investigates how podcasts can serve as educational tools to enhance both unplanned vocabulary learning and speaking abilities of EFL students. The research evaluates three popular podcast series AEE, SE and CBE to assess their impact on language development. The study is guided by the following research questions:

1. To what extent does listening to English podcasts (*AEE*, *SE*, and *CBE*) impact incidental vocabulary acquisition among EFL learners?

2. How do these English podcasts influence the development of speaking skills among EFL learners?

## 2 Literature Review

### 2.1 Theoretical literature

Theories of second language acquisition (SLA) have substantially shaped research in computer-assisted language learning (CALL) and technology-enhanced educational practices during the last forty years. Much of this scholarship has drawn from cognitive-interactionist frameworks, which center on the mental mechanisms that underlie second language (L2) development (Ellis et al., 2019). These perspectives argue that learners acquire language by processing input, receiving feedback, and modifying their output accordingly, especially in interaction-rich settings (Ellis, 2018; Long, 2015). In CALL environments, technological tools can be seen as mediators that facilitate these processes, particularly when learners engage in tasks that promote real-time interaction and language use. By the 1990s, however, SLA researchers began to acknowledge that language learning is not purely cognitive. Increasing attention was given to the social dimensions of learning, emphasizing that language development occurs within interactional, cultural, and contextual frameworks.

Sociocultural theory (SCT), rooted in the work of Vygotsky (1978), has since emerged as a key lens through which language learning is understood, particularly in English language education (Zuengler & Miller, 2006). SCT posits that learning is inherently social and mediated by tools (whether linguistic, symbolic, or technological). Within the classroom, language development is seen not as a solitary cognitive task but as a product of collaborative engagement. Learners encounter linguistic forms through interaction and feedback, often with the aid of digital tools that act as mediators in the learning process (Morgana, 2024). Mediation is thus central to SCT, as it explains how learners use external artifacts, including technology and social exchanges, to construct knowledge (Swain et al., 2015).

Importantly, such tools do not function automatically; they become meaningful only when learners engage with them intentionally. For instance, technologies like podcasts or mobile-based tasks gain pedagogical value through active learner interaction (Lantolf et al., 2018; Oskoz & Elola, 2014). The engagement process enables scaffolding which is an essential SCT concept through which more knowledgeable others or structured tools provide support to learners. Scaffolding enables learners to achieve tasks beyond their current capabilities through task segmentation or by directing attention to essential elements (Ellis et al., 2019; Morgana, 2024). The study views student interactions with podcasts and instructors and peer discussions as mediating activities which help students notice and improve their vocabulary and speaking abilities.

### 2.2 Experimental literature

The theoretical foundations of podcast research have led to an increasing number of empirical studies that investigate podcast effects on language development specifically, in speaking and vocabulary skills. The research by Tomé Díez and Richters (2020) demonstrated that students who used podcasts for tasks developed better fluency and pronunciation skills and gained increased confidence. The structured oral

practice combined with authentic input led to these positive results. The research conducted by Farangi et al. (2015) showed that EFL students who used podcasts for instruction achieved better results than their peers in fluency and coherence tests. The research by Peng et al. (2025) showed that speaking activities supported by podcasts enhanced both oral abilities and student motivation and their digital engagement outside the classroom. The participants in the study found the podcast tasks both enjoyable and autonomy-supportive, factors which traditional speaking instruction often fails to consider.

Research has shown growing interest in how podcasts help people to learn new words, especially when that learning occurs unintentionally. The quasi-experimental study by Amiri et al. (2023) demonstrated that EFL students who listened to educational podcasts achieved notable vocabulary growth while expressing high contentment with the task. The flexible and authentic nature of podcast content enabled learners to learn new words through contextual exposure. Putman and Kingsley (2012) found similar results in their content-area study which showed that students learned domain-specific terminology through repeated exposure to thematic material in podcasts.

Bueno-Alastuey and Nemeth (2020) conducted comparative research to evaluate student-made podcasts against Quizlet flashcards for vocabulary maintenance. The research showed that both methods worked well yet students demonstrated a tiny preference for Quizlet. The research by Chaves-Yuste and Peña (2023) investigated podcast content about social issues in a secondary EFL educational environment. The research showed that students who participated in both creating and listening to podcasts achieved substantial improvements in their speaking and listening abilities. Research on collaborative podcast listening methods has produced encouraging findings. Saeedakhtar et al. (2021) discovered that students who worked in peer-peer podcast groups learned vocabulary better than students who listened alone or received standard classroom instruction. The collaborative learning environment led students to report more favorable attitudes toward learning which indicates that the social engagement during podcast use improved student participation and contributed to better knowledge retention.

Research studies have analyzed how different design aspects of podcasts affect student learning results. The study by Şendağ et al. (2018) demonstrated that Turkish EFL pre-service teachers' comprehension improved through repeated listening to podcasts of different lengths with listening aids available. The repetitive listening process was considered monotonous by some participants, but all demonstrated improved comprehension abilities after the intervention. The research by Widodo and Gunawan (2019) and Mirza Suzani (2020) demonstrated that students who received podcast materials as part of their instruction showed substantial improvements in their listening abilities. The educational use of podcasts extends beyond listening comprehension to include pronunciation support. Fouz-González (2019) studied how students developed better perception and production skills of fossilized sounds through repeated audio-based pronunciation training. The research demonstrated that podcasts used in targeted learning activities help students improve their specific phonological skills.

## 2.3 Research gap

Although existing research clearly supports the use of podcasts in language education, particularly in developing listening comprehension, vocabulary, and pronunciation, several important gaps remain. First, relatively few studies have focused specifically on how podcasts influence incidental vocabulary acquisition in tandem with speaking proficiency. While studies such as those by Saeedakhtar et al. (2021) and Bueno-Alastuey and Nemeth (2020) offer useful insights into collaborative learning or comparisons with other digital tools, they do not fully explore how continuous, individual engagement with widely accessible podcast series supports naturalistic language development.

Second, the research on podcast use in secondary or pre-service education by Şendağ et al. (2018) and Chaves-Yuste & Peña (2023) has been conducted in other contexts but there is no information about

the impact of popular, publicly available podcast series such as AEE, SE, and CBE on EFL learners in Iran. These podcasts offer rich, authentic input, but their pedagogical impact remains underexplored, particularly in cultures where exposure to native-speaker content may be limited.

Moreover, the majority of existing research focuses on short-term results which measure listening comprehension improvements over several weeks (Şendağ et al., 2018) but fails to determine if podcast exposure results in enduring vocabulary retention and continued speaking improvement. This research investigates how the chosen podcast series affects receptive vocabulary skills and productive speaking abilities through natural learning processes. The research provides an integrated perspective on podcast-based language development for Iranian EFL learners by studying both skill areas in a culturally and linguistically distinct environment.

## 3  Methodology

### 3.1 Participants

The study involved 139 male EFL learners enrolled in three language institutes across Iran. Participants were between 14 and 19 years of age and were selected through convenience sampling, based on their availability and willingness to take part in the research. All learners were at an intermediate level of English proficiency, as verified by their previous standardized test results, ensuring a degree of homogeneity in language ability across the sample.

This study adhered to the ethical principles outlined in the Declaration of Helsinki. Prior to participation, both learners and their legal guardians were informed of the study's objectives and procedures, and written consent was obtained. Confidentiality of the collected data was rigorously maintained, and participants were explicitly reminded of their right to withdraw from the study at any point without incurring academic consequences.

The participants were randomly assigned to one of four groups. Three experimental groups engaged with distinct podcast series: *AEE* (n = 31), *SE* (n = 35), and *CBE* (n = 37) while the CG (n = 36) received traditional instruction without podcasts. This grouping allowed for the comparison of podcast-based instruction with conventional teaching methods.

### 3.2 Instruments

To assess changes in learners' speaking and vocabulary skills, two researcher-developed instruments were employed as both pre- and post-tests: a speaking assessment and a vocabulary test. These tools were designed to align with the learners' upper-intermediate proficiency level.

The speaking test included 4 tasks targeting core components of oral proficiency, such as fluency, pronunciation, grammatical accuracy, coherence, and interactional competence. Task types were varied to elicit both planned and spontaneous language. Examples included short monologues, picture descriptions, opinion-based dialogues, and role-plays simulating everyday scenarios (e.g., placing an order at a restaurant or debating familiar topics).

A detailed scoring rubric was developed to assess speaking performance. Criteria included fluency, vocabulary use, grammatical range and accuracy, pronunciation, and interaction. Each category was scored on a 5-point scale, with higher scores indicating greater competence. The maximum total score was 25. To ensure consistency, multiple trained raters applied the rubric, and inter-rater reliability was assessed. A pilot study with a small subset of learners helped refine the test instructions and validate task difficulty. Internal consistency was measured using Cronbach's alpha, with acceptable reliability indicated by values above 0.70.

The vocabulary test comprised 30 items covering both receptive and productive knowledge of target vocabulary. It featured multiple-choice items, fill-in-the-blank tasks, sentence completions, and word-definition matching exercises. Items were selected to reflect vocabulary commonly taught at the learners' level and that appeared in the podcast materials.

Selected-response items were scored dichotomously, while productive tasks allowed partial credit for semantically correct but slightly inaccurate responses (e.g., incorrect tense or article use). Test content validity was established by mapping items to the course curriculum and podcast content. A pilot test confirmed item appropriateness for the sample, and reliability was evaluated using both test-retest measures and the Kuder-Richardson Formula 21 (KR-21).

Both instruments were administered at the beginning and end of the intervention. The pre-tests established learners' baseline abilities, while the post-tests captured growth attributable to the instructional treatments. This design enabled direct comparison of outcomes across groups and contributed to the reliability and validity of the findings.

## 3.3 Procedures, treatment, and data analysis

The study employed a 13-week quasi-experimental design to investigate the effects of podcast-integrated instruction on speaking proficiency and incidental vocabulary acquisition. Participants met twice weekly for 70-minute sessions, resulting in approximately 30 hours of instruction over the course of the intervention. Three experimental groups received podcast-based instruction using one of the three selected podcast series. The CG followed a traditional language learning curriculum using the *New English File Upper-Intermediate* textbook.

At the start of the study, all groups completed pre-tests assessing speaking and vocabulary. The speaking test required learners to produce short monologues on general topics, which were audio-recorded and evaluated using the established rubric. The vocabulary test consisted of a 40-item checklist drawn from the podcast content and course materials.

For the experimental groups, instruction followed a structured three-phase model: pre-listening, guided listening, and output-focused activities. In the pre-listening phase, learners activated background knowledge and predicted target vocabulary through visuals and prompts. During the guided listening phase, they listened to each podcast episode twice: first for general comprehension, then with targeted attention to vocabulary, discourse markers, and language use. The final phase emphasized productive language use, with learners engaging in discussions, role-plays, and speaking tasks based on the podcast content.

To reinforce vocabulary development, students were encouraged to identify unfamiliar words during listening, log them digitally, and to then use them in context. They received regular formative feedback from instructors on both vocabulary and speaking performance. A key feature of the intervention was the weekly "vlog reflection," where students recorded short video summaries of the week's lessons, focusing on how they applied newly acquired vocabulary and expressions. These reflections aimed to foster metacognition and support learner autonomy.

In contrast, the CG's instruction focused on textbook activities, including grammar exercises, vocabulary drills, and controlled speaking tasks. Though the topics were thematically similar to those in the podcast groups, the instruction lacked the multimodal, authentic input and communicative practice embedded in the podcast-based sessions.

Instructional fidelity was maintained through bi-weekly planning meetings among instructors and classroom observations during Weeks 4, 8, and 12. Observers used standardized checklists to ensure consistent delivery of content and equal time-on-task across groups. Student engagement in the experimental groups was monitored through podcast logs tracking time spent listening, vocabulary noted, and speaking activities completed.

At the end of the intervention, all learners completed post-tests identical in format to the pre-tests. To reduce testing bias, the order of speaking topics was counterbalanced, and test administration was standardized across groups. Additionally, students in the experimental groups completed a perception questionnaire and participated in brief interviews to provide qualitative insights into their experiences with podcast-integrated instruction.

Before statistical analysis, datasets were screened for normality to confirm the suitability of parametric tests. Since the design involved one independent variable (type of instruction) and two dependent variables (speaking and vocabulary performance), one-way ANOVA was used to examine differences between groups. Where appropriate, post hoc tests were conducted to explore pairwise differences.

## 4 Results

The Kolmogorov-Smirnov (KS) test was applied to examine the normality of the data, and the results indicated that all variables followed a normal distribution. Based on this outcome, a one-way ANOVA was conducted to determine whether there were significant differences in mean scores among the groups. Statistical outcomes for the speaking pre-test and post-test are shown in Tables 1 through 5, while Tables 6 through 10 display the results related to vocabulary assessments before and after the intervention.

Table 1

*Descriptive Statistics for the Speaking Pretest across Four Groups*

| Groups | N | M | SD | SE |
|--------|----|---------|---------|--------|
| AEE | 31 | 13.1935 | 2.80974 | .50464 |
| SE | 35 | 13.5429 | 1.55947 | .26360 |
| CBE | 37 | 13.7838 | 1.54803 | .25449 |
| CG | 36 | 13.9722 | 2.59104 | .43184 |
| Total | 139 | 13.6403 | 2.17365 | .18437 |

As illustrated in Table 1, the average pretest scores for speaking proficiency are relatively close among the four groups. The AEE group recorded a mean score of 13.19, followed by 13.54 for the SE group, and 13.78 for the CBE group. The CG had a slightly higher mean score of 13.97. Standard deviations ranged from 1.55 to 2.80, suggesting limited variability within the groups. Notably, the SE and CBE groups exhibited less variation in their scores compared to the AEE and CG.

Table 2

*ANOVA Results for the Speaking Pretest Scores*

| Source | Sum of Squares | Df | Mean Square | F | Sig. |
|--------|----------------|-----|-------------|------|------|
| Between Groups | 11.247 | 3 | 3.749 | .790 | .502 |
| Within Groups | 640.767 | 135 | 4.746 | | |
| Total | 652.014 | 138 | | | |

Table 2 displays the outcomes of the ANOVA test. With an F-value of 0.790 and a p-value of 0.502, the analysis reveals no statistically significant differences in the pretest speaking scores among the four groups at the 0.05 level. This implies that the participants had comparable speaking abilities prior to

the intervention, thereby justifying the validity of subsequent posttest comparisons. The non-significant p-value suggests that any minor variations in pretest means are likely attributable to random fluctuations rather than inherent group differences.

Table 3

*Descriptive Statistics for the Speaking Posttest across Four Groups*

| Groups | N | M | SD |
|--------|----|---------|---------|
| AEE | 31 | 22.2258 | 1.49910 |
| SE | 35 | 21.8571 | 1.49790 |
| CBE | 37 | 21.4324 | 1.11904 |
| CG | 36 | 15.9722 | 4.76587 |
| Total | 139 | 20.3022 | 3.71572 |

The descriptive results for the speaking posttest demonstrate clear differences in mean scores among the four groups, reflecting variations in speaking proficiency. The AEE group obtained the highest average score of 22.22 (SD = 1.49), closely followed by the SE group at 21.85 (SD = 1.49). The CBE group reported a slightly lower mean of 21.43 (SD = 1.11), whereas the CG performed considerably worse, with an average score of 15.97 (SD = 4.76). The relatively small standard deviations in the experimental groups suggest consistent performance, while the larger standard deviation in the CG indicates more dispersed scores. These findings imply that the podcast-based instruction implemented in the experimental groups contributed more effectively to improving speaking skills than the conventional teaching method used for the CG.

Table 4

*ANOVA Results for the Speaking Posttest Scores*

| Source | Sum of Squares | Df | Mean Square | F | Sig. | Partial $\eta^2$ |
|--------|----------------|-----|-------------|--------|------|------------------|
| Between Groups | 921.551 | 3 | 307.184 | 42.154 | .000 | 0.484 |
| Within Groups | 983.758 | 135 | 7.287 | | | |
| Total | 1905.309 | 138 | | | | |

The ANOVA findings revealed a statistically significant difference in speaking posttest scores among the four groups, $F(3, 135) = 42.154$, $p < .05$, with a very large effect size (partial $\eta^2 = .484$). This indicates that the type of instructional intervention had a substantial impact on learners' speaking proficiency. While the omnibus test confirms overall group differences, post hoc comparisons are necessary to determine the specific group contrasts (e.g., AEE vs. CG, SE vs. CG).

Table 5

*Bonferroni Multiple Comparisons for Speaking Posttest Scores*

| (I) Groups | (J) Groups | Mean Difference (I-J) | SE | Sig. |
|------------|------------|-----------------------|--------|-------|
| | SE | .36866 | .66579 | 1.000 |
| AEE | CBE | .79337 | .65728 | 1.000 |
| | CG | 6.25358 | .66143 | .000 |

| | | | | |
|---|---|---|---|---|
| SE | AEE | -.36866 | .66579 | 1.000 |
| | CBE | .42471 | .63652 | 1.000 |
| | CG | 5.88492 | .64080 | .000 |
| CBE | AEE | -.79337 | .65728 | 1.000 |
| | SE | -.42471 | .63652 | 1.000 |
| | CG | 5.46021 | .63196 | .000 |
| CG | AEE | -6.25358 | .66143 | .000 |
| | SE | -5.88492 | .64080 | .000 |
| | CBE | -5.46021 | .63196 | .000 |

The results of the Bonferroni post hoc test in Table 5 offer a clearer understanding of the mean differences between groups. The AEE group performed significantly better than the CG, with a mean difference of 6.25 (p < .05), indicating a strong effect of the podcast-based intervention. The SE group also demonstrated a notable improvement over the CG, with a mean difference of 5.88 (p < .05). Similarly, the CBE group showed a statistically significant advantage, with a mean difference of 5.46 (p < .05). In contrast, no significant differences emerged among the three experimental groups themselves, as their pairwise comparisons yielded p-values greater than .05. These findings suggest that while all three podcast-based approaches were more effective than traditional instruction, there were no meaningful distinctions in their relative effectiveness.

Table 6

*Descriptive Statistics for the Vocabulary Pretest across Four Group*

| Groups | N | M | SD | SE |
|---|---|---|---|---|
| AEE | 31 | 14.6129 | 1.40659 | .25263 |
| SE | 35 | 14.8571 | 1.78462 | .30166 |
| CBE | 37 | 15.0811 | 1.32032 | .21706 |
| CG | 36 | 15.7778 | 2.64155 | .44026 |
| Total | 139 | 15.1007 | 1.90459 | .16155 |

The vocabulary pretest results show that the average scores among the four groups were fairly similar. The AEE group had a mean of 14.61, the SE group averaged 14.85, and the CBE group recorded a mean of 15.08. The CG achieved the highest average at 15.77, suggesting a slightly stronger initial vocabulary level compared to the experimental groups. Nevertheless, variation within groups was evident, as reflected in the standard deviations. The CG showed the greatest variability (SD = 2.64), indicating a broader distribution of scores. The overall mean score across all participants was 15.10, providing a baseline against which the posttest outcomes could be compared to assess the instructional impact.

Table 7

*ANOVA Results for the Vocabulary Pretest Scores*

| Source | Sum of Squares | Df | Mean Square | F | Sig. |
|---|---|---|---|---|---|
| Between Groups | 25.970 | 3 | 8.657 | 2.462 | .065 |
| Within Groups | 474.620 | 135 | 3.516 | | |
| Total | 500.590 | 138 | | | |

The ANOVA analysis of vocabulary pretest scores shows no statistically significant difference among the four groups, with an F-value of 2.462 and a p-value of 0.065, above the typical 0.05 threshold. Although slight differences in group means were observed, these were not significant. The between-group sum of squares (25.970) compared to the within-group value (474.620) indicates that most score variation stemmed from individual learner differences rather than group assignment. Therefore, it can be concluded that all groups started with relatively similar vocabulary proficiency, providing a reliable baseline for assessing the impact of the instructional interventions.

Table 8

*Descriptive Statistics for the Vocabulary Posttest across Four Groups*

| Groups | N | M | SD | SE |
|---|---|---|---|---|
| AEE | 31 | 24.9032 | 1.75793 | .31573 |
| SE | 35 | 24.2571 | 2.29248 | .38750 |
| CBE | 37 | 25.5676 | 1.09394 | .17984 |
| CG | 36 | 18.0833 | 4.72909 | .78818 |
| Total | 139 | 23.1511 | 4.14923 | .35193 |

The vocabulary posttest data reveal a clear improvement in mean scores among all experimental groups compared to their respective pretest results. The CBE group obtained the highest average score of 25.56, followed by the AEE group with a mean of 24.90, and the SE group with 24.25. In contrast, the CG's average score was considerably lower at 18.08. This significant difference underscores the effectiveness of the vocabulary-focused interventions, as the experimental groups not only surpassed the CG but also showed marked gains in vocabulary acquisition. The overall mean score of 23.15 further reflects this upward trend. Additionally, the smaller standard deviations observed across the groups suggest consistent progress among learners in the experimental conditions.

Table 9

*ANOVA Results for the Vocabulary Posttest Scores*

| Source | Sum of Squares | Df | Mean Square | F | Sig. | Partial η² |
|---|---|---|---|---|---|---|
| Between Groups | 1278.601 | 3 | 426.200 | 52.439 | .000 | 0.538 |
| Within Groups | 1097.226 | 135 | 8.128 | | | |
| Total | 2375.827 | 138 | | | | |

The ANOVA results for the vocabulary posttest revealed statistically significant differences among the four groups, $F(3, 135) = 52.439$, $p < .05$, with a very large effect size (partial $\eta^2 = .538$). This indicates that more than half of the variance in posttest vocabulary scores was attributable to the type of instructional approach. The between-group sum of squares (1278.601) exceeded the within-group value (1097.226), further underscoring the strong influence of instructional method on vocabulary development.

Table 10

*Bonferroni Multiple Comparisons for Vocabulary Posttest Scores*

| (I) Groups | (J) Groups | Mean Difference (I-J) | Std. Error | Sig. |
|---|---|---|---|---|
| AEE | SE | .64608 | .70313 | 1.000 |
| | CBE | -.66434 | .69415 | 1.000 |
| | CG | 6.81989 | .69853 | .000 |
| SE | AEE | -.64608 | .70313 | 1.000 |
| | CBE | -1.31042 | .67222 | .320 |
| | CG | 6.17381 | .67675 | .000 |
| CBE | AEE | .66434 | .69415 | 1.000 |
| | SE | 1.31042 | .67222 | .320 |
| | CG | 7.48423 | .66741 | .000 |
| CG | AEE | -6.81989 | .69853 | .000 |
| | SE | -6.17381 | .67675 | .000 |
| | CBE | -7.48423 | .66741 | .000 |

The Bonferroni post hoc analysis indicates statistically significant differences in vocabulary posttest scores between each experimental group and the CG. The AEE group outperformed the CG by a mean margin of 6.81 points, while the SE and CBE groups showed differences of 6.17 and 7.48 points, respectively. Each of these comparisons yielded p-values below .05, highlighting the superior performance of learners in the experimental conditions. In contrast, no statistically significant differences were found among the three experimental groups, suggesting that although all instructional approaches were effective in boosting vocabulary acquisition, none proved markedly more effective than the others. These results support the notion that various pedagogical methods can be beneficial in promoting vocabulary growth, even if they yield comparable outcomes within a structured learning environment.

## 5  Discussion

This study set out to explore whether listening to English-language podcasts had a measurable impact on the incidental vocabulary acquisition and speaking skills of EFL learners, compared with traditional instruction. The results clearly showed that learners in all three experimental groups significantly outperformed the CG on both posttests. This provides compelling evidence for the effectiveness of podcast-based instruction in enhancing key language skills. Interestingly, the lack of statistically significant differences among the experimental groups indicates that the specific podcast series used: *AEE*, *SE*, and *CBE* were equally effective, despite their differing formats and themes.

These findings are consistent with previous research highlighting the pedagogical value of podcasts in second language learning. Saeedakhtar et al. (2021), for instance, found that both individual and peer-based podcast listening improved vocabulary development more effectively than traditional methods. Our results similarly revealed gains in vocabulary knowledge across all podcast groups. However, unlike Saeedakhtar et al., who found an edge for collaborative listening, our study found no notable differences between groups, suggesting that content format may matter less than regular, meaningful exposure to spoken language.

Speaking performance also improved significantly in the experimental groups, echoing findings by Chaves-Yuste and Peña (2023), who reported that podcast production and use led to stronger speaking

and listening skills. The learners did not create podcasts themselves but their exposure to authentic spoken language through podcasts resulted in measurable improvements in their oral proficiency. The study confirms that listening to podcasts as a passive activity helps students develop their speaking skills through exposure to authentic speech patterns and natural pronunciation and rhythm.

The vocabulary-related results also mirror those of Bueno-Alastuey and Nemeth (2020), who found that both podcasts and digital tools like Quizlet contributed to vocabulary retention, though with no clear superiority. The research findings supported our results because the three podcast groups showed no significant differences which indicates that authentic input modality plays a more important role than its specific format.

The study did not focus on listening skills but the results support previous research about language learning benefits from podcast use. Widodo and Gunawan (2019) observed improvements in listening comprehension with podcast-based instruction. The study by Fouz-González (2019) demonstrated that focused listening through podcasts enhanced pronunciation accuracy which could explain the speaking improvements found in our research. The participants' enhanced exposure to native speech models likely led to better fluency and articulation skills although pronunciation was not directly measured.

Several theoretical frameworks help explain these outcomes. Krashen's Input Hypothesis (1982) states that language learning occurs best when learners receive comprehensible input that extends just beyond their current abilities (i+1). Podcasts deliver the exact type of input which consists of natural language presented in context and varied content so learners can absorb language through an engaging process. The communicative approach (CLT) supports the development of language through real-world interaction. The everyday dialogues and interviews and situational conversations in podcasts create real-life language simulations which provide learners with meaningful input for vocabulary and speaking development.

The podcast format aligns perfectly with Huckin and Coady's (1999) theory of incidental vocabulary learning because it enables learners to acquire new words through contextual exposure. Students learn new vocabulary through repeated exposure to words in meaningful situations rather than through memorization. The participants demonstrated better post-test results because of incidental learning. According to Paivio's (1971) Dual-Coding Theory, the combination of verbal and non-verbal input during processing leads to better memory retention. Podcasts, while primarily auditory, are often used alongside notes, visuals, or classroom discussion, and create a multisensory learning experience that can deepen vocabulary retention.

The Sociocultural theory (Vygotsky, 1978) presents additional valuable perspectives. The learning process becomes mediated through podcasts when students engage in peer discussions or teacher-led reflection activities. The social use of language, whether through interaction with content or classmates, helps solidify linguistic gains. The social environment for language development emerged from the participant's discussions, speaking tasks, and reflection activities.

The experimental groups achieved superior results because podcast-based instruction provides essential language learning benefits. Through podcasts, students encounter language in its authentic state which includes natural idioms, connected speech and authentic communicative functions. Textbook-based instruction typically lacks the type of input found in podcasts because it uses scripted dialogues in restricted contexts. Through podcasts learners could also access content outside the classroom which provided them with additional opportunities to study English at their own pace.

The auditory nature of the medium serves as a key reason why podcast groups achieved success. The repeated listening to podcast episodes enabled students to absorb vocabulary and phrasing patterns which traditional lessons cannot match. The diverse range of subjects and scenarios presented to learners enabled them to observe word usage in various contexts which resulted in better speaking fluency and confidence. The CG received vocabulary exposure that was both restricted and removed from context which probably impacted their ability to remember and speak words correctly (Teng, 2025).

The three experimental groups showed no differences because their podcast series shared common characteristics. All three programs presented authentic dialogues alongside contextual vocabulary and consistent thematic content. The three series provided learners with sufficient chances to hear and practice language through meaningful contexts despite their different structural and tonal approaches. The quality of input appears to have been the primary element which led to performance improvement rather than the style of the input.

The podcast-based instruction approach seemed to foster learner independence and engagement in their learning process. Students gained self-directed control through their ability to listen at their own speed and the opportunity to review segments and study content beyond regular class hours, which might have boosted their learning independence. The combination of learner autonomy with meaningful authentic input exposure led to better outcomes for the podcast groups. In contrast, traditional instruction provided limited opportunities for student-driven engagement which restricted their ability to process information deeply and limited exposure to natural language patterns and opportunities use the language actively.

## 6 Conclusions and Implications

The research results demonstrate that podcast instruction provides valuable benefits for EFL students to learn vocabulary and improve their speaking abilities. The positive results from all experimental groups demonstrate how authentic audio content with context helps students learn better. The observed improvements align with established learning theories including Krashen's Input Hypothesis which emphasizes the need for students to receive understandable input. The study confirms that podcasts provide more than simple listening experiences because they establish interactive learning spaces which help students develop vocabulary incidentally while using language actively. The integration of podcasts into EFL classrooms creates an improved learning experience because it enhances student engagement and personalization and focuses on learner needs.

The implications for learners are equally promising. Podcasts provide flexible learning opportunities that extend beyond the classroom for students. Students who listen to authentic spoken English on a regular basis can develop their vocabulary and speaking skills through meaningful real-world contexts. The freedom to select interesting topics and learn independently helps students develop autonomy and motivation which are vital for long-term language development. Many learners who do not have many opportunities to hear native speakers find podcasts to be a useful method for learning the natural speech rhythms, intonation and structure of spoken language which leads to improved spoken communication skills.

Educators should use these findings to understand how podcasts can serve as additional educational materials in EFL teaching. The research demonstrates podcast-based instruction effectiveness across different formats. Yet teachers must select materials based on learner proficiency levels and aligned with individual preferences and educational targets. The combination of relevant podcast content selection with classroom activities such as guided discussions and reflective speaking exercises will enhance student engagement and help students to remember the language material. Teachers need professional development programs that teach them how to use podcasts and digital tools in language instruction to adapt to new technological possibilities.

The combination of interactive instruction methods with podcast multimedia resources will create more significant learning experiences in the classroom (Teng, 2023). The benefits of podcast-based learning will increase when students take responsibility for their education through reflective speaking activities and peer collaboration for discussions or content development. The increasing role of technology in education enables educators to implement it effectively in EFL instruction, which leads to transformative student language engagement.

Despite its contributions, this study is not without limitations. The sample consisted exclusively of 139 male learners aged 14 to 19 from three English institutes in Iran, which limits the generalizability of the findings. To build a more complete understanding of how podcasts influence language learning, future studies should include a more diverse participant pool that reflects differences in gender, age, region, and educational background. Employing random sampling techniques in future research would also help reduce potential bias and improve the representativeness of the results.

Another limitation concerns the duration and timing of the intervention. Although learners demonstrated improvement after 13 weeks, the study did not include delayed posttests to assess whether these gains were sustained over time. Long-term retention is a key component of language acquisition, and future research would benefit from tracking learners beyond the immediate post-intervention period. Including follow-up assessments could provide deeper insight into the durability of podcast-based learning effects.

In terms of measurement, this study relied primarily on quantitative tests of speaking and vocabulary knowledge. While these instruments provided a snapshot of learning outcomes, they did not capture students' attitudes, motivations, or engagement levels. Future studies should consider using a broader set of tools including interviews, classroom observations, and self-reported reflections to gain a more nuanced picture of how learners experience podcast-based instruction.

Given these considerations, several directions for future research emerge. Expanding the scope and diversity of participant groups, using longitudinal designs, and incorporating mixed-methods approaches can all contribute to a richer understanding of the role podcasts play in EFL learning. In particular, valuable insight could be had by examining how different learner profiles respond to podcast integration, or how instructional scaffolding around podcast content shapes outcomes. These insights would inform both educational theory and practice.

Overall, this study adds to the growing body of evidence supporting the use of podcasts in language education. By providing learners with flexible access to authentic language input and engaging them in meaningful listening and speaking tasks, podcasts appear to be a promising resource for promoting incidental vocabulary learning and oral proficiency. When thoughtfully implemented, podcast-based instruction can complement traditional teaching methods and contribute to more effective, personalized, and engaging language learning experiences.

## Declaration of AI-Assisted Technologies in the Writing Process

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