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Impact of Video Podcasts on Speaking Proficiency in Indonesian Higher Education: A Study of Diverse Learning Styles

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ABSTRACT

This study investigates the effectiveness of video podcasts as a supplementary tool for enhancing speaking proficiency among second-semester higher education students majoring in English, with varying learning styles. It examines the impact of video podcasts on speaking proficiency across visually-dominant, auditory-dominant, and kinesthetic-dominant learners and explores the differences in effects among these three learning styles. It involved 42 respondents, specifically within an Intermediate Speaking course, categorized into three groups based on their dominant learning styles: visual, auditory, and kinesthetic. Data were analyzed through paired sample t-tests and one-way ANOVA. The result shows that visually-dominant learners improved from a pretest mean of 60.24 to a posttest mean of 67.48 ($p = .000$), auditory-dominant learners increased from 60.36 to 66.73 ($p = .001$), and kinesthetic-dominant learners showed an increase from 64.33 to 72.83 ($p = .022$). Despite these improvements, the one-way ANOVA indicated no statistically significant differences in the level of improvement among the three learning styles ($p = .707$) which implies that video podcasts are effective across different learning styles. This study's findings contribute to the understanding of multimedia tools' role in language learning and the positive impact of utilizing video podcasts on speaking proficiency. The flexibility of video podcasts enables students to learn at their own pace, revisit content, and receive personalized feedback, which can be particularly beneficial for students with different learning styles.

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1. INTRODUCTION

Proficiency in communicating in a foreign language is crucial not only for academic and professional achievements but also for fostering social integration and cultural exchange. Traditional language instruction methods, however, often struggle to cater to individual learning preferences effectively. Technology plays a pivotal role in supporting these diverse instructional strategies, encompassing both tangible elements (like equipment and techniques) and informational components (such as management and production expertise) (Volti, 2009, as cited in Carroll, 2017). Furthermore, multimedia technology

offers significant advantages in education. Pun (2013) emphasizes that multimedia can efficiently motivate students to learn English by capturing their attention through engaging audio, video, and animations. Additionally, technology enhances communication skills by enabling the integration of various engagement modes, such as sounds, gestures, and visuals, resulting in more meaningful interactions (Jones & Hafner, 2012; Liu, 2013). The incorporation of multiple technological modes in teaching English as a foreign language (EFL) has been demonstrated to improve instructional practices, enhance student learning and motivation, and accommodate a variety of learning styles (Lea et al., 2001; Tabatabaei & Gui, 2011; Min & Siegel, 2011; Granito & Chernobilsky, 2012; Palmer, 2012; Ganapathy & Seetharam, 2016).

In Indonesia, where English is taught as a foreign language, improving students' language skills remains a significant challenge. Harris (2000) suggests that technology can effectively transform 21st-century education and enhance student learning outcomes. Various Indonesian government policies support the use of technology in education. The 2001 Presidential Decree on Telematics and the 2003 Law of National Education advocate for the use of ICT in education. Additional policies, such as Law No. 14 of 2005 and the 2007 Regulation of the National Education Minister, emphasize the necessity of ICT competency for teachers and provide infrastructure to support ICT-based teaching and learning. The creation of E-dukasi.net, the National ICT Backbone, and the Indonesia Higher Education and Research Network further demonstrates the government's commitment to integrating technology in education (Pannen, 2014). Given this context, integrating technology, including video podcasts, into language instruction is crucial for improving educational results in Indonesia (Wahyuni, 2020).

Video podcasts, a blend of traditional podcasting and video content, have emerged as a powerful tool in language education. The term podcast refers to digital audio files that are distributed via the web through systems (Diez & Richters, 2020). Video podcasts extend this concept by incorporating visual elements, making them an engaging multimedia resource. Unlike traditional podcasts, which are purely audio, video podcasts provide both auditory and visual stimuli, thus catering to multiple sensory channels simultaneously. Because of their dual modality, video podcasts are very helpful for learning a language, as visual clues can improve spoken language comprehension and memory. In language education, video podcasts offer authentic and diverse linguistic inputs, featuring real conversations and speech patterns, which are crucial for developing listening and speaking skills. It can transform instruction by providing rich sources of input and enhancing traditional teaching methods (Hasan & Hoon, 2013).

Furthermore, video podcasts add diversity to language learning resources by showcasing various dialects and accents that are frequently absent from traditional textbooks. This diversity helps students get used to a variety of English-speaking environments. The easy accessibility of video podcasts is another significant advantage. As highlighted by Putman & Kingsley (2009), students can include podcasts into their schedules to facilitate on-the-go learning. As learning may happen outside of the classroom due to this accessibility, education is more flexible and individualized. Furthermore, students could be inspired to actively engage in their learning process by the captivating and educational qualities of video podcasts (O-Bryan & Hegelheimer, 2007). It is a useful tool for various types of learners since they address the needs of different learning styles by combining visual and auditory aspects.

In teaching speaking, critical aspects of language production and interaction should be involved in the process. Chastain (1998) identifies essential components of speaking proficiency, including recalling appropriate vocabulary, organizing words into coherent units, accurately using articulatory movements, and understanding cultural conventions. Meanwhile, Thornbury (2005) highlights several pedagogical activities, such as controlled practice, milling activities, assisted performance, and practicing dialogues, which can be significantly enhanced with technology-assisted tools like video podcasts. Podcasts offer a wealth of authentic materials that support aural comprehension and vocabulary development. Thorne and Payne (2005) emphasize that podcasts, featuring dramatic performances, talk shows, and interviews, provide diverse examples of real-life language use. Putman and Kingsley (2009) also demonstrate that

podcasts can substantially improve vocabulary acquisition, while Ducate and Lomicka (2009) highlight their effectiveness in enhancing pronunciation.

Learning style refers to an individual's preferred method of acquiring, processing, and retaining information, encompassing the unique ways in which learners perceive, interact with, and respond to the learning environment (Gilakjani, 2012). Visual learners prefer to learn through visual aids such as diagrams, charts, and videos. They benefit from visual elements in lessons, which help them grasp vocabulary and grammar concepts in English more effectively. Clark (2000) further divides visual learners into visual-linguistic learners, who favor written language, and visual-spatial learners, who prefer visual materials like charts and videos. Auditory learners excel through listening activities, such as lectures, discussions, and audio recordings (Ernst & Clark, 2009). They may often talk to themselves and move their lips while reading. Engaging auditory learners with spoken English can improve their language comprehension and pronunciation skills (Gardner, 1993). Kinesthetic learners learn best through hands-on experiences and physical activities. They benefit from interactive language tasks, role-plays, and language games. This learning style can be subdivided into kinesthetic and tactile learners, who learn most effectively when physically involved with the learning environment (Ernst & Clark, 2009). Understanding and accommodating these individual learning styles can lead to more effective learning and better retention of information. For instance, visual learners may benefit from visual aids, while kinesthetic learners may learn better through hands-on activities (Hernandez et al., 2020)

Previous studies on podcasting and multimodal approaches in language learning consistently highlight their transformative potential, yet they differ in specific focus and findings. Hasan and Hoon (2013) and Besser et al. (2022) both emphasized podcasting's role in enhancing traditional instruction, with Evans particularly noting its effectiveness in replacing conventional review materials. Kim (2021) expanded the scope to multimodal literacies which demonstrate how various technological resources can enrich classroom discussions and facilitate deeper student engagement. Ganapathy and Seetharam (2016) specifically investigated multimodal approaches for ESL students, finding improved learning outcomes, increased motivation, and better accommodation of different learning styles. Abdous (2009) and Ducate and Lomicka (2009) highlighted the academic benefits of podcasts, noting their potential to improve pronunciation and provide greater benefits beyond mere review tools. Knight (2010) found podcasts effective for phonetics exercises as it allows the students to repeatedly engage with the material. Studies by Putman and Kingsley (2009) showed podcasts significantly reinforce vocabulary learning and increase motivation. Konig (2021) noted positive attitudes and interest in podcast-based learning, while Lee and Chan (2007) emphasized podcasts' role in reducing anxiety and fostering a sense of community. Abdi and Makiabadi (2018) detailed the features of podcast apps like "Learn English Listening & Speaking BBC, VOA News," noting their accessibility and continuous updates.

The use of digital video recordings was also examined by Diez and Richters (2020), who found them effective for speaking proficiency but not significantly for oral fluency. These studies collectively illustrate the diverse applications and benefits of podcasting and multimodal approaches in language education, revealing variations in their implementation and impact on different aspects of language learning. Meanwhile, Alfa (2020) provided insights into using podcasts as authentic material in speaking activities to promote students' speaking skills. In this study, students listened to audio in pairs and wrote down information guided by the teacher, focusing on vocabulary and pronunciation. Phillips (2017) found that student-produced podcasts were effective learning tools, with participants reporting increased language confidence, fluency, and vocabulary acquisition. These studies collectively illustrate the diverse applications and benefits of podcasting and multimodal approaches in language education, revealing variations in their implementation and impact on different aspects of language learning.

However, a significant research gap exists in examining the specific impacts of video podcasts on speaking proficiency, particularly in relation to different learning styles. While previous studies have explored the general benefits of podcasts and multimedia in language learning, they have not thoroughly investigated how video podcasts specifically affect learners with distinct visual, auditory, and kinesthetic preferences. This gap is critical, as understanding these differences can lead to more personalized and

effective teaching strategies. The novelty of this study lies in its focus on the impact of video podcasts on speaking accuracy across various learning styles within the context of Indonesian higher education. Therefore, the research questions guiding this study are as follows:

1. How do video podcasts impact speaking proficiency in visually-dominant learners?
2. How do video podcasts impact speaking proficiency in auditory-dominant learners?
3. How do video podcasts impact speaking proficiency in kinesthetic-dominant learners?
4. Are there statistically significant differences in speaking proficiency improvements among visually-dominant, auditory-dominant, and kinesthetic-dominant learners using video podcasts?

2. METHODS

This study employs a quantitative experimental research design to evaluate the effectiveness of video podcasts as a supplementary tool in teaching speaking to foreign language learners with different learning styles. The design involves a pre-test and post-test approach to measure improvements in speaking proficiency among visually-dominant, auditory-dominant, and kinesthetic-dominant learners.

The participants in this study were 42 second-semester students enrolled in the Intermediate Speaking course a private university in Semarang, Indonesia. They were selected based on their willingness to participate and categorized into visually-dominant (25 students), auditory-dominant (11 students), and kinesthetic-dominant learners (6 students) using the VARK questionnaire (Fleming & Mills, 1992). The VARK questionnaire was developed by Neil Fleming and Colleen Mills as a tool to help learners identify their preferred learning styles. This instrument categorizes learners into: Visual, Auditory, and Kinesthetic, each representing a distinct mode of learning.

The research employed two primary instruments: the VARK questionnaire and a speaking test. The VARK questionnaire includes indicators such as preferences for visual aids, auditory learning, reading/writing activities, and kinesthetic experiences. It is designed to categorize learners into primary styles based on their preferences for processing information. Visual learners prefer to see and use images, diagrams, and charts to understand information, benefiting from visual aids such as videos, pictures, and written instructions. Auditory learners excel when they can hear discussions, lectures, and audio recordings, and they grasp concepts best through listening and speaking, often benefiting from repeating information out loud and engaging in verbal dialogue. Kinesthetic learners learn through physical activities and hands-on experiences, engaging most effectively with interactive tasks, experiments, and physical movement to understand and retain information. In this study, the VARK questionnaire was administered in the participants' native language to ensure accurate understanding and responses.

The second instrument, a speaking test, was designed to assess students' speaking performance through an extensive speaking task of monologue, following Brown's (2003) framework. Participants were instructed to talk about an assigned topic. The indicators for assessing speaking performance, derived from Joe et al. (2015), included topic selection, introduction, organization, conclusion, nonverbal behavior, word choice, fluency, pronunciation, vocal expression, and grammar. Each indicator was scored on a scale from 1 (very poor) to 5 (excellent), with two raters independently evaluating the tests to ensure reliability. The validity of the speaking test was confirmed through expert judgment, involving two experts who assessed the test for both content and construct validity. The test, consisting of approximately 40 items on a Likert scale, was evaluated for alignment with the syllabus, course learning outcomes, teaching materials, and the operational definitions of speaking, as well as the learning aims of the Intermediate Speaking course. Content validity was confirmed using the Content Validity Index (CVI), calculated with Davis' formula. The Scale-CVI was determined by calculating the proportion of items that received high ratings (e.g., 4 or 5) on the Likert scale from at

least 80% of the experts. A validity index threshold of 0.80 was used, indicating that at least 80% of the experts agreed that the items were relevant and appropriate, thus confirming the test's validity according to established standards.Inter-rater reliability was measured using the Intraclass Correlation Coefficient (ICC), with values above 0.80 indicating high reliability. The steps of doing the research were as follows:

a. Initial Sessions: Participants engaged in initial sessions where they were introduced to speaking materials through worksheets designed to familiarize them with course content and speaking exercises.
b. Pre-test: Before the intervention, all participants completed a pre-test consisting of a speaking assessment (monologue test) to establish baseline speaking proficiency levels.
c. Intervention: The intervention phase spanned 10 sessions, with each session lasting 100 minutes. Participants used the BBC Learning English Podcast as a supplementary learning tool during these sessions. The sessions were conducted once a week over a period of ten weeks, integrating the podcasts into the regular course curriculum to enhance speaking skills. These podcasts were selected to enhance speaking skills and were integrated into the regular course curriculum. The procedure for teaching speaking using video podcasts is as follows:
    1) The procedure begins with teaching key target vocabulary relevant to the podcast episode. A glossary of new words and phrases encountered in the podcast is created, serving as a guide for students during listening activities. This step facilitates the recall of appropriate words and enhances vocabulary acquisition.
    2) The selected video podcast episode is played. Depending on its complexity, the podcast may be presented once or multiple times to ensure comprehension. Students are encouraged to focus on pronunciation, phonetics, vocabulary, grammar, and cultural conventions demonstrated in the podcast.
    3) Engaging questions are presented on the board to guide students' listening and discussion. Examples of such questions include:
        - What is this episode about?
        - Who is speaking?
        - What are they talking about?
        - What is the general mood of the conversation?
        - Where are they?
    4) Students discuss their answers to the comprehension questions in pairs, small groups, or as a whole class. This discussion helps students organize words into coherent units and monitor their sounds, correcting themselves as necessary.
    5) Scaffolding and assisted performance activities are provided where students practice dialogues. Video podcasts function as models, demonstrating how pair-work should be performed, thus replacing traditional teacher-student or student-student modeling of speaking tasks.The video podcast offers real-life dialogue examples, showcasing backchannel devices (e.g., "really," "uh-uh"), performance effects (e.g., pause fillers, false starts, discourse markers like "so," "well," "right"), and ellipsis (e.g., "What's your name?" instead of "My name is Juan")
    6) Students practice their dialogues, incorporating vocabulary, pronunciation, grammar, and cultural nuances observed in the video podcast. Monitoring and feedback are provided, highlighting areas for improvement and encouraging self-correction.

d. Post-test: Following the intervention sessions, all participants completed a post-test, which included another speaking assessment (monologue test). Although the topics for the pre-test and post-test were different, the instructions for both tests were similar, including a 5-minute monologue with the same generic structure. The level of difficulty and readability of the pre-test and post-test were ensured to be comparable, based on a try-out test conducted with other second-semester higher

education students majoring in English.This post-test aimed to measure any changes in speaking proficiency after the use of Video Podcasts.

To analyze the data, descriptive statistics such as means and standard deviations, were used to summarize pre-test and post-test scores. To ensure consistency in scoring, both raters were provided with a detailed scoring rubric outlining the criteria for evaluating speaking proficiency. They reviewed sample assessments and scored pilot tests independently, then discussed discrepancies to align their scoring practices. Inferential statistics were employed to analyze the data and draw conclusions regarding the effectiveness of Video Podcasts on speaking proficiency across different learner modalities. Paired sample t-tests were used to assess the impact of Video Podcasts on speaking proficiency for visually-dominant, auditory-dominant, and kinesthetic-dominant learners separately. One-way ANOVA was used to determine if there was a statistically significant difference in speaking proficiency among visually-dominant, auditory-dominant, and kinesthetic-dominant learners post-intervention.

3. FINDINGS AND DISCUSSION

3.1 The Effect of Video Podcasts on visually-dominant learners

The data analysis aimed to evaluate the impact of video podcasts on the speaking accuracy of visually-dominant learners. Descriptive statistics were calculated for both the pretest and posttest scores of 25 students. The result is displayed in Table 1.

Table 1. Descriptive Statistics of Pre-test and Post-test Scores of Visually Dominant Learners

	N	Minimum	Maximum	Mean	Std. Deviation
Pretest	25	46.00	76.00	60.24	7.34
Posttest	25	50.00	84.00	67.48	10.44

The pretest results, which were gathered using video podcasts prior to the intervention, varied from a minimum of 46.00 to a high of 76.00. The pretest had a mean score of 60.24 and a standard deviation of 7.34. The posttest results following the video podcast intervention varied from a minimum of 50.00 to a maximum of 84.00. The posttest had a mean score of 67.48 and a standard deviation of 10.44. The utilization of video podcasts by visually dominant learners appears to have improved their speaking accuracy overall, as seen by the rise in mean score when compared to the pretest.

Table 2. Paired Sample t-test of Visually Dominant Learners

	Mean	Std. Deviation	df	t	Sig. (2-tailed)
Pretest - Posttest	-7.24	5.68	24	-6.372	.000

The paired sample t-test revealed a t-score of -6.372 and a significance value of 0.000, indicating a statistically significant improvement in speaking proficiency. The improvement suggests that visually-dominant learners experienced notable gains in their ability to communicate effectively. For example, this improvement could manifest as clearer and more organized presentations or more coherent responses in discussions. Visually-dominant learners often benefit from visual aids that help them process and retain information better, and the video podcasts provided rich visual contexts that likely enhanced their ability to articulate ideas and use vocabulary more accurately.

Errors noted in the pretest included frequent issues with organizing spoken content and integrating new vocabulary into their speech. Post-test results showed improvements such as better organization of spoken ideas, more precise use of vocabulary, and enhanced clarity in expression. This

progress is consistent with the visual support provided by the podcasts, which helped learners structure their responses and incorporate new language more effectively.

3.2 *The Effect of Video Podcast on auditory-dominant learners*

The impact of video podcasts on the speaking accuracy of auditory-dominant learners was analyzed using descriptive statistics. The pretest and posttest scores of 11 students were examined to identify any changes in performance after the intervention. The descriptive statistics is displayed in table 3.

Table 3. Descriptive Statistics of Pre-test and Post-test Scores of Auditory Dominant Learners

	N	Minimum	Maximum	Mean	Std. Deviation
Pretest	11	46.00	76.00	60.36	9.42
Posttest	11	48.00	82.00	66.72	12.84

The pretest scores for the auditory-dominant learners revealed a minimum score of 46.00 and a maximum score of 76.00. After the intervention with video podcasts, the posttest scores showed an improvement. The minimum score increased to 48.00, and the maximum score reached 82.00. The increase in the mean score from 60.36 in the pretest to 66.72 in the posttest indicates a positive effect of video podcasts on the speaking accuracy of auditory-dominant learners. To further understand the impact of video podcasts on the speaking accuracy of auditory-dominant learners, a paired samples t-test was conducted. This test compared the pretest and posttest scores to determine if the differences observed were statistically significant.

Table 4. Paired Sample t-test of Auditory Dominant Learners

	Mean	Std. Deviation	Std. Error Mean	t	Sig. (2-tailed)
Pretest - Posttest	-6.36	4.78	1.441	-4.415	.001

The t-value obtained from the test was -4.415, and the significance level (2-tailed) was .001, which is below the significance level of .05. This result indicates that the observed improvement in scores from pretest to posttest is statistically significant. The paired samples t-test confirms that video podcasts have a significant positive effect on the speaking accuracy of auditory-dominant learners.

The improvement indicates that auditory-dominant learners made notable progress in their capacity for effective communication. The audio components of the video podcasts, which improved their speaking and listening abilities, most certainly contributed to this increase. The podcasts help students articulate their thoughts more precisely by offering clearer examples of pronunciation, intonation, and conversational patterns. In the pretest, pronunciation and fluency errors were among the identified errors. Results from the post-test revealed advancements like more fluid speech and more accurate pronunciation.

3.3 The Effect of Video Podcast on Kinesthetic-Dominant Learners

The descriptive statistics for kinesthetic-dominant learners reveal insights into their speaking proficiency before and after the intervention with video podcasts. The description can be seen in table 5.

Table 5. Descriptive Statistics of Pre-test and Post-test Scores of Kinesthetic Dominant Learners

	N	Minimum	Maximum	Mean	Std. Deviation
Pretest	6	54.00	74.00	64.23	9.22
Posttest	6	57.00	86.00	67.5	11.22

The pretest scores of the six participants in the analysis ranged from 54.00 to 74.00, with a mean score of 64.23 and a standard deviation of 9.22. The posttest results for showed improvement after the intervention, with scores ranging from 57.00 to 86.00. The posttest's mean score improved to 67.5. This improvement points to the positive effects of video podcasts for kinesthetic-dominant learners' speaking accuracy. The data were further analyzed through paired sample t-test and the result is in table 6.

Table 6. Paired Sample t-test of Kinesthetic Dominant Learners

	Mean	Std. Deviation	Std. Error Mean	t	Sig. (2-tailed)
Pretest - Posttest	-8.5	6.379	2.604	-3.264	.022

There is a significant difference between the pretest and posttest scores, according to the paired samples t-test (t (5) = -3.264, p =.022). The t value and significance value showed a significant improvement in speaking accuracy. This result emphasizes the effectiveness of video podcasts as a supplementary tool in enhancing the speaking skills of kinesthetic learners.

The observed improvement is likely attributed to the interactive elements of the video podcasts, which enhanced both fluency and nonverbal behavior in participants' speech. The podcasts included dynamic exercises that encouraged learners to incorporate effective nonverbal cues, such as gestures and facial expressions, while also speaking more fluidly. Initially, participants struggled with maintaining fluency and integrating appropriate nonverbal signals. However, post-test results indicated notable progress, including more fluid speech and improved use of nonverbal behaviors, such as more expressive gestures and better eye contact. The kinesthetic aspects of the podcasts, with their focus on interactive, hands-on activities, seemingly facilitated these improvements by providing practical opportunities to refine these skills in engaging ways.

3.4 The Difference of the Effect of Video Podcasts on Three Different Learning Styles

The analysis of the effect of video podcasts on three different learning styles shows varying levels of improvement in speaking accuracy. A one-way Anova was conducted to examine whether there was a significant difference between the effects of video podcasts on visually-dominant, auditory-dominant, and kinesthetic-dominant learners.

Table 7. One-way Anova

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	14.345	2	7.172	.350	.707
Within Groups	800.227	39	20.519		
Total	814.571	41			

The F-value obtained from the ANOVA was 0.350, and the corresponding p-value was 0.707. Since the p-value is greater than the conventional significance level of 0.05, the null hypothesis cannot be rejected. This indicates that there is no statistically significant difference in the improvement scores among visually-dominant, auditory-dominant, and kinesthetic-dominant learners when using video podcasts as a tool to enhance speaking accuracy. In conclusion, the use of video podcasts did not result in significantly different improvements in speaking accuracy across the different learning styles. This implies that video podcasts are equally effective for learners, regardless of their dominant learning style.

Discussion

The use of Video Podcasts as supplementary learning tools for teaching speaking in foreign language classrooms has been found to have a significant positive effect on students' speaking accuracy.

This improvement is not limited to specific learning styles, as all types of learners showed improvement when instructional materials were provided through Video Podcasts. The results of this study reveal that visually dominant learners experienced a notable increase in speaking accuracy, with their mean score improving from 60.24 in the pretest to 67.48 in the posttest, and a significant p-value of .000. This supports the VARK learning styles theory, which posits that visual learners benefit from visual aids (Ernst & Clark, 2009). Video podcasts improve engagement and comprehension by combining visual and auditory stimuli. This result is consistent with earlier studies demonstrating multimedia technologies' benefits in assisting visual learners (Jones & Hafner, 2012; Liu, 2013). Incorporating video podcasts into the learning process can provide a more engaging and comprehensive learning experience, as they combine visual and auditory elements (Muthmainnah et al., 2022). Visual learners, who rely more on seeing information to process and retain it, often benefit from the visual cues and contextual elements provided by video podcasts (Muthmainnah et al., 2022). These multimedia resources can help better illustrate and explain language concepts, vocabulary, and pronunciation, allowing visual learners to connect the spoken and written forms of the language (Hasan & Hoon, 2013). By using visual assistance that improves the learning process, video podcasts can help visually dominant students improve their speaking ability. Information delivered in a visual format, such as through movies, diagrams, and other visual displays, is typically better absorbed by visual learners. With a better comprehension and retention of the material, they can utilize it to develop speaking skills.

Auditory-dominant learners also showed significant improvement, with their mean score increasing from 60.36 in the pretest to 66.73 in the posttest, with a p-value of .001. This finding emphasizes how beneficial video podcasts are for meeting the needs of auditory learners, who gain from both visual and audio material. For auditory learners, the dual modality of video podcasts provides an extensive sensory experience that improves learning (Pun, 2013; Hasan & Hoon, 2013). Video podcasts can improve the speaking skills of auditory-dominant learners as they provide rich auditory input through native speaker pronunciations, varied intonations, and natural speech patterns, which help learners to better understand and reproduce authentic language use (Hasan & Hoon, 2013; Ducate & Lomicka, 2009). The interactive and dynamic nature of podcasts can captivate auditory-dominant learners, keeping them engaged and motivated to continue learning (Shafiee & Salehi, 2019). Video podcasts can benefit auditory dominant learners' speaking proficiency by providing audio components that enhance their learning experience. Auditory learners tend to absorb information better when it is presented in an auditory format, which includes podcasts. This format helps them to better understand and retain information, which can then be applied to improve their speaking skills.

Kinesthetic learners, who prefer physical interaction and hands-on experiences, may benefit from video podcasts through interactive components or practical demonstrations (Ernst & Clark, 2009). The positive improvement observed for kinesthetic learners supports the notion that multimedia approaches can engage different learning styles effectively, though further interactive elements may enhance the learning experience even more (Ganapathy & Seetharam, 2016). Video podcasts can incorporate animations, simulations, and interactive elements that allow learners to engage with the content through movement, which enhances their understanding and retention of the material. This type of learning can help kinesthetic learners better grasp new concepts and improve their speaking skills by providing a more immersive and interactive learning experience. Furthermore, the findings revealed that the observed improvements in speaking proficiency are attributed to the interactive and hands-on elements incorporated into the video podcasts. These podcasts featured dynamic exercises that encouraged learners to practice speaking through physical engagement (Bruner, 1972; Gallimore & Tharp, 2005). As the video podcasts included activities where learners had to perform tasks, use gestures, and demonstrate concepts through movement, it encouraged learners to practice speaking through physical engagement. This approach aligns with the kinesthetic preference for physical interaction and practical application (Ernst & Clark, 2009; Ganapathy & Seetharam, 2016).

Initially, kinesthetic learners faced challenges with maintaining fluency and incorporating effective nonverbal behaviors into their speech. They struggled with organizing their thoughts and

using appropriate gestures and facial expressions. However, the post-test results revealed substantial progress. Participants exhibited more fluid speech and enhanced nonverbal communication, such as expressive gestures and improved eye contact. This progress suggests that the interactive components of the video podcasts, which included practical demonstrations and movement-based activities, effectively addressed these challenges. The video podcasts provided kinesthetic learners with opportunities to engage physically with the content, facilitating a more immersive learning experience. For instance, learners might have been prompted to mimic gestures or perform activities related to the speech topics, which helped reinforce their speaking skills through active involvement. This practical approach not only improved their fluency but also allowed them to integrate nonverbal cues more naturally into their communication. Additional studies support these findings, indicating that interactive and hands-on learning methods enhance engagement and skill development for kinesthetic learners (Huang et al., 2016; Mitchell, 2013).

The one-way ANOVA results revealed no statistically significant differences in improvement scores among visually-dominant, auditory-dominant, and kinesthetic-dominant learners ($p = .707$). This indicates that while video podcasts positively affected all learning styles, the degree of improvement was consistent across different learner types. This finding aligns with previous research suggesting that multimedia tools can be effective across various learning styles (Granito & Chernobilsky, 2012). However, several limitations must be considered when interpreting these results. One notable limitation is the sample size, particularly for kinesthetic-dominant learners, who were represented by only six participants. A small sample size can reduce the statistical power of the analysis and may limit the ability to detect significant differences. Despite these limitations, the positive impact of video podcasts on different learning styles suggests that it is a versatile educational tool. The multimedia nature of video podcasts, combining visual, auditory, and interactive elements, supports diverse learning preferences and enhances speaking accuracy.

The result of the effectiveness of video podcasts indicates that it can facilitate deep learning and higher-order thinking (Wu, 2008). It is also backed up by the arguments of Ghee et al. (2012) and Middleton that learners have shown a favorable perception of podcast technology, appreciating its flexibility and the student-centered approach it supports. It can be tailored to individual learner needs and extend learning beyond the classroom (Dewi et al., 2022). Through conversations with native speakers and cultural insights, video podcasts expose students to language in a real and natural way. This facilitates students' acquisition of the language in natural settings, which is essential for learning a foreign language. A lot of video podcasts are set up with lessons that are easy to understand and incorporate conversation, grammar, vocabulary, and cultural context. With the aid of this systematic technique, students can develop their language abilities in a logical and organized way. With its more dynamic and captivating approach to learning than more conventional techniques like textbooks or lectures in class, it also provides a powerful source of motivation for students. Better language skills and retention could result from this higher level of engagement.

Video podcasts offer authentic auditory experiences through varied intonations, accents, and speech patterns of native speakers (Assia, 2024). This exposure helps learners improve their listening comprehension by familiarizing them with natural speech rhythms and conversational nuances that are often absent in traditional learning materials. As learners regularly engage with these podcasts, they become more adept at understanding spoken language in real-world scenarios, leading to improved listening proficiency and communicative competence. Moreover, video podcasts foster active listening by integrating visual elements that complement the audio content. This multisensory approach aids learners in grasping complex language structures and meanings that might be challenging to understand through audio alone (Patesan et al., 2018). Visual cues such as body language and facial expressions enhance comprehension and retention, making it easier for students to follow along with and respond to spoken content effectively. The dynamic and engaging nature of video podcasts, compared to more conventional methods like textbooks or in-class lectures, also contributes

to increased motivation and active participation. This heightened engagement can lead to better language acquisition, as students are more likely to retain information and apply it practically.

4. CONCLUSION

This study confirms the theoretical and empirical support for the use of video podcasts in enhancing language learning across different learning styles. The significant improvements observed for visually-dominant, auditory-dominant, and kinesthetic-dominant learners emphasize the benefits of incorporating multimedia technology into language instruction. Video podcasts have shown to be a useful, adaptable medium that accommodates a range of learning styles. They also help language learners improve their speaking accuracy by offering a flexible and entertaining resource. While demonstrating the positive impact of video podcasts on students' speaking accuracy. Integrating video podcasts into existing language programs can provide students with additional opportunities to practice and refine their speaking skills outside of traditional classroom settings. Institutions can benefit from adopting such innovative tools to enhance their teaching strategies, improve student engagement, and support a more effective language learning environment. A limitation of this study is the uneven distribution of participants among learning styles, with 25 visually-dominant, 11 auditory-dominant, and 6 kinesthetic-dominant learners. This imbalance may affect the generalizability of the findings and potentially bias results, as the larger visually dominant group could skew the outcomes. Future research should aim for a more balanced sample to better capture the effects of video podcasts across all learning styles. Additionally, exploring the impact on a broader range of learning styles and employing objective measures such as standardized tests can enhance reliability. Integrating video podcasts with other technological tools and examining their effects on different language skills could further enrich language education strategies.

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