



Development of Podcast-Based Audio-Visual Learning Media Through a Role-Playing Model on the Speaking Skills of Junior High School YPK 2 Merauke Students

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Abstract

This study is driven by the observed deficiencies in the speaking abilities of junior high school students, coupled with the suboptimal utilization of instructional media within the teaching and learning process. This research aims to develop podcast-based audio-visual learning media through a role-playing model to improve students' speaking skills at SMP YPK 2 Merauke. Audio-visual-based learning, especially podcasts, is expected to be able to provide a more interactive and enjoyable learning experience for students. The method used in this study is Research and Development (R&D) with the ADDIE (Analysis, Design, Development, Implementation, Evaluation) development model. The subject of the study is grade IX students of SMP YPK 2 Merauke using podcast-based teaching media. Data collection instruments include observation guidelines, assessment scale sheets, interview guidelines, and questionnaires. The results show that the use of podcast media in role-playing model-based learning significantly improves students' speaking skills. This media is effective in helping students to be more confident in speaking, enrich vocabulary, and improve critical and argumentative thinking skills. The implication of this study is that podcast-based learning media can be used as an innovative alternative to improve speaking skills, especially in Indonesian subjects.)

Keywords: podcasts, speaking skills, learning media, ADDIE development.

1. Introduction

Education has experienced significant development along with technological advances that continue to increase rapidly. The learning process between teachers and students can take place through face-to-face methods or distance learning that utilizes various types of learning media (Mudatsir & Wahyuniar, 2023). Indonesian education starts from an early age, including basic teaching of speaking, reading, writing, and listening. The basis of language skills is being able to listen well. If withdrawn again, the most effective way is to listen to understanding, because by listening to the understanding of students will it be easier to understand the meaning of the language they are listening to, and by listening to the understanding of students consciously or unconsciously, directly or indirectly, they will understand the meaning of the language, as well as understand the teaching material (Widana et al., 2024).

In the current Junior High School curriculum, there are four language elements, namely listening, speaking, reading, and writing skills. Speaking skills develop along with children's development, which begins with the ability to listen. Through listening, children begin to learn to speak. The ability to speak allows them to express their thoughts and feelings with words. Reading and writing skills are also important because they allow children

to learn and communicate more effectively with others. (Mardiyani & Aulina 2024). Children who have difficulty learning a language often face obstacles in the language learning process (Susanto et al., 2020).

Speaking also includes the ability to pronounce sounds or words to convey ideas, ideas, or thoughts. More broadly, speaking is defined as an audible and visible system, which involves many body muscles to convey intent (Djamdjuri et al., 2014). Speaking ability is one of the most important abilities that must be possessed by every individual by not ignoring other abilities such as the ability to listen, read, write, and linguistically in learning Indonesian, because with this ability individuals can communicate with anyone, both in formal and informal situations. (Beta, 2019). In addition, speaking skills are closely related to learning activities that involve intensive interaction between teachers and students or between students (Damyanov & Tsankov, 2018).

Various factors contribute to the challenges encountered in language learning, particularly in the application of speaking skills in schools. These include the limited use of instructional media as teaching aids by educators and the reliance on teaching methods that are neither diverse nor innovative. (Kirana et al., 2024). Teachers are required to be creative in developing innovative learning media in order to increase students' interest in learning (Lampropoulos et al., 2019). The technological development in education that is happening today is a way for this nation to jump in technological achievements with the aim of improving the quality of education. Online learning is carried out to overcome the limitations of collaboration and communication in the classroom, as well as to facilitate the search for teaching materials that cannot be fulfilled in printed materials that are full of boredom, with online learning residents can widely search for materials in completing their learning tasks in the internet world. (Fatirul & Leksono, 2021).

Podcast media that integrate role-playing models can be a solution for teachers to improve students' speaking skills. Podcasts are considered effective learning tools as they offer versatility as both teaching and learning media. They are easy to access, require simple playback devices, and can be utilized at any time and place, even while engaging in other activities (Laila, 2021). This approach is expected to make the learning process more engaging and effective in enhancing students' speaking abilities. In response to these needs, this study aims to develop podcast-based learning media integrated with a role-playing model. This media is anticipated to provide a more interactive learning experience while equipping the younger generation with the skills needed to face future challenges.

2. Methods

This research is included in the type of research and development. In this study, the ADDIE development model is used. Based on previous research, the use of the ADDIE model is still very relevant because: (1) this model is easily adapted to various conditions, (2) its flexibility in answering various problems is very high, and (3) it provides a structured framework for developing learning interventions with revision and evaluation at each stage (Branch, 2009).

The ADDIE model consists of five main stages, namely analysis, design, development, implementation, and evaluation. In the analysis stage, an analysis of needs, characteristics, and media is carried out. The planning stage includes determining the material or topic related to speaking skills, as well as preparing a design based on the results of the analysis. After that, the selection and determination of the material to be used in the podcast is carried out, including sources and guidelines for making podcasts. The development stage involves the realization of the product that has been designed.

The developed product undergoes a rigorous evaluation process through expert consultation and validation to assess its relevance and practicality. This validation process involves three subject matter expert lecturers, one Grade IX teacher, and five Grade IX students. During the implementation phase, the media is applied in practice to the designated research subjects to evaluate its effectiveness in real-world learning contexts.

The final stage is evaluation, which includes formative and summative evaluations to assess the effectiveness of the product. The subject of this study is a podcast-based learning media applied through a role-playing model. The object of this research is the validity and effectiveness of the media in improving the speaking skills of grade IX students.

This study uses two types of data, namely: (1) qualitative data, in the form of input and suggestions from experts. (2) Quantitative data, in the form of the results of the validation of the expert test using the assessment scale, the practicality test of the media by teachers and students, and the data of the results of the effectiveness test. Data collection methods include questionnaires and observations. The data obtained were analyzed using qualitative data analysis techniques, instrument validity analysis, media content validity analysis, media practicality analysis, and media effectiveness analysis on speaking skills.

3. Results

This research focuses on developing podcast-based learning media through the implementation of a role-playing model to enhance students' speaking skills. The study involves Grade IX students at SMP YPK 2 Merauke as the test subjects and follows the ADDIE framework, which comprises five stages: analysis, design, development, implementation, and evaluation. The first stage, analysis, encompasses three key areas: needs analysis, student characteristics analysis, and media analysis. The needs analysis was conducted through observations and interviews with Grade IX homeroom teachers at SMP YPK 2 Merauke to gather insights into students' speaking abilities and the use of instructional media. The analysis of student characteristics involved administering questionnaires to Grade IX students to better understand their learning preferences and needs. Media analysis was carried out by reviewing references on relevant learning media, focusing on the characteristics of effective media to guide the development of materials tailored to the needs of students and educators.

In the subsequent planning stage, the design of the learning media was based on findings from the analysis phase. The podcast-based teaching media was conceptualized and designed using Microsoft Word to structure the content. The production of the media involved creating visual and interactive components using Canva, while the core content—a series of videos—was recorded and edited using Adobe Premiere. The completed podcast-based teaching media was then converted into a formlink format, allowing for easy access via desktop platforms. An example of the media design is presented in Figure 1.



Fig 1. Media-Based Learning Design in the Form of Podcast

The subsequent stage is the development phase, during which the initial product design is refined to create a finalized, ready-to-use learning medium. This process is further enhanced through expert evaluations, involving a series of feasibility and practicality assessments to ensure the developed media meets the required standards for effective implementation.

Table 1. Expert Validation of the Feasibility of Media and Podcast Media-Based Teaching Materials

Points	Valuation				S1	S2	S3	S4	Σs	n(c-1)	Value
	I	II	III	IV							
Points 1-8	39	36	39	36	31	28	31	28	118	128	0.9229
Points 1-11	50	53	50	57	41	40	41	44	166	176	0.9443

As presented in Table 1, the podcast-based learning media achieved an overall material validity index of 0.9229, while the media suitability index reached 0.9443. These results indicate that the podcast-based learning media possesses very high eligibility qualifications. Subsequently, the implementation phase serves as a practical step to apply the developed media in an educational setting. During this phase, the media is introduced and utilized in a manner that ensures its effective application for the intended audience.

The practicality of the podcast-based learning media was evaluated through a trial involving a single class of 30 students with diverse abilities. Students were tasked with assessing the media by completing a structured questionnaire designed to gather their feedback. The outcomes of the practicality test are detailed in Table 2.

Table 2. Results of Media Practicality Test Based on Podcast Teaching Media

Respond	Sum	Maximum Score	Presented	Average Score
R 1	42	50	84	90,6
R 2	45	50	90	
R 3	49	50	98	
R 4	48	50	96	
R 5	43	50	86	
R 6	43	50	86	
R 7	46	50	92	
R 8	43	50	86	
R 9	49	50	98	
R 10	43	50	86	
R 11	49	50	98	
R 12	42	50	84	
R 13	43	50	86	
R 14	47	50	94	
R 15	44	50	88	
R 16	45	50	90	
R 17	49	50	98	
R 18	43	50	86	
R 19	45	50	90	
R 20	44	50	88	
R 21	44	50	88	

R 22	41	50	82
R 23	45	50	90
R 24	40	50	80
R 25	48	50	96
R 26	48	50	96
R 27	47	50	94
R 28	49	50	98
R 29	49	50	98
R 30	46	50	92

Based on Table 2 above, it can be seen that the student response to podcast-based learning media obtained an achievement level of 90.6% so it can be concluded that the student response is at a very good interpretation level. The subsequent stage involves testing the effectiveness of the developed media, employing a pre-experimental approach with a one-group pretest-posttest design. In this phase, students' speaking skills are assessed by comparing their performance before and after utilizing podcast-based learning media integrated with a role-playing model. The study participants included Grade IX students of SMP YPK Merauke as the research subjects, while the object of investigation was their speaking proficiency.

The normality test conducted on the data distribution revealed that the significance values in both columns exceeded 0.05, using a 5% significance level. These findings indicate that the data on students' speaking skills prior to the implementation of the podcast-based learning media follows a normal distribution..

Table 3. Mean Pretest and Posttest Values

Speaking Skills	Mean	SD	<i>p value</i>
Before being given podcast-based learning media	80.76	13.311	0.001
After being given podcast-based learning media	93.33	8.222	

The table above shows that the mean pretest value or before being given podcast-based learning media is (80.76) with a standard value (13,311) and the mean posttest value after being given podcast-based learning media is (93.33) with a standard value (8,222). As for the p value, $0.001 < 0.05$ were obtained, so it can be concluded that there is a significant difference in students' speaking skills before and after being given podcast-based learning media.

The last stage in this study is evaluation, which includes formative evaluation and summative evaluation. Formative evaluation is carried out during the development process, namely at every stage of the research, starting from design, development, to implementation. The focus of formative evaluation is to assess the smoothness of the research process and the quality of the products produced at each stage. Meanwhile, summative evaluation was carried out at the end of the study. This evaluation aims to reflect on the entire research process while ensuring that the products produced are of high quality and in accordance with the goals that have been set.

4. Discussion

This study aims to produce podcast-based learning media through a role-playing model to improve the speaking skills of junior high school grade IX students. This learning media is different from other learning media

because it combines two types of learning media, namely audio and visual, which are packaged in the form of learning podcasts. This learning podcast media is based on helping students improve their speaking skills. This media is highly appropriate for Grade IX junior high school students as it incorporates interactive elements such as videos and game-based quizzes, which can be directly accessed and engaged with by the students.

The developed learning media was subsequently evaluated for feasibility, practicality, and effectiveness using a validated questionnaire as the assessment instrument. The feasibility of the podcast-based learning material and media was assessed by expert validators with recognized expertise in the relevant fields. The assessment results show that podcast-based learning media through the role-playing model has a validity index of media expert eligibility of 0.9443 and material expert feasibility of 0.9229, with a high validity predicate. This is because the media content starts from attractive design, the use of fonts in videos, the use of cartoon objects as sources and hosts, the use of colors in videos and menus, to appropriate layouts. Well-designed learning media can help students digest and understand the learning content material (Muhson, 2010)

After the media is validated by experts, the next stage is to test the practicality of podcast-based learning media through a role-playing model. The test was conducted with 30 students serving as respondents, who are users of the podcast-based learning media. These participants were Grade IX students at SMP YPK 2 Merauke, located in Merauke District, Merauke Regency. The results of the assessment of 30 students as media users showed a level of practicality of 90.6% with very good predicates or qualifications.

This is because podcast-based learning media with an easy-to-use role-playing model, and the content of the material and the learning process have been adjusted to the characteristics and needs of grade IX students. Podcasts function as a medium to provide information and knowledge needed by their listeners (Ummah et al., 2020)

After watching the podcast video, students are invited to answer questions in the quiz menu in the form of games, the content of which is related to the material in the podcast video. This makes it easier for students to understand the stages of a good and correct interview. The repetition feature on this media allows students who have not understood the video in one viewing to watch it again until they really understand the material (Suryanto & Sari, 2021). Podcast-based learning media through this role-playing model can be accessed using various types of electronic devices, both PCs, laptops, and smartphones, making it easier for students to access them.

After going through the validity test, practicality test, and improvement, a test of the effectiveness of this media was carried out on students at SMP YPK 2 Merauke, Merauke District, Merauke Regency. The effectiveness test was carried out with observation sheets, where students were assessed when conducting interviews using a role-playing model. The data obtained were analyzed using the related t-test technique in the SPSS application. The results of the analysis showed a significance value (2-tailed) of 0.00, smaller than 0.05, which means that there was a significant difference in students' speaking skills before and after using this podcast-based learning media.

Based on the test results, it can be concluded that the podcast-based learning media, integrated with the role-playing model, is effective in enhancing the speaking skills of Grade IX students at SMP YPK 2 Merauke. This media facilitates interactive learning, enabling students to grasp the material more effectively and encouraging greater participation in speaking activities. The media demonstrates high-quality standards and can be consistently utilized for teaching speaking skills in Grade IX at SMP YPK 2 Merauke. Furthermore, it holds potential for

broader dissemination to other classes within the school, as well as to other educational institutions in Merauke District, Merauke Regency.

5. Conclusions

The podcast-based learning media culminates in the creation of a website. This platform features an introductory display, accompanied by a menu or homepage layout for easy navigation. In this podcast-based learning media, there are videos that discuss interview topics related to students' speaking skills. After students watch a podcast video about the interview, there is a quiz menu in the form of a game that contains questions about the content of the podcast video.

The validity index of media and podcast-based teaching materials each obtained a very good predicate or qualification. The level of achievement of student responses to podcast-based learning media also received a very good predicate or qualification. This podcast-based learning media has proven to be effective in improving the speaking skills of grade IX students of SMP YPK 2 Merauke.

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