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## The Development of Podcast-Based-Audio Learning in Material Introducing Ourselves at 10th Grade SMA Muhammadiyah 1 Pekanbaru

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### ABSTRACT

This Podcast development research aims to produce a quality Podcast with the eligibility criteria for teaching materials and to determine the feasibility of the product based on the assessment of the material validator, media validator and students. This type of research is development research with ADDIE research model. The practicality test was carried out on students of SMA Muhammadiyah 1 Pekanbaru in the first semester (I) of the 2022/2023 academic year. Practicality test subjects consisted of 32 students to test the practicality of Podcast products designed with anchor applications. The assessment results obtained from the media validator are categorized as "very good" for use with an average of 4.61. The material validator assessment are also categorized as "very good" with an average material validator of 4.65. Furthermore, the practicality of the products carried out is in the category of practical use with an average Overall 4.56 which are in the very decent category. Based on the results of the validity and practicality tests, it can be concluded that the Podcast product is ready to be developed and is practically used in the learning process in particular the process of learning English on Introducing Ourselves material.

## 1. Introduction

Education is a learning process that includes an information network from educators to students and vice versa from participants to educators. The information process will form an active interaction so that it can improve the way of thinking and change behavior patterns for the better. As we know, technological development in the era of globalization is very rapid because it offers many advantages and opportunities for progress. Over time, technological

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advancements have influenced all areas of life, both in the economy, culture, art, politics, and education. People who are using technology right now must be able to use the development of these technologies due to the adjustment between humans and the use of technology for the process of education and learning so that the next generation will not be left behind in the rapidly developing times between the old and new generation as reported by Ngafifi (2014). Technological progress is very rapid at this time because it indirectly affects aspects of human life, such as in Indonesia as reported by Ameliola (2013)

Educational institutions are encouraged to continue developing effective digital media to support learning activities. And adapt to the needs of the times and the rapid development of technology as reported by Mulyani (2021). This shows that as the front line in the world of education, teachers must be able to improve their competencies so that they are truly ready to face the Education Era 4.0 as reported by Aspi (2022). Learning media is a tool used to convey information to students using various techniques so that they can understand the content of the information provided as reported by Pakpahan (2020). Various media have been developed based on this, such as animated videos, infographics, power points, audio podcasts, etc. Learning media can be used to convey messages and teaching materials as reported by Muhson (2010) Each medium has its strengths and weaknesses. Therefore, media development must be compatible with the teacher's ability to create, mold, and shape learning. The learning design is adapted to the learning objectives to be achieved, then the media selection is to be used.

WS Winkel in Asmi (2019). Give his opinion regarding the meaning of learning media can be translated broadly and narrowly. First, broadly, media are individuals, materials, or events that provide students with a way to acquire knowledge, skills, and personality. Second, strictly speaking, media are tools that bridge students and teaching materials, such as laptops and televisions. The role of using learning media is very important because, as a point of information, it can increase the motivation of students in the learning process and provide new information that students are not yet aware of. And through the use of media, students get a picture of something that is not too verbal. Media is very helpful in overcoming limitations of time and place, so media enables students to learn independently using media. One of the media that can be used is audio podcast media.

In an open interview with the teacher in the field of study in question, it was found that initial observations at SMA Muhammadiyah 1 in July 2022 showed non-achievement of the stated learning objectives in the learning implementation plan for aspects of listening. Therefore, there is a need for media for efficient and effective English listening learning. This is in accordance with the opinion of experts Why is listening to learn so necessary? for foreign language learning.

One of the materials contained in the audio containing the text is Introduction Ourselves material, Introduction Ourselves is material that contains many descriptions of how to introduce oneself in informal situations, talk about where you come from, mention your habits, interests, and hobbies. This material is also

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good for listening skills because it has a lot of vocabulary to say in everyday life. Therefore, it takes the right learning media and can explain how to talk to new people from self-introduction material. In addition, the learning media used must also be able to help students relate to real life and can help students dare to meet new people. It is intended that learning can be more contextual and interesting, so that it is quickly remembered by students as reported by Arifin (2012)

Based on these conditions, it takes appropriate learning media according to the needs and characteristics of students. Observation results on the characteristics of student learning show that most students like learning, which is done by using audio in explaining the concept of the material so that it can help them understand the concept of Introduction Ourselves material. Audio that is suitable for use in explaining material is podcasts. Podcasts are recordings in the form of audio (MP3) or video (MP4) uploaded to the internet and can be downloaded via a computer, mobile devices, MP3/MP4 players, and cameras and can be listened to at any time as reported by Özkan (2018). The results of research conducted by Al Qasim (2013) prove that podcasts can improve understanding and skills listening to students better than traditional classroom instruction, especially when the material on the podcast is delivered using the teacher's voice, so that will provide familiarity and more interesting teaching.

Podcasts have several advantages, including efficient and practical storage and use, ease of distribution into specific portals, compatibility with branding, and compatibility with data use as reported by Indriastuti (2014). The results of research conducted by Putman (2009) also showed that the use of podcasts for science students can help students enrich their science vocabulary and motivate them to learn science vocabulary.

Based on this description, it is necessary to develop English learning podcast media based on Introduction Ourselves materials for class X SMA/MA. However, to develop English learning podcast media that are feasible to use, it is necessary to evaluate the validity and practicality of the media. The validity of the media aims to find out the level of validity of the developed media. The purpose of this study is to determine the validity of podcast media development in learning English in Introduction Ourselves material for class X SMA/MA.

## **2. Methodology**

The method used in this research is Research and Development (R&D), which is a research method that aims to produce products and test their effectiveness. (Sugiyono, 2017). The ADDIE model has 5 stages, namely: Analyze, Design, Development, Implementation, Evaluation. This research is development research conducted at SMA Muhammadiyah 1 Pekanbaru. The subjects of this study were 10th-grade students with a total of 32 students.

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## **Research Procedures**

### **a. Analyze**

At this stage, researchers analyze the circumstances and needs related to learning media that can be developed innovatively by utilizing current technological developments. The purpose is to observe what types of media are needed in learning in the era of digitization and to know the level of effectiveness of digital-based media that is able to provide convenience in learning.

### **b. Design**

The second stage is the stage of making the media design that will be developed. In this second stage, researchers make flowcharts, storyboards, and validation instruments so that they can create a design and research-based development product that is able to provide solutions to these problems. The product that will be produced is podcast-based audio media.

### **c. Development**

At this stage, the researcher began to arrange the media systematically based on the results of the design. Make a material script that has been adapted to the theme of the discussion, namely about introducing yourself, making a cover to support the appearance to make it look attractive, and recording audio of each sound, which will be compiled based on the initial design.

### **d. Implementation**

This is the activity of applying media (products) that have been developed based on a systematic design in the development stage. Then testing and initial improvement of the media are carried out based on the expert validation instrument sheet and students who have a role as learning media users. With this, it can be seen the feasibility of the product to be implemented from each assessment criteria such as the media aspect and the material contained in the product results. The results of this implementation will be used as the basis for the evaluation stage.

### **e. Evaluation**

At this stage, the final results of the assessment are presented in the form of evaluations from expert validators and students, both data in the form of percentages or figures related to the feasibility of the developed media and data in terms of expert opinions in the form of input and suggestions in media development. Then From the results of the assessment, the final stage of product improvement will be carried out. This is intended so that the resulting product has good quality and is in accordance with the ideals of the needs of learning media developed with the use of technology in the digital era as a solution to the problems that have been found and analyzed.

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### **Collecting Data**

In collecting data, product trials will be developed according to instructional media instructions. There are two stages, namely:

a. Alpha testing

Alpha testing to learning media using Podcast was carried out by material experts and media experts. This testing requires advice from material experts and media experts who will be used to revise the product developed before being tested.

b. Beta testing

After the product is revised, the next step will be to test on students. Beta testing was carried out at Muhammadiyah 1 Pekanbaru high school. The trial was carried out in grade 10<sup>th</sup> with a total of 32 students.

### **Data Analysis**

In this study, the instrument used consisted of two types. The first was a questionnaire filled out by material expert validation, media experts, and student responses. where the scoring format uses a five-point response format from the Likers scale.

Table 1. Rules for Granting the Score of Instruments for Media Expert and Material Expert

No	Description	Category
1	Very good	5
2	Good	4
3	Pretty Good	3
4	Not Good	2
5	Very Poor	1

Table 2. Rules for Grading Respondent's Instruments Score Remarks

No	Description	Category
1	Strongly Agree	5
2	Agree	4
3	Quite Agree	3
4	Disagree	2
5	Strongly Disagree	1

Furthermore, the second instrument used in this study is criticism and suggestions in a descriptive format. In this study, of course, there are still many things that must be improved, therefore the author really needs input in the form of criticism and suggestions from users of the media that the author developed, especially the class X students who became the object of the author's research. So with this input, it is hoped that the resulting product will be even better.

### 3. Results and Discussion

Podcasts are one of the easiest audio content to find on the internet. Podcasts are audio media files that are published regularly and can be downloaded from the internet (Laila, 2021). The nature of audio podcast content is similar to that of broadcast radio, such as auditory elements that can stimulate one's imagination (Saepuloh, 2021). As a digital medium, podcasts are one type of content that has many fans, both listeners and creators. This is because creating a podcast does not require a process that is too complicated and has fairly simple stages.

The stages or processes that researchers go through in making podcasts are: 1) determining the topic to be raised or discussed; When determining a topic, try to make it a discussion that attracts the attention of others, is currently being discussed, or according to the needs of content creators. The topic of the podcast that the researcher made raises the questions of "introducing Ourselves" and "making a script containing the discussion/sentence that will be raised on the podcast. This is to avoid mistakes in speaking and as a reference in conveying the narration; 3) start doing audio recordings according to a predetermined topic. The tools that researchers use to create podcast content are the anchor and Spotify applications. Anchor is used as a platform for recording, while Spotify is an application to publish recorded podcasts so that they can be accessed by many people.

Introduction Ourselves learning materials in the tenth grade English subject contain basic competencies in the cognitive domain to identify social functions, text structures, and linguistic elements of spoken and written transactional interaction texts that involve the act of giving and asking for information related to identity, and are short and simple in accordance with the context of use. In the psychomotor realm, compiling very short and simple oral and written transactional interaction texts involving the act of giving and asking for information related to identity is short and simple, taking into account social functions, text structure, and linguistic elements that are correct and in context. The following podcast design drawings can be seen in figure 1 and 2.

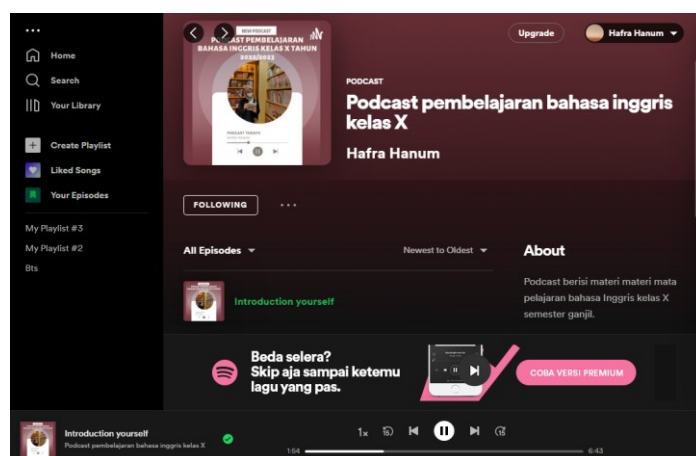


Figure 1. Spotify Podcast Display on Laptop

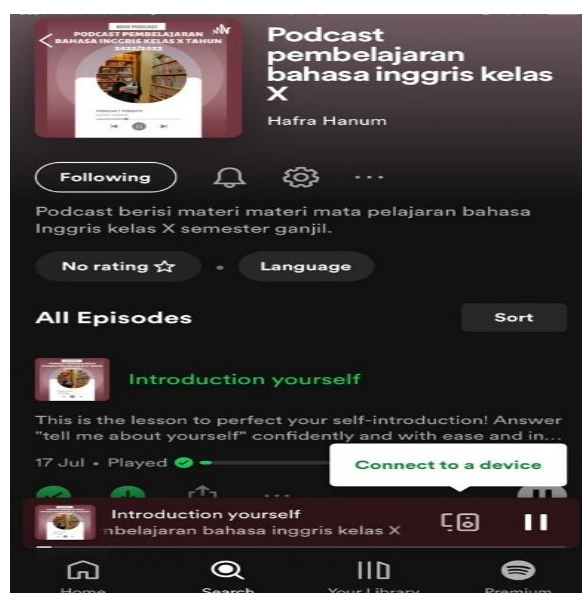


Figure 2. Show Spotify Podcasts on Mobile



Figure 3. Implementation Application in Class

### ***Material Expert Validation***

The product development findings are presented to the validator, who evaluates each component and provides an assessment of the submitted questionnaire, as part of the validation process. Researchers collect quantitative and qualitative data during the validation procedure which will be very helpful for the creation and progress of podcast-based audio products.

Material expert validation was carried out to determine the quality of podcast-based audio products in terms of the material aspect. Aspects assessed include aspects of material relevance as many as 2 items, language aspects as many as 5 items, aspects of presentation as many as 2 items, aspects of use as many as 3 items, and aspects of usefulness as many as 2 items. Validation is done by

providing a podcast-based audio product that was developed to be assessed by material experts with a 5-scale questionnaire. The results of the material expert assessment can be seen in table 1.

Table 3. Average Score of Material Validation by Expert

NO	Aspects of assessment	Score (g)	Classification
1	Material	4,87	Very Good
2	Language	4,54	Good
3	Presentation	4,81	Very Good
4	Aspects of use	4,32	Good
5	Aspects of usefulness	4,74	Very Good
<b>Average Aspect Score</b>		<b>4,65</b>	<b>Very Good</b>

Based on the results of the validation as a whole above the shows the criteria of “Very Good” with an average of 4.65.

### *Media Expert Validation*

Media validation is needed as an evaluation of the product podcast developed by researchers. There are three aspects that are assessed, namely the learning design aspect with 3 assessment items, the audio communication aspect with 3 assessment items, and the attractiveness aspect with 4 assessment items.

Tabel 4. Average Score of Media Validation by Expert

No	Aspects of assessment	Score (g)	Classification
1	Learning Design	4,71	Very Good
2	Audio Communication	4,43	Good
3	Attractiveness aspect	4,77	Very Good
<b>Average Aspect Score</b>		<b>4,61</b>	<b>Very Good</b>

Based on the results of the validation as a whole above the shows the criteria of “Very Good” with an average of 4.61.

### *Trial with the Students*

The goal of beta testing is to gather data that can be used to improve the product in the next revision. A total of 32 students participated in the beta test. Students are shown the development product during the beta test. The data derived from the students' assumptions about the developed podcast-based audio product was then converted to a 5-point scale.

Table 5. Student Respondent Validation Results

No	Assessment	Mean	Category
1	Media eligibility	4,45	Very Good
2	Material feasibility	4,34	Very Good
3	Effectiveness of use	4,56	Very Good



#### 4. Conclusion

Podcasts are learning media in the form of audio. Along with the development of technology, podcasts can be used as learning media in schools. Learning media using podcasts can also increase students' interest in learning because it is something new and varied so students do not feel bored in carrying out learning. This research is in the form of research and development. The purpose of development research is to develop and revise products based on the results of field tests. Validation data, media feasibility tests, material feasibility, and the feasibility of using podcasts are known through distributed questionnaire. From the exposure of the data, it can be seen that from the aspect of media feasibility, qualifications obtained are in a good category, In the aspect of material feasibility, the qualifications obtained are in the very category good. In terms of effectiveness of use, the qualifications obtained are in the very good category.

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