THE DEVELOPMENT OF EDUCATIONAL GAME WITH SPINNING WHEELS FOR SPEAKING CLASS TO THE TENTH GRADE OF MADYATAMA VOCATIONAL HIGH SCHOOL PALEMBANG

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ABSTRACT
The objective of this research was to develop of educational game with spinning wheels for speaking class to the tenth grade of Madyatama Vocational High School Palembang. The method use in this development is the ADDIE (analysis, design, development, implementation, and evaluation) model. Data was collected through interviews, tests (one-to-one test and small group test), and questionnaires to assess the needs of students and teachers regarding speaking activities in the classroom. The research results show that the development of spinning wheels media for English speaking classes are declared valid with percentage score of 95,4%, the practicality value gets a percentage score of 95,3 % with very practical criteria, and the effectiveness value gets a percentage score of 89,1% with a very effective category. It means that the development of educational game with spinning wheels for speaking class was very valid, and suitable to be implemented in speaking class.
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Keyword: Educational game, spinning wheels, speaking class, and ADDIE model

1. INTRODUCTION

In this study, researcher makes a product that was associated with education. Activities in education need innovation to improve the quality of effective learning. The innovation applied by researcher to improve the quality of learning is to developed of product.

Based on the development carried out, namely the design and research development stages. Before developing a product, the first step is to design a product. The starting point is the knowledge of the benefits of the product to be developed, the quality of the product, and the effectiveness of the product used. Researcher design an educational game product in this development, namely the spinning wheel media.

In this educational game, a learning media is needed. According to Arifin (2021), learning media is a means for teachers to learn so students can more easily understand the content conveyed by the teacher learning media as an intermediary to facilitate the learning process to achieve teaching goals effectively and efficiently.

The researcher conducted researct at Madyatama Vocational High School Palembang because the school is suitable for the characteristics or conditions that are in accordance with research objectives. Based on observation at Madyatama Vocational High School Palembang on June 12th, 2024, conducting interview with the homeroom teacher of tenth grade and the English teacher. The teacher often use the lecture method even though it is interspersed with learning media, but students listen more than actively involved in learning. Teacher respond that during teaching, students not confident in speaking English, students are easily sleepy and bored, and teacher only focus on delivering material and lack of interactive. There are still many students who feel afraid in speaking English.

Students′ lack of confidence in speaking, especially in the context of language learning, can be caused by several factors, such as lack of practice, fear of making mistakes, anxiety about judgement from others, limited vocabulary, or lack of exposure to situations. Based on this, media in this development needs to be determined to support students in understanding the material presented. A spinning wheels media is needed, so that students are more interested, foster the spirit of learning, and make students active and participate. The development of media can be implemented into the speaking class. Most of the students have anxiety and a low level of confidence when faced with speaking English. students fear that speaking English is a big problem attached to their subconscious.

Many things can motivate students to speak English, including the environment and fun things. Social environment can also affect one′s attitude towards life and learning. Anxiety, motivation, personality, self-esteem, and self-confidence are important and effective factors. Advanced learners are usually highly motivated by these factors (Hermansyah, 2018). An environment that likes to express communication in English is one of the processes to improve students′ speaking ability.

The interrelationship between games in speaking classes has great potential to increase students′ enthusiasm for learning. Games in speaking class can foster students′ learning motivation, make it easier for students to understand learning, and make teaching methods more varied so that students are more motivated and increase their confidence level in speaking English. learning with games can be more meaningful. The information filter was learn through the process of decision-making and practicing thinking skills. It can be more fun while learning. Fun learning was created student enthusiasm for learning, thus generating student interest in learning.

Therefore, the researcher conducted research on ″Development of Educational Game with Spinning Wheels for Speaking Class″ to provide students′ confidence level and speaking ability in English. students who are still quite stiff or afraid of speaking English

can develop by using this learning media. Spinning wheels are not only easy to make, but the tools and materials for spinning wheel media are easy to find. In terms to play, the spinning wheels media can create a tense atmosphere and also have fun. Using educational games with spinning wheel can build students′ confidence and motivation to speak English.

2.   LITERATURE REVIEW

Educational Game Theories

Teachers use media and educational Talking about games has been a common thing for us from childhood to adulthood. Educational games initially emerged as a result of the efforts of Steven Russel in his project known as Computer Games in 1962, with his flagship product being the game ″Pong″ which used a system. In 1980, the game ″Pacman″, which has based on IBM PC technology, became very popular and used diskettes as a data storage device (Tridhonanto, 2016). According to Najuah, et al. (2022) stated that with the development of the times, games are used in education because they are entertaining and provide good knowledge and understanding.

Learning through a game approach can give students the opportunity participate directly in the learning process. This can make students feel happy with the material taught by the teacher and can increase their motivation to learn because students feel happy and easily understand the subject matter quickly (Jatmiko, 2019). Games are combined in education, education in the opinion of an expert, ″There is a process that is passed by individuals to find their identify, which is carried out through observation and learning, which the results in actions and behaviour″ (Efendi, 2018).

The conclusion from the above statements is the educational games that is spiked with games is one of the effective ways to develop this research. The characteristics of students are more inclined to things that are fun situations, so student interest in learning tends to increase with the educational games applied in the development.

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The Nature of Learning Media

Students can achieve learning objectives well due to the effective and interesting delivery of learning materials by a teacher. Arifin (2021) states that ″Learning media is a means for teachers in learning so that students can more easily understand the content conveyed by the teacher so that learning media acts as an intermediary to facilitate the learning process to achieve teaching goals effectively and efficiently.″ The existence of media according to Subakti′s view (2020), can facilitate learning that is easy to understand and interesting for students to learn.

As an educator, knowing the role of learning media is an important step, to achieve learning objectives. Indicators or measures of the role of learning media are needed to determine the benchmark for the effectiveness of the media used. According to an expert (Umar, 2014: 102), there are several roles of learning media, including: a) to clarify in conveying material and information so that it can facilitate and improve the learning process and results; b) to increase and direct children′s attention so that it can bring up learning motivation; c) to increase the limitation of the senses, space, and time for movies, videos, slides, or computer simulations; d) to provide impressions and experiences to children about events in their environment, then allow direct interaction with teachers, society, and the environment.

Spinning Wheels Media Development Quality

Media selection criteria must be developed by the objectives to be achieved, and the conditions and limitations that exist by considering the capabilities and characteristics of the media concerned. The criteria in media development are validity, effectiveness, and practicality. 1) one of the criteria for evaluating the quality of learning materials is validity. A media is considered valid, if a learning media is based on sufficient theory and all components of the learning media are related to each other; 2) the practicality of a learning media is reviewed from the implementation of the media during learning activities, starting from the teacher′s response regarding the learning media used, students responses; 3) the effectiveness of a learning media is seen from the criteria that have been set and evaluated based on positive feedback given by students (KKM 70) based on the sources used today.

Spinning wheels media

The media used in this development is spinning wheels. The opinion of Ulya (2020: 64) regarding the shape and spinning wheels benefits. Spinning wheels are round and can be rotate, whiich are designed to be able to help childr′n's learning process to be fun. The previous researcher also stated that, ″Spinning wheels is a circular game that a directional needle and several parts that can be filled by the material presented″ (Machdarini & Hidayat. 2024). Each part of the spinning wheels is divided into several sectors. This sector is filled with pictures that are integrated with the media. Spinning wheels media are round learning media with a thickness of 0,5 cm.

According to Ramadhanty & Tasuah (2024), the spinning wheels media has advantages, it is attractive to students because it has a variety of colors, can be used for a long period, is easy to use, and harmless, provides an opportunity for all students to play while learning, arouse enthusiasm, train memory, and thinking speed, and train understanding in solving problems for students″ (Simbolon, 2019: 262). Some theories an experts, there are several advantages of spinning wheels including: a) providing stimulus to student; b) to attract attention; c) to providing innovative learning; d) spinning wheels media tools and materials are easy to find; e) to increase students′ learning motivation.

The procedures for playing the spinning wheel media includes the following: a) students make a group, each group consists of 5-6 students; b) students pay attention to the pictures and occupational words in each sector; c) students prepare small notes on the use of the phrases answered in each selected picture; d) students observe examples of dialog and pictures on the slide. After that ask for expressions, difficult words or how to play. Students imitate the pronunciation of words, dialogs, and sentences learned; e) researcher

spin the spinning wheels (students pay attention to the spinning wheels media). If the image of a doctor, then the first group asks the second group. For example, the question, "what do you think of doctor′s job?". Then, the second group answers, "I think doctor′s job is difficult"; f) spinning wheels are turned back to the first group. If the first group gets a picture of a farmer, they are saying "doctor′s job Is difficult but farmer′s job is relaxing"; g) however, if the card is not the same as the job picture or shows the ball picture, then a change to the game play.

English Speaking Concept

Speaking is one of the most important aspects of daily life, and always goes hand in hand with the activities carried out. According to Jaya (2019), "Speaking is the first skill that must be taught first when someone learns a language. Because, speaking takes up a lot of our lives and everyone produces at least tens of thousands of every day". Related to speaking is the first skill, Hermansyah (2023) revealed that the importance of learning to speak well comes from the fact that speaking is the main way of communication. This iis also corroborated by Ghafar′s opinion (2022), that "Speaking shows the relationship between verbal, interpersonal and body language".

The basis of speaking, as a means of communication in which there is a direct observation process based on the experience of each participant. Mastering this skill allows individuals to express themselves effectively and establish meaningful relationships with others. A speaking class will be effective when there is interaction between teachers and students to be able to express meaning in transactional and interpersonal language in the context of daily life. Interpersonal is part of interpersonal communication in speaking English.

Speaking English can make learners feel scared when issuing sentences. This is corroborated by Jaya′s opinion (2017: 2) "Speaking ability is not easy as expected speaking skills are a challenge that we must master because speaking skills include all elements of the English language". Hermansyah (2018) stated that, students always face problems when speaking English, this is because they think about the structure and lack of vocabulary. The problem then makes students avoid speaking English and only speak when the teacher asks them questions.

To encourage students′ communication progress in speaking skills, there are several things that must be considered, namely components. According to some experts, speaking is a complex skill because it is at least related to components consisting of four components, including grammar, vocabulary, pronunciation, and fluency (Putri, 2023).

The Concept of Material in Speaking Class

The development of spinning wheels accompanied by descriptive text material. According to the researcher, the material taken can be conducted because the images that will be inserted into each sector are about occupational professions, such as doctors, teachers, pilots, and so on. This image will be a benchmark for students in implementing spinning wheels media.

According to Muniroh, et al. (2024), the purpose of description is to expand the reader′s knowledge and experience by describing the ture nature of the object to make it seem real and alive. This is similar to the opinion of an expert who said that the descriptive text is to convey the information to the readers in an effective way. By using clear descriptions, factual details, and sensory language, descriptive writing invites readers to form a clear mental picture and engage their senses (Amalia, et al. 2023). In this study, using a spinning wheels media through educational games. The material in the research is very necessary, because of its educational nature with a game. This material is comparable to the implementation of media and educational games.

3. METHODS

The method used in this development is the ADDIE (analysis, design, development, implementation, and evaluation) model. Cheung (2016: 123) states that ADDIE is a method that is easy to use and can be applied in curricular that teach knowledge, skills or attitudes. To reduce the level of error or lack of products to be developed, this research uses the ADDIE model because there is an evaluation in each step. It can be concluded that research and development is a research model that aims to produce new products through the development process. This research allows an educational game to be implemented in speaking classes and uses a media in the form of spinning wheels to improve student learning outcomes with valid, practical, and effective categories.

4. RESULT AND DISCUSSION

The results of this study have been carried out in several stages of research procedures using the research and development method with the ADDIE model. From the research that has been done, researcher developed a media in the form of a spinning wheel or better known as spinning wheels. This research was conducted in Madyatama Vocational High School Palembang

The steps of developing educational games with spinning wheel media using the ADDIE model developed by Molenda & Reiser (Rohaeni, 2020: 123), namely:

1. Analysis

The main activities in this stage are to analyse need, curriculum, and student characteristics. Needs analysis in the form of ATP (Flow of Learning Objectives) analysis and learning modules. Curriculum analysis can be determined in the assessment indicators and learning objectives. The research objectives of the development of educational games with spinning wheels in speaking classes are to increase student" thinking and understanding of the information they get, with an understanding of students′ thinking skills from obtaining information, this can improve students′ speaking skills through analysis students need in order to be confident when speaking English. How the validity, practicality, and effectiveness of the media to be developed in the speaking class.

a. Need Analysis

At this stage, the problem of students′ English teaching and learning process are analyzed from the initial stage. during the learning activities in the classroom, students have never implemented a variety of learning media, including spinning wheel media. As well as in learning activities, students are less interactive and seem monotonous. In English teaching, it is very necessary to have a media that can arouse students′ enthusiasm, so it can create a sense of confidence in students while learning and speaking English, as well as better understand the material and add to students′ experience by developing spinning wheel media in English teaching.

b. Learning Media Analysis

In analysing the needs of students for learning media in the classroom, the author has an interesting point of view that can be applied to the English language classroom. The application carried out is the development of educational games with spinning wheels for speaking classes for tenth grade students. The following are the results of the needs analysis conducted by researcher on June 8th, 2024, which aims to find out what learning media are suitable for use in learning. This stage is carried out using a needs analysis questionnaire for the media needed by students.

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Table 4.1 Need Analysis Questionnaire

No	Statements	Answer	Total Number of Respondent	percentage
1	Are you interested in speaking class?	Yes	23	100%
		No	0	0
2	Does teachers learning media often use in classroom learning?	Yes	23	100%
		No	0	0
3	Do you need other learning media as a tool for learning in class?	Yes	22	95%
		No	1	5%
4	Do you agree if English lessons use educational games with spinning wheels learning media in your class?	Yes	23	100%
		No	0	0
5	Do you have an interesting and fun learning media spinning wheel?	Yes	22	95%
		No	1	5%
6	Are spinning wheels interesting to play with when presented as learning media in your class?	Yes	22	95%
		No	1	5%

(Analysis Data Research)

c. Material Analysis

Material analysis in the development of educational games with spinning wheels for speaking classes is carried out to select important material from speaking material, which is the minimum material that must be mastered and possessed during the learning process. First step is curriculum analysis carried ot by researcher to find out the curriculum used at Madyatama Vocational High School Palembang. The independent curriculum emphasizes the essential material and the development of students′ character and competence. In addition, the independent curriculum encourages students to be more critical, creative and innovative, and equipped with teaching materials that are not boring.

2. Design

At this stage regarding the concept of spinning wheels media, as well as design resulting from the previous analysis stage. The design section has several stages including:

a) The researcher was prepared some materials that have been provided.
b) Designing an image of a job character through the canva application and after completion was printed on paper.
c) The stage of assembling each material.
d) Attaching each piece of character image to the spinning wheels.
e) Installing the spinning wheels along with small arrows on the savings can along

with a pointer arrow as a stop for job character image.

3. Development

The existence of this development stage provides direction for students to be able to easily apply the media to be developed. As in the previous stage, which is the initial design stage of a product. The provisions of the steps in the development of spinning wheel media on educational games in English-speaking classrooms, as follows:

a) The collection of materials in the manufacture of spinning wheels media has been determined at the initial design stage, the materials used are based on relevant sources of information from previous researcher. in addition, researcher collect information that supports and relates to speaking class materials. The purpose of collecting the above references was to develop the product, in order to attract students′ attention, increase their desire to learn, increase their confidence when speaking in English, and reduce their fear when speaking in English.

b) Validation products of media expert, language expert, and material expert

The validation results are presented in the form of a questionnaire with evaluation criteria ranging from very feasible to very feasible for use. In addition, validators are asked to provide comments or suggestions based on the media used by researcher.

Table 4.1 Names of Validator

Names of Validators	Job Title	Institute
MI	Asisten Ahli	Universitas PGRI Palembang
SM	Lektor	Universitas PGRI Palembang
RI	Guru	Universitas PGRI Palembang

c) Prototype Descripton

Revisions from the media expert validator, Mr. Dr. Mulyadi, M.A to developed spinning wheels media are objects that help the wheels spin, or said to be a clock should be replaced with small arrows, so that when playing it is easy to use and does not make it stop or difficult to rotate. The spinning wheels are replaced with something better, such as a round board that can be hung on the wall. The picture of the ball game that serves to make

students play one more time, just use one and replace it with an occupational character image. For the image and writing part, it is slightly enlarged so that students can see clearly.

From the assessment analysis, the data obtained by the media expert validators, material experts, and language expert are presented in the following table:

Table 4.7 Media Expert Data Acquisition

Validator	Expert Validation	Score (%)
MI	Media Expert	82,4%
Maximum Scores		103
Number of respondent answer Score		5 X 25 = 125
Category		**Valid**

The media expert validation assessment analysis can be determined in the following formula (Mubarok & Mintohari, 2023):

P = F/N x 100%

P = 103/125 X 100%

P = 82,4%

Table 4.8 Language Expert Data Acquisition

Validator	Expert Validation	Score (%)
SM	Language Expert	80%
Maximum Scores		100
Number of respondent answer Score		5 X 25 = 125
Category		**Valid**

The language expert validation assessment analysis can be determined in the following formula (Mubarok & Mintohari, 2023):

P = F/N x 100%

P = 100/125 X 100%

P = 80%

Table 4.9 Material Expert Data Acquisition

Validator	Expert Validation	Score (%)
RI	Material Expert	87,2 %
Maximum Scores		109
Number of respondent answer Score		5 X 25 = 125
Category		**Valid**

The material expert validation assessment analysis can be determined in the following formula (Mubarok & Mintohari, 2023):

P = F/N x 100%

P = 109/125 X 100%

P = 87,2%

Based on the results of the assessment of the three validators, the total score 95,4%, a spinning wheels media is declared valid and suitable for use in students′ speaking class.

4. Implementation

Researcher conducted test in the tenth grade of SMK, to determine the practicality and effectiveness of spinning wheels media products. These stage consist of:

a. Practicaliity Test

At this point, the product is being tested by researcher to determine if spinning wheels is a viable medium. One-to-one test was conducted on 3 students and a small group test.

Table 4.13 Name of Student Response

No	Students	Score	Percentage
1	NN	65	86,6%
2	YN	68	90,6%
3	AN	66	88%
4	MR	66	88%
5	NM	67	89,3%
6	MS	64	85,3%
7	IF	69	92%
8	NA	67	89,3%
9	MK	63	84%
10	MU	63	84%
Total Score	: 877,1		
Score Average	: 95,3%		
Criteria	**: Very Practical**		

The results of the student response questionnaire sheet that has been done previously obtained an average percentage score of 95,3%. Based on the criteria for interpreting the practicality score, it can be concluded that the spinning wheels learning

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media developed by researcher is categorized as ″Very practical″.

b.   Effectiveness Test

This large group test aims to determine the potential effects of the media developed by spinning wheels. After going through the validation process, researcher explained the descriptive text material related to the occupational character image on the spinning wheels. Researcher made groups of students, each group consisted of 4 − 5 students, then the researcher gave an oral question test in the form of educational games using spinning wheels media. Each student gets two questionnaire on the descriptive text question sheet to answer.

The results of student tests using spinning wheels media of tenth grade field trials obtained an average score 89,1%. Based on the level of scoring the effectiveness of the potencial score, the classical presentation category can be concluded that the score can be categorized as ″Very effective″.

5.   Evaluation

The purpose of this stage is to make revisions that have been suggested by previous validators, as well as to find out the strengths and weaknesses of the spinning wheels media developed by researcher. After making several revisions according to the suggestions of the validation experts, the next stage is filling out the validation questionnaire sheets by the validation experts, and the last stage is implementation.

5.   CONCLUSION

This research was conducted at Madyatama Vocational High School Palembang, on June 12th to 14th, 2024. The researcher conducted an interview with the students′ English speaking ability. The researcher found a problem in making English, students experience full of fear when they want to speak English, the fear is caused by students who are not confident when speaking English. in this place, researcher found a solution to develop spinning wheels because students can actively participate in the learning process.

The results of the development of spinning wheels media for speaking class are declared valid score of 95,4%. The practicality value gets a percentage score of 95,3% with very practical criteria. The effectiveness value gets a percentage score of 89,1% with a very effective category.

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