Media Fun Thinkers Based on Vocabulary Problems for Grade II Students on Theme 2 "Playing in My Environment"

Gusti Ayu Winawatiningsih[1*], I Gusti Ayu Tri Agustiana[2], I Ketut Dibia[3]

[1,2,3] Elementary School Teacher Education Study Program, Ganesha University of Education, Singaraja, Indonesia

ABSTRAK

Minimnya ketersediaan media pembelajaran inovatif yang mampu memuat materi secara efektif berdampak pada rendahnya motivasi belajar serta pemahaman siswa terhadap materi. Penelitian ini memiliki tujuan untuk merancang media Fun Thinkers untuk siswa SD kelas II pada tema 2 bermain di lingkunganku yang teruji validitasnya. Jenis dari penelitian ini adalah penelitian pengembangan (RnD). Penelitian pengembangan ini menggunakan model ADDIE. Subjek penelitian ini adalah 2 orang ahli materi soal, 2 orang ahli media, 2 orang praktisi, dan 7 orang siswa kelas II SD. Metode pengumpulan data pada penelitian ini menggunakan metode kuisioner dengan penyebaran instrumen rating scale berskala 5. Kemudian, data yang diperoleh dianalisis dengan menggunakan rumus mean untuk mengetahui rata-rata skor validitas media Fun Thinkers. Rata-rata skor ahli materi soal adalah 4.43, ahli media 4.93, dan praktisi 4.6. Sehingga, secara keseluruhan hasil validitas media Fun Thinkers berbasis soal kosakata berada pada rentangan 4,01 < x < 5,01 degan kualifikasi sangat valid. Berdasarkan analisis tersebut media Fun Thinkers berbasis soal kosakata untuk siswa SD kelas II pada tema 2 Bermain Di Lingkunganku layak untuk digunakan dalam proses pembelajaran. Implikasi pada penelitian ini yaitu adanya media fun thinkers untuk siswa SD kelas II pada tema 2 bermain di lingkunganku memiliki kualifikasi sangat baik. Media ini dapat digunakan dalam proses pembelajaran pada topik tema 2 bermain di lingkungan sekolah.

ABSTRACT

The lack of availability of innovative learning media that can load material effectively has an impact on the low motivation to learn and students' understanding of the material. This research has a goal to design Fun Thinkers media for grade II elementary school students on theme 2 playing in my environment which has been tested for validity. The type of this research is development research (RnD). This development research uses the ADDIE model. The subjects of this study were 2 subject matter experts, 2 media experts, 2 practitioners, and 7 second-grade elementary school students. The data collection method in this study used a questionnaire method with a 5-scale rating scale instrument spread. Then, the data obtained were analyzed using the mean formula to determine the average validity score of the Fun Thinkers media. The average score of material experts is 4.43, media experts are 4.93, and practitioners are 4.6. Overall, the results of the validity of the Fun Thinkers media based on vocabulary questions are in the range of 4.01 < x < 5.01 with very valid qualifications. Based on this analysis, the Fun Thinkers media based on vocabulary questions for grade II elementary school students on the theme 2 Playing in My Environment is suitable for use in the learning process. This research implies that the existence of media fun thinkers for elementary school students in grade II on theme 2 playing in my environment has very good qualifications. This media can be used in the learning process on the topic of theme 2 playing in the school environment.

1. INTRODUCTION

Media are various types of components in the student environment that can stimulate learning (Nahdi & Jatisunda, 2020; Rusydiyah et al., 2021). Media is one of the most important elements in the learning process, media is a learning resource used by teachers to assist in deepening students' insight, with this type of learning media by teachers can be used as material in providing knowledge to students (Ahmad et al., 2021; Zaenuri et al., 2017). The use of learning media is used to foster student interest in learning new things about the learning material delivered by the teacher so that they can easily understand it (Rusydiyah et al., 2021; Setiyani et al., 2020). Interesting learning media for students can be a stimulus for students in the learning process (Arshad et al., 2021; Hamidah et al., 2020). Management of learning aids is very much needed informal educational institutions. Learning media is a medium used to facilitate the learning process carried out by educators in delivering material to students, learning media can stimulate thinking skills, interest, and motivation to learn students so that learning activities become more meaningful and conducive

*Corresponding author.
E-mail addresses: gustiayuwinawatiningsih17@undiksha.co.id (Gusti Ayu Winawatiningsih)

(Adi & Widodo, 2018; Atmojo et al., 2020). The existence of learning media in learning is very influential on the quality of learning, through the existence of media can increase one's understanding and reduce misunderstandings about the things or materials discussed, as well as being able to increase students' enthusiasm for learning (Angraini, 2017; MS et al., 2017). Media can be said to be innovative when the use of media can involve many of the students' senses (Wati & Widiansyah, 2020; Wulandari et al., 2020). In addition, good learning media to support the learning process must adapt to the applicable curriculum materials, make or choose media by considering prices that are not too expensive, and have ease of use (Adi & Widodo, 2018; Atmojo et al., 2020). Thus, the teacher as an educator is expected to be able to provide learning media in every lesson, so that the learning process carried out can provide meaning for students, considering that the media has a very vital function in learning.

However, in practice, different facts are found, in the learning process that has not been used optimally by learning media. Moreover, in online learning that is currently being carried out, the use of learning media is very much needed in achieving learning objectives and increasing students' enthusiasm for learning. Whereas in the 2013 curriculum the application of learning media is very important because in the learning process in the 2013 curriculum the teacher acts as a facilitator who helps students find concepts or knowledge independently. This happens because teachers as educators have not been able to design and utilize innovative learning media to the fullest. This is supported by the results of observations made to class II teachers at SD Gugus V, Buleleng District, which showed that students were still learning to use textbooks, videos, and pictures only. There are no media that is specifically used on theme 2 play in my environment. The unavailability of media that is specifically used in theme 2 playing in the environment makes students less enthusiastic in the learning process. The results of distributing questionnaires conducted in SD Gugus V, Buleleng District, obtained the fact that 92% of teachers agreed that the development of innovative media that was able to cover learning materials as needed. Meanwhile, students stated that 97% of the material contained in student books needed to be developed into media forms such as media. If this continues, it will have an impact on decreasing the enthusiasm for learning from students, so that the learning process will no longer provide benefits to students.

One solution that can be done in overcoming the above problems is to design a media that can increase students' enthusiasm for learning in participating in learning, specifically on Theme 2 Playing in My Environment. One type of media that is appropriate and able to increase students' enthusiasm for learning in learning Theme 2 Playing in My Environment is a vocabulary-based Fun Thinkers media. Some of the advantages of Fun Thinkers media are that it is easy to carry anywhere, with an attractive appearance, and accompanied by cartoon images that match the topic of theme 2 playing in my environment and natural resources according to the material for grade II elementary school. Media fun thinkers use 2 materials, namely the box frame is made of wood and the book is made of paper which is designed as attractively as possible according to the character of elementary school students. The media is packaged in a box-shaped place and can be folded properly in a bag equipped with quiz game questions in the book containing learning materials (Batlolona et al., 2021; Sutiarso et al., 2017). This solution is supported by several relevant studies. Based on the analysis that has been done, it can be concluded that the Fun Thinkers Book media can be used as a medium to support learning (Riani et al., 2019). The student's response to the feasibility of the bulletin in the form of an integrated science pocketbook that was produced was proven to be suitable for use as a learning medium based on the results of student responses carried out on class VIII students of SMP Negeri 7 Bandar Lampung and SMP Negeri 21 Bandar Lampung, totaling 40 students (Asyhari & Silvia, 2016). The picture storybook learning media "It's fun to help" to increase the reading interest of grade 2 MI students is suitable for use (Apriliani & Radia, 2020).

Based on the results of the study, it can be concluded that there are differences in the emotional development of children between children who use picture storybooks and the results of children's emotional development using storytelling learning activities (Mithen et al., 2021; Ngura et al., 2020; Rosana et al., 2017). Based on the results of the study, the researcher developed a media design in the form of a montage-based picture storybook. The montage-based picture storybook "The Adventures of Si Unyil" is effective on student learning outcomes with a count of 7,108 and ttable 2,052 (Faroh & Setiawan, 2018; Sangsawang, 2020; Sutiarso et al., 2017). Based on the results of the feasibility assessment of media experts, linguists, and material experts. All experts stated that the product developed was suitable for use in learning mathematics at the elementary level with the category "Very feasible" (Garad et al., 2021; Lubis & Dasopang, 2020; Zulfiani et al., 2020). Based on the results of the research and discussion that have been explained, it can be concluded that there is a significant influence in the use of picture storybook media on the speaking ability of children aged 4-5 years in TK-ABA Pringwulung Yogyakarta (Ramadhanti & Yanda, 2018; Ratnasari & Zubaidah, 2019; Setiyani et al., 2020). Based on the results of the research that has been done, it can be concluded that the development of an android-based picture word book to improve the reading ability of grade II students on writing material in the valid category or suitable for use (Andrajati et al., 2020;

Arshad et al., 2021; Haristiani & Rifa'i, 2020). The use of picture storybooks as a source of reading for students at SDN Sukoharjo 2 is quite optimal because in every Indonesian language lesson in grades 1-3 the use of picture storybooks reaches 80% and in grades 4-6 the use of picture storybooks reaches 65% (Adipta et al., 2016; Batlolona et al., 2021; Hamidah et al., 2020). The creative thinking ability of second-grade elementary school students after participating in learning using illustrated story media on Fractions material experienced positive changes marked by a significant increase (Herayanti et al., 2017; Mawanto et al., 2020; Rusydiyah et al., 2021). However, there are still some shortcomings in the media development that has been done previously, starting from the design to the absence of an evaluation process that has been carried out. Therefore, in the development of the Fun Thinkers media, this time it was developed by integrating vocabulary questions as an evaluation process carried out and further optimizing the design of the media.

This development research resulted in a Fun Thinkers learning media based on vocabulary questions for second-grade elementary school students on Theme 2 Playing in My Environment. The design of this learning media aims to improve students' understanding of the material being taught, as well as increase students' enthusiasm for learning. The characteristics of the media to be developed are Fun Thinkers media based on second-grade elementary school vocabulary questions on Theme 2 Playing in My Environment, the cover of the Fun Thinkers media is designed according to the material contained in the book content with interesting and bright color compositions, there are instructions for Fun Thinkers media to make it easier for users to use it, there is a table of contents from the Fun Thinkers media, there are questions directly in the book on the left sheet contained in a box of 16 pieces and the answer sheet on the right sheet, in the upper left corner of the question sheet, namely sheet on the left there are materials and instructions, in the upper right corner of the answer sheet there are learning objectives and answer keys, the Fun Thinkers media developed has a size of 26 x 21 cm on the cover sheet, on the content it has a size of 40.5 x 26 cm, while for media it has a size of 40.5 x 26 cm. Fun Thinkers measures 19 x 19 cm on the frame and 4 x 4 cm on the beam, the material used in the media for fun thinkers, namely glossy paper and on media using acrylic, and as a complement to the media for Fun Thinkers, there is a match-frame in the shape of a box and behind the blocks filled with colors.

This study aims to produce a prototype of Fun Thinkers learning media based on vocabulary questions for second-grade elementary school students on Theme 2 Playing in My Environment and to find out the validity of the learning video media that has been developed. Theoretically, this research is expected to be able to contribute theoretical information in developing theme learning media in elementary schools, especially in the subject matter of Theme 2 Playing in My Environment. Then, the Fun Thinkers learning media based on vocabulary questions for grade II elementary school students on Theme 2 Playing in My Environment is expected to be able to provide new knowledge and facilitate the delivery of material for teachers in creating an active learning atmosphere by guiding students to increase their enthusiasm for learning.

2. METHOD

The type of this research is development research (RnD) which is oriented to a product in the form of learning media in the type of Fun Thinkers book. The model used in this development research is the ADDIE development model. This model was chosen based on the purpose of the research conducted, which is to produce a product in the form of Fun Thinkers learning media based on vocabulary questions. The ADDIE model is a model that emphasizes the relationship between each component that interacts with each other according to the existing phases (Mayub et al., 2020; Nahdi & Jatisunda, 2020). The implementation of this research was carried out in SD Cluster V, Buleleng District. The data collection method used in this study was a questionnaire and an armature. The subjects in this study consisted of 2 subject matter experts, 2 media experts, 2 practitioners, and 7 second-grade elementary school students. Data analysis in this study used two types of data analysis methods, namely descriptive qualitative statistical analysis and quantitative descriptive analysis using the average formula (mean). The data generated through qualitative descriptive analysis is in the form of descriptive data or words, and the data generated through quantitative descriptive analysis is the level of validity of the media itself. This development research consists of 3 stages, namely the Analyze stage, the Design stage, and the Development stage. The implementation and evaluation stages of this research were not carried out considering the world situation which was being hit by the Covid-19 pandemic. Analyze stage, at this stage, there are several analyzes carried out namely curriculum analysis, analysis of student needs, and analysis of media use (Mulyanti et al., 2020; Purnami et al., 2021). Curriculum analysis is carried out by reviewing the contents of the syllabus and lesson plans to find out the KI and KD contained in Theme 2 Playing in My Environment. Analysis of student needs is carried out to determine

several aspects including the needs and characteristics of students who are the target of using learning media. Analysis of the use of media, carried out to determine the characteristics of good media.

The Design (design) stage is a follow-up stage from the previous stage, the product developed is Fun Thinkers media (Lesmono et al., 2018; Setiawan et al., 2017). The steps in this stage include making an initial design or initial design, namely the stage that starts from determining the material to be developed in the media, making a media design for fun thinkers, which will be shown and then validated by supervisors and media experts to obtain input or advice. suggestion. In the Development phase, media development is carried out with learning material theme 2 playing in my environment which has been consulted with the supervisor (Mayub et al., 2020; Usmeldi et al., 2017). Regarding the development of this game, the researcher uses steps, namely determining the purpose of developing media, one of which is being able to quickly understand learning materials, determining KI, KD, and material indicators are given in each lesson, compiling media designs to be developed, namely Fun media. Thinkers. After the development was carried out, the assessment was carried out by 2 teachers and 2 lecturers as experts. The data from the expert assessment is then analyzed to determine the feasibility and corrected if there are suggestions or input.

Subjects in this development research consisted of experts, practitioners, and small groups of students. Specifically, the subjects in this study consisted of 2 lecturers with a minimum specification of undergraduate (S1) Elementary School Teacher Education at Ganesha Education University as subject matter experts, 2 lecturers with minimum qualifications of undergraduate (S1) Elementary School Teacher Education at Ganesha Education University as media experts, 2 practitioners who are competent in their fields, and 7 grade II elementary school students to find out the responses from students regarding the learning media that were successfully developed. The data collection instrument used in this study consisted of several aspects of assessment, where these aspects aimed to test the validity of the Fun Thinkers learning media based on vocabulary questions for elementary school students in grade II on Theme 2 Playing in My Environment. These aspects include the use of language, the content of questions, instructions for use, media design, ease of use, media display, and content. Some of the aspects mentioned are used as a reference or guide in the preparation of the validation sheet grid for Fun Thinkers learning media based on vocabulary questions for grade II elementary school students on Theme 2 Playing in My Environment. The grid of instruments used in this study can be seen in Table 1.

Table 1. Grid of Validation Sheets on Media Fun Thinkers

A. Material Expert Validation Instrument Grid			
1	Language use	Quality of language use	1, 2, 3
		Sentence quality	4, 5, 6, 7
2	Fill in the question	The relevance of the question material to basic competencies	8, 9, 10
		The relevance of the question material to the indicators	11, 12
		The relevance of the question material to the level of student development	13, 14
		The relevance of the question material to the language content	15, 16
3	Instructions for use	Instructions clarity	17, 18
		Ease of use of media	19, 20
B. Media Expert Validation Instrument Grid			
1	Media Design	Cover Design	1, 2, 3
		Image quality displayed	4, 5
		The clarity of the displayed text	6, 7, 8
		Media display	9, 10, 11
		Layout	12, 13, 14, 15
2	Language use	Quality of language use	16, 17, 18
3	Ease of use	Media convenience	19, 20, 21
C. Teacher Response Instrument Grid			
1	Media Display	The attractiveness of the media display	1, 2, 3, 4
		Image quality displayed	5, 6
		The clarity of the displayed text	7, 8
2	Contents	The suitability of the material being studied	9, 10, 11, 12, 13
3	Language	Quality of language use	14, 15
4	Ease of use	Media convenience	16, 17, 18
		Instructions clarity	19, 20

	D. **Student Response Instrument Grid**		
1	Media design	Media display	1, 2, 3, 4
2	Language use	The language used is easy to understand	5
3	Contents	The question material on the media is easy to understand	6
		The subject matter can cause feelings	7

(Hashim et al., 2020)

There are two types of data analysis techniques used in this study, namely qualitative descriptive statistical analysis techniques and quantitative descriptive statistical analysis techniques. Qualitative descriptive statistical data analysis techniques produce data in the form of input, criticism, and suggestions that will be analyzed and used as material to improve the learning media developed. The technique of analyzing quantitative descriptive statistical data produces data in the form of numbers. This analysis technique is used to process the data obtained through a questionnaire in the form of descriptive data. This quantitative descriptive statistical analysis method was used to analyze data in the form of scores obtained from the Fun Thinkers Learning Media assessment sheet given to subject matter experts, media experts, practitioners, and small groups of students to get expert agreement on the media developed.

3. RESULT AND DISCUSSION

Result

This development research resulted in Fun Thinkers learning media based on vocabulary questions for second-grade elementary school students on Theme 2 Playing in My Environment which has been tested for validity. This was obtained based on the validity test of the Fun Thinkers learning media based on vocabulary questions for second-grade elementary school students on Theme 2 Playing in My Environment conducted by 2 subject matter experts, 2 media experts, 2 practitioners, and 7-second grade elementary school students. . It is important to test the validity of this product so that the level of validity of the Fun Thinkers learning media based on vocabulary questions for second-grade elementary school students on Theme 2 Playing in My Environment that was developed can be known. The product validity test is carried out through several stages, namely the material expert test through a review of two subject matter experts, the media expert test through a review from two media experts, a review from two practitioners who are competent in their field, as well as a review from 7 grade II students. SD to find out the response about the developed media.

This research uses the ADDIE research model which consists of 5 stages, but the implementation and evaluation stages were not carried out because the world situation was in the COVID-19 pandemic. The first stage is the Analyze stage (analysis), at this stage, there are several analyzes carried out namely curriculum analysis, analysis of student needs, and analysis of media use (Mutia et al., 2018; Rehusisma et al., 2017). Based on the curriculum analysis conducted, the results of the formulation of KI, KD, and Indicators are found in the student book. These results are used as a guide in developing material on the media. The KD formula and indicators can be seen in Table 2.

Table 2. The description of KD and Theme 2 Indicators Playing in My Environment

No.	Lesson Content	Basic Competence (KD)	Indicator
Subtheme 1 Playing in the Home Environment			
1	Bahasa Indonesia	3.2 Describing vocabulary and concepts about the diversity of objects based on their shape and form in Indonesian or regional languages through written, oral, visual, and/or environmental exploration texts.	3.2.1 Determining objects around which are fixed, rough, wet, smooth, and changing.
2	Matematika	3.4 Explain multiplication and division involving whole numbers with products up to 100 in everyday life and link multiplication and division.	3.4.1 Shows the multiplication form.
3	PPKn	3.2 Identify the rules and regulations	3.2.1 Describing the attitude of

No.	Lesson Content	Basic Competence (KD)	Indicator
		that apply in the school.	courtesy and obeying the rules in the home environment.
Subtheme 2 Playing at a Friend's House			
1	Bahasa Indonesia	3.2 Describing vocabulary and concepts about the diversity of objects based on their shape and form in Indonesian or regional languages through written, oral, visual, and/or environmental exploration texts.	3.2.1 Define images that include solids, liquids, and gases.
2	Matematika	3.4 Explain multiplication and division involving whole numbers with products up to 100 in everyday life and link multiplication and division.	3.4.1 Calculate and determine the result of multiplication.
3	PPKn	3.2 Identify the rules and regulations that apply in the school.	3.2.1 Describing manners and rules at a friend's house.
Subtheme 3 Playing in the School Environment			
1	Matematika	3.4 Explain multiplication and division involving whole numbers with products up to 100 in everyday life and link multiplication and division.	3.4.1 Shows the form of division.
2	PPKn	3.2 Identify the rules and regulations that apply in the school.	3.2.1 Describing manners and rules in the school environment.
Subtheme 4 Playing in Tourist Attractions			
1	Bahasa Indonesia	3.2 Describing vocabulary and concepts about the diversity of objects based on their shape and form in Indonesian or regional languages through written, oral, visual, and/or environmental exploration texts.	3.2.1 Determining the diversity of objects in tourist attractions.
2	Matematika	3.4 Explain multiplication and division involving whole numbers with products up to 100 in everyday life and link multiplication and division.	3.4.1 Calculate and determine the result of division.
3	PPKn	3.2 Identify the rules and regulations that apply in the school.	3.2.1 Describe the manners and rules in tourist attractions.

(Anwar et al., 2016)

Based on the analysis of student characteristics through observation, it was found that students were still learning to use textbooks, videos, and pictures only. There are no media that is specifically used on theme 2 play in my environment. The unavailability of media that is specifically used in theme 2 playing in the environment makes students less enthusiastic in the learning process. Based on the analysis of the use of media, the results were obtained in the form of several criteria for developing good media. Several criteria were used such as cover aspects, format, content, language, practicality, and effectiveness. The cover aspect includes cover identity and media attractiveness, format aspect includes media appearance in the form of color, design, layout, and text clarity, content aspect includes material conformity to indicators, material completeness, media clarity in explaining the material, and material attractiveness in the media, the criteria for the language aspect include the use of language, the arrangement of sentences, and the ease with which the media is developed.

The second stage, namely the Design stage, at this stage has succeeded in designing development steps based on the results of the analysis in the previous stage. The initial step taken in this stage is to make an initial design or initial design, namely the stage that starts from determining the material to be developed in the fun thinkers media, making a fun thinkers media design using the Photoshop application which will later be printed and shown. The media fun thinkers developed has a size of 29 cm x 21 cm with a large number of pages, namely 37 pages. The paper used in making fun thinkers media is glossy. The contents of the Fun Thinkers book on the left are the questions and on the right are the answers. In addition to the paper material used, media fun thinkers also use tools in the form of acrylic. The third stage, namely the Development stage, the results at this stage have been able to produce Fun Thinkers learning media based on vocabulary questions based on the design at the design stage, and have been consulted and received criticism/suggestions from supervisors. Some of the inputs received include placing the back cover on the back page, on the cover of the words *Let's Learn With Fun* the letter D uses non-capital letters (lowercase) and the font size is enlarged. The text and background of the sub-theme titles are more contrasted for clarity. The text color is white. After undergoing the revision process, the learning media that have been successfully developed can be seen in Figure 1.

Figure 1. Successful learning media developed

The results of the media validation data analysis showed that each assessment item got an average score on the validity of the matter, media fun thinkers, teacher responses, and student responses with a range of 4.21 Va < 5.00. In the five-scale conversion guideline, each assessment item has very good qualifications, this indicates that the fun thinkers media is valid for use in the learning process in elementary schools. The average score of the validity of the question material is 4.43 with a reliability percentage of 89% having very good qualifications, but the learning materials need to be considered again. The media fun thinkers validity score is 4.93 with a reliability percentage of 103% having very good qualifications, but it is necessary to pay attention to the appearance of the media. The teacher's response assessment score is 4.6 with a reliability percentage of 92% and the student's response is 4.83 with a reliability of 97%, but it is necessary to pay attention to the material contained in the media so that it is easy to understand.

Discussion

This research is development research in the form of developing Fun Thinkers learning media based on vocabulary questions for second-grade elementary school students on Theme 2 Playing in My Environment. The model used in this study is the ADDIE model which consists of five stages, namely analysis, design, development, implementation, and evaluation. The ADDIE model is a model that emphasizes the relationship between each component that interacts with each other according to the existing phase (Hartini et al., 2017; Wilujeng et al., 2020). The selection of this model is based on the purpose of the research conducted, namely to produce a product in the form of Fun Thinkers learning media based on vocabulary questions. The developed product is then tested for validity so that it can be used in learning to help increase students' enthusiasm for learning and increase students' understanding of the material described.

The stages of research using the ADDIE model consist of 5 stages but are only carried out until the development stage due to time constraints and conditions during the Covid-19 pandemic. The analyze stage

is done by analyzing the curriculum, needs, and good use of media. Based on the analysis stage, it was found that the fun thinkers media for elementary school students in grade 2 on theme 2, playing in my environment was good to develop. Media development is adjusted to analyze the needs that have been carried out, namely the unavailability of media that is specifically used in theme 2 playing in the environment makes students less enthusiastic in the learning process. In this analysis stage, several aspects need to be considered in the development process. This design stage is carried out with the design of making media. the initial design or initial design is the stage that starts from determining the material to be developed in the fun thinkers media, making the fun thinkers media design using the photoshop application which will later be printed and shown. Media Fun Thinkers developed has a size of 29 cm x 21 cm with a large number of pages, namely 37 pages. The paper used in making fun thinkers media is glossy. The contents of the Fun Thinkers book on the left are the questions and on the right are the answers. In addition to the paper material used, Fun Thinkers media also uses acrylic tools. The development stage is done by developing the media. The media developed is adjusted to the design that has been made and adjusted to the supervisor. Then after the media has been developed, an assessment is carried out by 2 expert lecturers on the subject matter, 2 media expert lecturers, and 2 teachers by providing media assessment sheets.

From the qualifications obtained, the developed media are in the "very good" qualification. This can be known through the development of appropriate media to be used as learning media for elementary school students. As it is known that elementary school students need concrete objects in learning. This media has benefits, namely the design of fun thinkers learning media can be used as a reference by teachers for the learning process in the classroom so that it can make students better understand thematic learning materials. This is supported by several research results which state that there are differences in children's emotional development between children who use picture book media and the results of children's emotional development using storytelling learning activities (Mithen et al., 2021; Ngura et al., 2020; Rosana et al., 2017). Based on the results of the study, the researcher developed a media design in the form of a montage-based picture storybook. The montage-based picture storybook "The Adventures of Si Unyil" is effective on student learning outcomes with a count of 7,108 and ttable 2,052 (Faroh & Setiawan, 2018; Sangsawang, 2020; Sutiarso et al., 2017). Based on the results of the feasibility assessment of media experts, linguists, and material experts. All experts stated that the product developed was suitable for use in learning mathematics at the elementary level with the category "Very feasible" (Garad et al., 2021; Lubis & Dasopang, 2020; Zulfiani et al., 2020). Based on the results of the research and discussion that have been explained, it can be concluded that there is a significant influence in the use of picture storybook media on the speaking ability of children aged 4-5 years in TK-ABA Pringwulung Yogyakarta (Ramadhanti & Yanda, 2018; Ratnasari & Zubaidah, 2019; Setiyani et al., 2020). Based on the results of the research that has been done, it can be concluded that the development of an android-based picture word book to improve the reading ability of grade II students on writing material in the valid category or suitable for use (Andrajati et al., 2020; Arshad et al., 2021; Haristiani & Rifa'i, 2020). The use of picture storybooks as a source of reading for students at SDN Sukoharjo 2 is quite optimal because in every Indonesian language lesson in grades 1-3 the use of picture storybooks reaches 80% and in grades 4-6 the use of picture storybooks reaches 65% (Adipta et al., 2016; Batlolona et al., 2021; Hamidah et al., 2020). The creative thinking ability of second-grade elementary school students after participating in learning using illustrated story media on Fractions material experienced positive changes marked by a significant increase (Herayanti et al., 2017; Mawanto et al., 2020; Rusydiyah et al., 2021). When compared with some of the studies above, there are differences in the media developed this time, integrating vocabulary questions as an evaluation process carried out and further optimizing the design of the media. In addition, the Fun Thinkers media that was developed this time used Theme 2 Playing in My Environment for the second grade of elementary school as the material. The specifications of the compiled media are also equipped with voice dubbing, and have a size of 26 x 21 cm on the cover sheet, on the contents it has a size of 40.5 x 26 cm, while for Fun Thinkers media it has a size of 19 x 19 cm on the frame and 4 x 4 cm. on the blocks, the materials used in the Fun Thinkers media are glossy paper and acrylic media, and as a complement to the Fun Thinkers media, there is a match-frame in the shape of a box and behind the blocks filled with colors.

This research implies that the existence of media fun thinkers for elementary school students in grade II on theme 2 playing in my environment has very good qualifications. This media can be used in the learning process on the topic of theme 2 playing in the school environment. Teachers must know the characteristics of students, to be able to streamline the learning process. Elementary school students are theoretically at the concrete operational stage, which means that when the learning process takes place students need concrete or real objects to make it easier to understand the subject matter. The existence of this media can provide facilities to students in carrying out the learning process and the objectives of learning can be achieved properly and optimally. The advantages of the media that will be developed are Fun Thinkers media based on elementary grade II vocabulary questions on Theme 2 Playing in My

Environment, the cover of the Fun Thinkers media is designed according to the material contained in the book content with interesting and bright color compositions, there are instructions for Fun Thinkers media. To make it easier for users to use it, there is a table of contents from the Fun Thikers media, there are questions directly in the book on the left sheet contained in a box of 16 pieces and the answer sheet on the right sheet, in the upper left corner of the question sheet, namely the sheet on the left there are materials and instructions, in the upper right corner of the answer sheet there are learning objectives and answer keys, the Fun Thinkers media developed has a size of 26 x 21 cm on the cover sheet, on the content it has a size of 40.5 x 26 cm, while for media it has a size of 40.5 x 26 cm. Fun Thinkers measures 19 x 19 cm in the frame and 4 x 4 cm in the beam, the material used in the theme he's fun thinkers, namely glossy paper and on the media using acrylic, and as a complement to the Fun Thinkers media, there is a match-frame in the shape of a box and behind the blocks filled with colors. However, this research certainly also has limitations in its development, namely the media developed is only made based on the material in the book Theme 2 Playing in My Environment and is intended for second-grade elementary school students because it is developed based on student characteristics so that its use is only those that have the same characteristics, as well as models. which is used in the media fun thinkers book is ADDIE (Analyze, Design, Development, Implementation, Evaluation) but in this development, it is only carried out until development due to financial, time, energy, and conditions limitations. Suggestions for other researchers, this research can be used as a reference by other researchers in developing similar media on different themes. In addition, other researchers can also continue this research at the implementation stage through the experimental stage.

4. CONCLUSION

The developed media is feasible to use with a very good validity category. So that the Fun Thinkers learning media based on vocabulary questions for grade II elementary school students on Theme 2 Playing in My Environment can be used as a reference in overcoming the problem of lack of innovative media which has an impact on students' low enthusiasm for learning when participating in the learning process. Suggestions for other researchers, this research can be used as a reference by other researchers in developing similar media on different themes. In addition, other researchers can also continue this research at the implementation stage through the experimental stage.

5. REFERENCES

Adi, Y. K., & Widodo, A. (2018). Pemahaman Hakikat Sains Pada Guru Dan Siswa Sekolah Dasar. *Edukasi Journal*, *10*(1), 55–72. https://doi.org/10.31603/edukasi.v10i1.1831.

Adipta, H., Maryaeni, M., & Hasanah, M. (2016). Pemanfaatan Buku Cerita Bergambar Sebagai Sumber Bacaan Siswa Sd. *Jurnal Pendidikan: Teori, Penelitian, Dan Pengembangan*, *1*(5), 989–992. http://journal.um.ac.id/index.php/jptpp/article/view/6337/2706.

Ahmad, D. N., Astriani, M. M., Alfahnum, M., & Setyowati, L. (2021). Increasing Creative Thinking of Students by Learning Organization with STEAM Education. *Jurnal Pendidikan IPA Indonesia*, *10*(1), 103–110. https://doi.org/10.15294/jpii.v10i1.27146.

Andrajati, N. H., Anis, M. B., & Mahmudi, A. (2020). Development of Online Thematic Teaching Materials Based on High Order Thinking Skills (HOTS) Subtema of Wealth of Energy Sources in Indonesia. *IJIS Edu : Indonesian Journal of Integrated Science Education*, *2*(2), 152. https://doi.org/10.29300/ijisedu.v2i2.3427.

Angraini, R. (2017). Karakteristik Media Yang Tepat Dalam Pembelajaran Pendidikan Kewarganegaraan (Pkn) Sebagai Pendidikan Nilai. *Journal of Moral and Civic Education*, *1*(1), 14–24. https://doi.org/10.24036/8851412020171116.

Anwar, H., Jamaluddin, J., & A.W., J. (2016). Pengembangan Perangkat Pembelajaran IPA Model 5E Di SMP. *Jurnal Cakrawala Pendidikan*, *1*(1), 142–151. https://doi.org/10.21831/cp.v1i1.8385.

Apriliani, S. P., & Radia, E. H. (2020). Pengembangan Media Pembelajaran Buku Cerita Bergambar Untuk Meningkatkan Minat Membaca Siswa Sekolah Dasar. *Jurnal Basicedu*, *4*(4), 994–1003. https://doi.org/10.31004/basicedu.v4i4.492.

Arshad, A. M., Halim, L., & Nasri, N. M. (2021). Impact of Integrating Science and Engineering Teaching Approach on Students Achievement: A Meta Analysis. *Jurnal Pendidikan IPA Indonesia*, *10*(2), 159–170. https://doi.org/10.15294/jpii.v10i2.29839.

Asyhari, A., & Silvia, H. (2016). Pengembangan Media Pembelajaran Berupa Buletin dalam Bentuk Buku Saku untuk Pembelajran IPA Terpadu. *Jurnal Ilmiah Pendidikan Fisika Al-Biruni*, *5*(1), 1–13. https://doi.org/10.24042/jpifalbiruni.v5i1.100.

Atmojo, S. E., Muhtarom, T., & Lukitoaji, B. D. (2020). The Level of Self-Regulated Learning and Self-

Awareness in Science Learning in the Covid-19 Pandemic Era. *Jurnal Pendidikan IPA Indonesia*, *9*(4), 512–520. https://doi.org/10.15294/jpii.v9i4.25544.

Batlolona, J. R., Nenohai, A. J. W. T., Wenno, I. H., Wartono, W., & Yurdabakan, I. (2021). Merry-Go-Round Techniques in the Inquiry Training Model on Students' Learning Outcomes in Work and Energy. *Jurnal Pendidikan IPA Indonesia*, *10*(2), 178–186. https://doi.org/10.15294/jpii.v10i2.22964.

Faroh, N. N., & Setiawan, D. (2018). Pengembangan Buku Cerita Bergambar Berbasis Montase dalam Pembelajaran IPS Kelas V. *Joyful Learning Journal*, *7*(4), 34–42. https://journal.unnes.ac.id/sju/index.php/jlj/article/view/25089.

Garad, A., Al-Ansi, A. M., & Qamari, I. N. (2021). The Role Of E-Learning Infrastructure And Cognitive Competence In Distance Learning Effectiveness During The Covid-19 Pandemic. *Jurnal Cakrawala Pendidikan*, *40*(1), 81–91. https://doi.org/10.21831/cp.v40i1.33474.

Hamidah, I., Sriyono, S., & Hudha, M. N. (2020). A Bibliometric Analysis of Covid-19 Research using VOSviewer. *Indonesian Journal of Science and Technology*, *5*(2), 209–216. https://doi.org/10.17509/ijost.v5i2.24522.

Haristiani, N., & Rifa'i, M. M. (2020). Combining Chatbot and Social Media: Enhancing Personal Learning Environment (PLE) in Language Learning. *Indonesian Journal of Science and Technology*, *5*(3), 487–506. https://doi.org/10.17509/ijost.v5i3.28687.

Hartini, S., Misbah, M., Dewantara, D., Oktovian, R. A., & Aisyah, N. (2017). Developing Learning Media Using Online Prezi into Materials about Optical Equipments. *Jurnal Pendidikan IPA Indonesia*, *6*(2), 313. https://doi.org/10.15294/jpii.v6i2.10102.

Hashim, S., Masek, A., Abdullah, N. S., Paimin, A. N., & Muda, W. H. N. W. (2020). Students' Intention to Share Information Via Social Media: A Case Study of Covid-19 Pandemic. *Indonesian Journal of Science and Technology*, *5*(2), 236–245. https://doi.org/10.17509/ijost.v5i2.24586.

Herayanti, L., Habibi, H., & Fuaddunazmi, M. (2017). Pengembangan Media Pembelajaran Berbasis Moodle pada Matakuliah Fisika Dasar. *Jurnal Cakrawala Pendidikan*, *36*(2), 210–219. https://doi.org/10.21831/cp.v36i2.13077.

Lesmono, A. D., Bachtiar, R. W., Maryani, M., & Muzdalifah, A. (2018). The Instructional-Based Andro-Web Comics on Work and Energy Topic for Senior High School Students. *Jurnal Pendidikan IPA Indonesia*, *7*(2), 147–153. https://doi.org/10.15294/jpii.v7i2.14245.

Lubis, A. H., & Dasopang, M. D. (2020). Pengembangan Buku Cerita Bergambar Berbasis Augmented Reality untuk Mengakomodasi Generasi Z. *Jurnal Pendidikan: Teori, Penelitian, Dan Pengembangan*, *5*(6), 780. https://doi.org/10.17977/jptpp.v5i6.13613.

Mawanto, A., Siswono, T. Y. E., & Lukito, A. (2020). Pengembangan Media Cerita Bergambar untuk Melatih Kemampuan Berpikir Kreatif Siswa Pada Materi Pecahan Kelas II. *Jurnal Cendekia : Jurnal Pendidikan Matematika*, *4*(1), 424–437. https://doi.org/10.31004/cendekia.v4i1.243.

Mayub, A., Suryani, E., & Farid, M. (2020). Implementation of Discovery Learning Model Based on Calor Characteristic Bricks Mixed by (Durio Zibethinus) and Coconut (Cocos Nucifera) Skin to Improve Students' Cognitive Learning Outcomes. *Jurnal Pendidikan IPA Indonesia*, *9*(2), 287–293. https://doi.org/10.15294/jpii.v9i2.23803.

Mithen, M., Onesimus, O., Arfandi, A., Raeny, R., & Rahmansah, R. (2021). Science Teachers Abilities in Integrating Population and Environmental Education with Science Subjects of Junior High School in Mamasa Regency, Indonesia. *Jurnal Pendidikan IPA Indonesia*, *10*(1), 81–91. https://doi.org/10.15294/jpii.v10i1.27012.

MS, B., Rahmawati, S., & Wardani, S. (2017). The Development of A Learning Media for Visualizing the Pancasila Values Based on Information and Communication Technology. *Jurnal Cakrawala Pendidikan*, *36*(3), 502–521. https://journal.uny.ac.id/index.php/cp/article/view/12748.

Mulyanti, B., Purnama, W., & Pawinanto, R. E. (2020). Distance Learning in Vocational High Schools during the COVID-19 Pandemic in West Java Province, Indonesia. *Indonesian Journal of Science and Technology*, *5*(2), 271–282. https://doi.org/10.17509/ijost.v5i2.24640.

Mutia, R., Adlim, A., & Halim, A. (2018). Pengembangan Video Pembelajaran Ipa Pada Materi Pencemaran Dan Kerusakan Lingkungan. *Jurnal Pendidikan Sains Indonesia*, *5*(2), 110–116. https://doi.org/10.24815/jpsi.v5i2.9825.

Nahdi, D. S., & Jatisunda, M. G. (2020). Analisis Literasi Digital Calon Guru Sd Dalam Pembelajaran Berbasis Virtual Classroom Di Masa Pandemi Covid-19. *Jurnal Cakrawala Pendas*, *6*(2), 116–123. https://doi.org/10.31949/jcp.v6i2.2133.

Ngura, E. T., Go, B., & Rewo, J. M. (2020). Pengaruh Media Pembelajaran Buku Cerita Bergambar Terhadap Perkembangan Emosional Anak Usia Dini. *Jurnal Ilmiah Pendidikan Citra Bakti*, *7*(2), 118–124. https://doi.org/10.38048/jipcb.v7i2.94.

Purnami, W., Ashadi, A., Suranto, S., Sarwanto, S., Sumintono, B., & Wahyu, Y. (2021). Investigation of Person

Ability and Item Fit Instruments of Eco Critical Thinking Skills in Basic Science Concept Materials for Elementary Pre-Service Teachers. *Jurnal Pendidikan IPA Indonesia*, *10*(1), 127–137. https://doi.org/10.15294/jpii.v10i1.25239.

Ramadhanti, D., & Yanda, D. P. (2018). Understanding Poetry Through The Use Of Cooperative Learning Model. *Jurnal Cakrawala Pendidikan*, *37*(3), 436–445. https://doi.org/10.21831/cp.v38i3.20675.

Ratnasari, E. M., & Zubaidah, E. (2019). Pengaruh Penggunaan Buku Cerita Bergambar Terhadap Kemampuan Berbicara Anak. *Scholaria: Jurnal Pendidikan Dan Kebudayaan*, *9*(3), 267–275. https://doi.org/10.24246/j.js.2019.v9.i3.p267-275.

Rehusisma, L. A., Indriwati, S. E., & Suarsini, E. (2017). Pengembangan Media Pembelajaran Booklet Dan Video Sebagai Penguatan Karakter Hidup Bersih Dan Sehat. *Jurnal Pendidikan: Teori, Penelitian, Dan Pengembangan*, *2*(9), 1238–1243. http://journal.um.ac.id/index.php/jptpp/article/view/9964.

Riani, R. P., Huda, K., & Fajriyah, K. (2019). Pengembangan Media Pembelajaran Tematik "Fun Thinkers Book" Tema Berbagai Pekerjaan. *Jurnal Sinektik*, *2*(2), 173. https://doi.org/10.33061/js.v2i2.3330.

Rosana, D., Ramadani, M., & Dewi, K. (2017). The Instrument for Assessing the Performance of Science Process Skills Based on Nature of Science (NOS). *Jurnal Cakrawala Pendidikan*, *36*(3), 435–445. https://journal.uny.ac.id/index.php/cp/article/view/14731.

Rusydiyah, E. F., Indarwati, D., Jazil, S., Susilawati, S., & Gusniwati, G. (2021). STEM Learning Environment: Perceptions and Implementation Skills in Prospective Science Teachers. *Jurnal Pendidikan IPA Indonesia*, *10*(1), 138–148. https://doi.org/10.15294/jpii.v10i1.28303.

Sangsawang, T. (2020). An Instructional Design for Online Learning in Vocational Education according to a Self-Regulated Learning Framework for Problem Solving during the CoViD-19 Crisis. *Indonesian Journal of Science and Technology*, *5*(2), 283–198. https://doi.org/10.17509/ijost.v5i2.24702.

Setiawan, H., Sa'dijah, C., & Akbar, S. (2017). Pengembangan Instrumen Asesmen Autentik Kompetensi Pada Ranah Keterampilan Untuk Pembelajaran Tematik Di Sekolah Dasar. *Jurnal Pendidikan: Teori, Penelitian Dan Pengembangan*, *2*(7), 874–882. http://journal.um.ac.id/index.php/jptpp/article/view/9602.

Setiyani, S., Putri, D. P., Ferdianto, F., & Fauji, S. H. (2020). Designing A Digital Teaching Module Based On Mathematical Communication In Relation And Function. *Journal on Mathematics Education*, *11*(2), 223–236. https://doi.org/10.22342/jme.11.2.7320.223-236.

Sutiarso, S., Coesamin, C., & Nurhanurawati, N. (2017). The Effect of Various Media Scaffolding on Increasing Understanding of Students' Geometry Concepts. *Journal on Mathematics Education*, *9*(1), 95–102. https://doi.org/10.22342/jme.9.1.4291.95-102.

Usmeldi, U., Amini, R., & Trisna, S. (2017). The Development of Research-Based Learning Model with Science, Environment, Technology, and Society Approaches to Improve Critical Thinking of Students. *Jurnal Pendidikan IPA Indonesia*, *6*(2), 318. https://doi.org/10.15294/jpii.v6i2.10680.

Wati, E. K., & Widiansyah, N. (2020). Design of Learning Media: Modeling & Simulation of Building Thermal Comfort Optimization System in Building Physics Course. *Jurnal Pendidikan IPA Indonesia*, *9*(2), 257–266. https://doi.org/10.15294/jpii.v9i2.23504.

Wilujeng, I., Tadeko, N., & Dwandaru, W. S. B. (2020). Website-Based Technological Pedagogical And Content Knowledge For Learning Preparation Of Science Teachers. *Jurnal Cakrawala Pendidikan*, *39*(3), 545–559. https://doi.org/10.21831/cp.v39i3.31228.

Wulandari, Y., Ruhiat, Y., & Nulhakim, L. (2020). Pengembangan Media Video Berbasis Powtoon pada Mata Pelajaran IPA di Kelas V. *Jurnal Pendidikan Sains Indonesia*, *8*(2), 269–279. https://doi.org/10.24815/jpsi.v8i2.16835.

Zaenuri, Z., Sudarmin, S., Utomo, Y., & Juul, E. (2017). Habituation Model of Implementing Environmental Education in Elementary School. *Jurnal Pendidikan IPA Indonesia*, *6*(2), 206. https://doi.org/10.15294/jpii.v6i2.10200.

Zulfiani, Z., Suwarna, I. P., & Sumantri, M. F. (2020). Science Adaptive Assessment Tool: Kolb's Learning Style Profile and Student's Higher Order Thinking Skill Level. *Jurnal Pendidikan IPA Indonesia*, *9*(2), 194–207. https://doi.org/10.15294/jpii.v9i2.23840.

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