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DEVELOPMENT OF FLIPBOOK BASED SMART CARD LEARNING MEDIA IN SCIENCE LEARNING TO IMPROVE STUDENT LEARNING MOTIVATION CLASS III SD

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ABSTRACT

This research is research Research and Development (R&D). This study uses the Four D development model. In this study it was only carried out at the development stage. This research was conducted in class II at SD IT Hamas Stabat. The research was carried out in the even semester of the 2021/2022 school year. The subjects in this study were 20 grade II students at SDIT Hamas, 11 male students and 9 female students. The object in this study is flipbook based smart card learning media. Data collection techniques in this study were observation, interviews, tests, questionnaires and documentation. The stages in the four D development model are define, design, develop, disseminate. The results of the validation test by experts, namely media experts, were 89.00%, while the results of the material validation test were 88.06%. The results of material validation and media validation are categorized as very feasible. The results of student learning motivation on flipbook-based smart card learning media amounted to 79.07%.

Keywords: Learning Media, Smart Cards, Flipbooks, Learning Outcomes.

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INTRODUCTION

Education is currently progressing and developing. This is due to the development of the times. Currently, we have entered the era of the industrial revolution 4.0. Where students are required to be more sensitive and active to get information. This is in line with (Hanannika & Sukartono, 2022) the times are mainly related to the era of the industrial revolution 4.0 which requires students to be sensitive to information disclosure, computerization, computing, and automation. To involve students actively in the classroom, teachers must be creative and innovative in conducting learning (Iswara et al., 2021). Teachers must also use the media in order to stimulate students to participate in teaching and learning activities. So that students can take part in teaching and learning activities properly, the teacher must provide facilities, namely learning media. This is in line with (Nadzif et al., 2022) one of the important facilities in learning is learning media. Learning outcomes are changes in behavior after going through a teaching and learning process that covers the cognitive, affective and psychomotor fields.(Ratno S, 2022) Learning media is a form of aids in the learning process (Fridayanti et al., 2022). Whereas (Tomi & Jamilah, 2020) Learning media as a tool is very necessary for a teaching process. The use of learning media can stimulate new desires and interests, generate motivation, stimulate learning activities, and even have a psychological impact on students (Zagoto et al., 2019). Based on observations made on third grade teachers at SD IT Hamas, it is known that teachers have not used instructional media in teaching and learning activities in the classroom. So that students are not interested in following the learning process. And there are still students who play alone when the teacher gives the material. Lack of concentration and motivation of students in participating in learning activities.This is in line with (Permana & Kasriman, 2022) lack of concentration and motivation from students.

One of the learning media that can make students interested is by using smart card learning media. Smart cards are media that are designed similarly to card media but contain pictures of letters, animals, and colors that will train children's memory and the mindset of children who are still in the process of growing, besides that pictures can train children's creativity (educenter), so that the right brain and left brain will work, and the child will not get bored learning because it is accompanied by learning (Permana & Kasriman, 2022). Whereas (Wasliyah & Kusniawati, 2019) Smart cards are cards that contain pictures that are usually used by school children to improve reading skills and recognize objects. One of the software that will be used in smart card learning media is flipbook.

As for the reasons the researcher chooses pem media smart card learning, because grade III students are still in the developmental stage, where at this stage students are still developing concepts, students are still dependent on objects in their surroundings. (Purwaningtyas & Mardati, 2020) the reason for choosing the media is inseparable from the fact that grade III students are still in the stage of concrete operational development, namely in the process of development, the process of generating ideas, the development of existing concepts still depends on objects. and concrete examples around it.

It is hoped that the use of smart card learning media can increase student learning

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motivation.Motivation to learn is a psychological factor that is non-intellectual. Someone who has
intelligence is high enough, can fail due to lack of motivation in learning (Arianti, 2019).

Based on the description above, the researcher will develop flipbook-based smart card learning media to increase the learning motivation of class III students of SD IT Hamas.

RESEARCH METHODS

This research is researchResearch and Development (R&D). This study uses the Four D development model. In this study it was only carried out at the development stage. This is because in this study it only develops and produces a product and will be validated by experts.

This research was conducted in class II at SDIT Hamas Stabat. The research was carried out in the even semester of the 2021/2022 school year. The subjects in this study were 20 grade II students at SDIT Hamas, 11 male students and 9 female students. The object in this study is flipbook-based smart card learning media. Data collection techniques in this study were observation, interviews, tests, questionnaires and documentation.

Table 1. Likert Scale Assessment Criteria

No	Score	Qualification
1	5	Very Worth it
2	4	Worthy
3	3	Decent Enough
4	2	Less Eligible
5	1	Very Unworthy

To test the validation results of flipbook-based smart card learning media experts, the following formula can be used:

$$p = x\ 100\%\frac{\sum R}{N}$$

Information:

P = Presentation of the score sought (results are rounded up to an integer)

ΣR = Number of answers given by the validator/selected options

N = Total maximum score

Table 2. Categories of Flipbook Based Smart Card Learning Media Validation

No	Score	Category
1	81% - 100%	Very Worth it
2	61% - 80%	Worthy
3	41% - 60%	Pretty decent
4	21% - 40%	not feasible
5	0% - 20%	Not feasible

(Kesumawati et al., 2022)

Table 3. Criteria for Student Learning Motivation

No	Score	Criteria
1	76 - 100	Tall
2	51- 75	Currently
3	0 – 50	Low

(Fadillah, 2018)

RESEARCH RESULTS AND DISCUSSION

This research will develop flipbook based smart card learning media in science learning to increase student motivation. The stages in this research are:

1. Define stage

At this stage the researcher will collect information in the IT Hamas SD school related to the product to be developed. As for the analysis that will be examined as follows:

a. Preliminary Analysis. Researchers will identify problems that occur in class III SD IT Hamas students. To identify the problem, the researcher

conducted interviews with teachers and third grade students. The interview activity led to learning natural science material for the environment where I live. After the researcher knows the problem that occurs, the researcher then gives suggestions to the teacher so that science learning is even better.

b. Student Analysis. Researchers will identify the problems and obstacles that occur in class III students at SD IT Hamas. After the researchers identified the problems and constraints that occurred in class III students, the researchers found that students' motivation in learning natural sciences in the environment where I lived was very low. This is because students are not interested in participating in teaching and learning activities in class, the teacher has not used learning media, the teacher only provides material with lectures so students feel bored.

c. Task Analysis. The results of the task analysis on science learning about the environment where I live at SD IT Hamas. The benchmark in learning science about the environment where I live is increasing student motivation.

d. Specification of Learning Objectives. Based on the analysis of the tasks that have been carried out by the researcher, the researcher identifies goals that are indicators of achievement in learning activities, namely increasing student motivation in learning natural sciences in the environment where I live.

2. Design Stage

At the design stage, the design of flipbook based smart card learning media is carried out after the define stage has been completed. At the design stage, there is already a flipbook-based smart card learning media draft.

3. Development Stage

The development of flipbook-based smart card learning media that has been developed was validated by 2 experts, namely material experts and media experts. The results of validation by experts can be seen in the table below:

Table 4. Media Validation Results

No	Rated aspect	Percentage %	Eligibility rate
1	Color Sharpness	92.00	Very Worth it
2	Neatness of Material Writing	88.00	Very Worth it
3	Flipbook-based smart card learning media design	87.00	Very Worth it
Whole		**89.00**	**Very Worth it**

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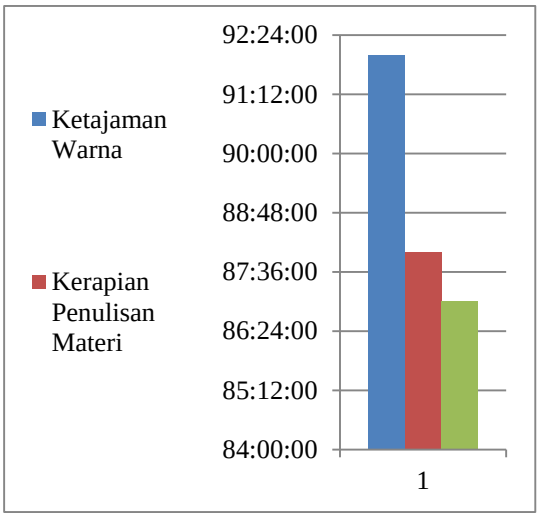
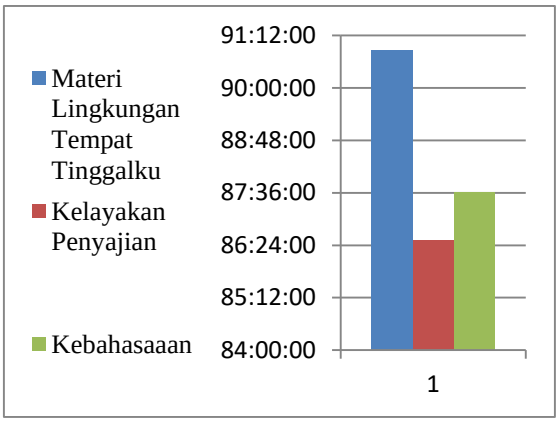


From table 4 and figure 1, it is known that the percentage of media validation results is 89.00%, the percentage results show that flipbook-based smart card learning media is categorized as very feasible. This is in line with previous research namely: (Emawati & Haka, 2020., 2022) from the results of validation by media experts is 95%, it is said that the product is feasible to use. (Batul, 2018) the results of the study show that the average percentage value of the media expert validation is 84.6% and is feasible to use. (Dwiqi et al., 2020) the results of expert reviews of media with very good qualifications with a percentage of 98%.

Table 5. Material Validation Results

No	Rated aspect	Percentage %	Eligibility level
1	My Living Environment	90.52	Very Worth it
2	Eligibility of Presentation	86.31	Very Worth it
3	language	87.36	Very Worth it
	Whole	**88.06**	**Very Worth it**



From table 5 and figure 2, it is known that the percentage of material validation results is 88.06%, the percentage results show that flipbook based smart card learning media is categorized as very feasible. This is in line with previous research namely: (Rahayu, 2018) material expert validation gets a score of 85% including the feasible category. (Widiyasanti & Ayriza, 2018) material on content and objective aspects obtained a score of 23 in the good category and the instructional/learning aspects obtained a score of 33 in the very good category.

Table 6. Results of the Student Learning Motivation Questionnaire

No	Statement	Total score	%
1	Flipbook-based smart card learning media makes me more enthusiastic to take part in learning in the classroom.	44	89.79
2	The content of the material on flipbookbased smart card learning media starts from easy to difficult, and from abstract to concrete.	45	91.83
3	The language used in the flipbook based smart card learning media is simple and easy for me to understand.	43	87.75

No	Statement	Total score	%
4	The display of flipbook-based smart card learning media is very interesting.	47	95.91
5	By using flipbook-based smart card learning media, learning science material from the environment where I live is not boring.	42	85.71
6	Using flipbook-based smart card learning media makes it easier for me to do the exercises independently.	44	89.79
7	I am passionate about independent learning at home using flipbook-based smart card learning media.	45	91.83
8	I prefer learning by using flipbook-based smart card learning media.	43	93.33
Average		**353**	**79.07**

From table 6 above, it is known that the percentage of students' motivation results in flipbook based smart card learning media with an average of 353 with a percentage of 79.07%. Based on the results of these percentages, flipbook-based smart card learning media can increase student learning motivation in learning natural sciences about the environment where I live.This is in line with (Sinaga et al., 2022) there was an increase in learning motivation of 14.62% (94.04> 82.04) in the experimental class and 2.75% (83.79>81.54) in the control class. (Rahmi et al., 2019) the response results of class II students at SDN Sidomulyo were 98.73%. (Suseno et al., 2020) in the use of learning media obtained a positive response of more than 70% of students who took part in the learning process. (Nababan, 2020) the results of the student response questionnaire were categorized as positive with an average of 4.39%.(Dewi et al., 2022)obtaining student response results with a percentage of 93.29% with the criteria of "very interesting".

CONCLUSION

Based on the results of research on the development of flipbook based smart card learning media to increase student learning motivation. This study uses the Four D development model. The stages in the four D development model are define, design, develop, disseminate. The results of the validation test by experts, namely media experts, were 89.00%, while the results of the material validation test were 88.06%. The results of material validation and media validation are categorized as very feasible. The results of student learning motivation on flipbook based smart card learning media amounted to 79.07%. Based on this percentage, it is known that the use of flipbook-based smart card learning media can increase the learning motivation of class III students at SD IT Hamas.

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