

Development of the Pinang Climbing Board Media to Strengthen Communicative Character in 5th Grade Elementary School

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ABSTRACT

The purpose of this research is to develop pin climbing board media by enhancing friendly / communicative characters in 5th grade elementary school Kauman 2 Blitar City which is valid, practical and interesting. This study uses the ADDIE model. The type of data used is quantitative and qualitative data. Data collection instruments in the form of interviews with teachers and two kinds of questionnaires, namely the validation questionnaire and student response questionnaire. The validation questionnaire was given to material experts, media experts, and users with the aim of measuring the level of product validity. Student response questionnaire was used to measure the level of practicality and attractiveness of the product. The results of validation by material experts were 92.5%, media experts were 91% and users were 96.4%. All in the very valid category. Student responses related to the attractiveness and practicality of the product in small-scale trials with students in total respectively 97.2% and 93.75% with the category of very practical and very interesting. The results of the product's attractiveness and practicality in small-scale trials with students and full-time colleagues are 100% and 95.8%, in the category of very practical and very interesting.

Keywords: *pinang climbing boards, communicative character, elementary school.*

1. INTRODUCTION

One form of efforts to improve the quality of education in Indonesia is the holding of curriculum changes. The curriculum that has been implemented since the 2013/2014 school year is currently the 2013 curriculum which emphasizes thematic learning. Thematic Learning is a learning program that is based on one theme/topic and then diligently associated with various aspects or perspectives of subjects that are usually taught in schools (Kadir & Asrohah, 2015). Integrative thematic learning is learning that combines various competencies from various subjects into various themes. The merger is manifested in two ways, namely: (1) the integration of attitudes, skills and knowledge, and (2) the integration of various related basic concepts (Hidayah, 2015). Through this integration, students are expected to be able to test out what is experienced, known, and applied in the thematic learning process in their daily lives. For example, students who can communicate and get along well with groups in the Thematic learning process are also expected to be able to apply it with other people at home and outside of school.

Referring to this, it can be concluded that thematic learning in terms of knowledge, attitudes, and skills can help instill values or character for students.

The results of interviews with Class V teachers at SDN Kauman 2 on December 10, 2019 obtained information about SDN Kauman 2, especially in class V. SDN Kauman 2 has implemented the 2013 curriculum from grade I to grade VI. The obstacles experienced by class V teachers, especially in thematic learning, are (a) limited concrete media available in schools, so teachers only use projected media (youtube, and power point) but if the power goes out the media cannot be used, (b) limited funds for procuring media and worrying if the media can only be used for certain subjects, (c) concrete learning media are still rarely used because they are considered less attractive by students, (d) lack of good interaction and communication between students.

To increase interest, learning motivation, and character in learning, especially in thematic subjects, it is not uncommon to be a challenge for teachers (Putra, A. P., & Pratiwi, I., 2020). Teachers must create a fun learning atmosphere and not monotonous (Ambarwati, R.

D., Bintartik, L., & Putra, A. P., 2020). Efforts that can be taken are by using learning media that have a high allure for students, one of which is by packaging the material into game media.

The media developed is a board game in collaboration with a traditional game, namely the areca climbing board game. This game is inspired by the monopoly game and the traditional game of areca climbing. This media is designed in the form of a board like a monopoly which is modified in such a way that it contains educational values regarding thematic learning materials which can also improve the friendly/communicative character of students. He added that the areca nut climbing is expected so that students can know and participate in preserving Indonesian culture so that it can increase students' love for Indonesian culture.

Previous research that combines learning media with games in the Thematic learning process is the Development of Red-White Monopoly Game Media in Integrative Thematic Learning for Class V SD/MI Students conducted by Nilam Sri Angraheni (2018). The research shows the results of material expert validation with an average percentage of 93% (very good). The results of media expert validation obtained an average percentage of 92% (Very good). User validation results obtained an average percentage of 90% (Very good). The small class trial obtained an average percentage of 96% (Very good) and the results of the large class trial obtained an average percentage of 94% (Very good). So the development of the Thematic learning monopoly media deserves to be used as material in classroom learning.

Based on these problems, a learning media that is fun, interesting, and can emphasize friendly/communicative characters in students is developed. So that the media "Development of the Panjat Pinang Board Media by Strengthening Friendly / Communicative Characters was made on the Sub-theme of National Events of the Colonial Period in Class V SDN Kauman 2 Blitar City".

2. METHOD

This study uses a research and development approach (Research and Development or R & D) ADDIE steps model with the aim of developing a media climbing areca nut that is valid and suitable for use as learning media for students. According to Rusdi (2018:119) this ADDIE development model has five development steps, namely Analysis, Design, Development, Implementation (trial/execution), and Evaluation (evaluation/feedback).

Data collection to find out the problems that occur is carried out through interviews with fifth grade teacher resource persons. The data used in this study is quantitative data in the form of material expert validation assessments, media expert validation, user validation, student and peer response questionnaires during scale

trials. small data, as well as qualitative data in the form of suggestions and input from material experts, media experts, users, students and colleagues. Qualitative data were analyzed by qualitative analysis techniques, while quantitative data were analyzed by percentage analysis. The questionnaire for the validator uses a Likert scale which is described in table 1.

Table 1. Likret Skala dalam Kuesionerfor the review of Material Experts, Media Experts, and Users.

Shoes	evaluation
4	Very good
3	good
2	not good
1	Not very good

Source : Sugiyono (2015:139)

Based on the data obtained, it is processed into percentage form using the formula derived from Akbar (2017:83) as follows.

$$V_{ah} = \frac{Tse}{Tsh} \times 100\% \tag{1}$$

Vah = Expert validation
 Tse = Total empirical score achieved
 Tsh = Total expected empirical score

After calculating and knowing the percentage results, then they are categorized and interpreted according to table 2.

Table 2. Criteria for Categorization of Validation Results

Achievement Rate (%)	category	Test Results / Meaning
85,01 – 100,00	Very valid	Can be used without revision
70,01 – 85,00	Quite valid	Usable, but needs minor revision
50,01 – 70,00	Not valid	Can be used with major revisions
01,00 – 50,00	Invalid	Unusable

Source: Akbar (2017:83)

The questionnaire given to students in the trial aims to determine the level of practicality and attractiveness of the areca climbing board media. The questionnaire was made using the Guttman scale. The Guttman scale has two criteria, namely 'yes' and 'no'. The 'yes' criteria got a score of 1, while the 'no' criteria got a score of 0. The results of the questionnaire were then analyzed using the formula from Yamasari (2010) as follows.

$$P = \frac{Xi}{Xmax} \times 100\% \tag{2}$$

Information :
 P = Percentage score

X_i = Number of scores selected

X_{max} = Total maximum score

Based on data analysis from each respondent, it is further categorized and interpreted according to table 3.

Table 3. Categorization Criteria for Attractiveness and Practicality

Achievement Rate (%)	category	Test Decision
76 P 100	Very interesting/ very practical	Can be used without revision
51 P 75	Attractive / Practical	Usable, but needs minor revision
26 P 50	Less attractive / less practical	Can be used with major revisions
$0 \leq P \leq 25$	Unattractive / impractical	Unusable

Source: Yamasari (2010)

3. RESULT

The development of the areca climbing board media is carried out in the ADDIE stage. An explanation of each stage is presented as follows. The first stage is analysis. Several stages of analysis were carried out, including (1) needs analysis, (2) student character analysis, (3) curriculum analysis, and (4) KD, KI, and indicator analysis. Interviews were conducted to explore data related to needs analysis and character analysis of students. The interview was conducted on Tuesday, December 10, 2019. Based on the results of the interviews, it was found that there were problems in learning, including: (a) limited concrete media available in schools, so teachers only used projected media (youtube, and power point) but if the power goes out the media cannot be used, (b) limited funds for media procurement and worried if the media can only be used for certain subjects, (c) concrete learning media are still rarely used because they are considered less attractive by students, (d) lack of good interaction and communication between students. The solution to these problems was finally agreed upon by developing concrete learning media that were interesting, not boring and increased student interest in learning, could increase the quality of communication between students, and could be used for many other subjects. The next step is to analyze the curriculum, KD, KI and indicators. This is done to make it easier to formulate learning objectives and determine the material.

The second stage is design. The product design stage of the areca climbing board starts from (1) designing the content, where the product content is material and questions based on the results of the analysis, namely the material on Theme 7 Sub-theme 1 National Events of the Colonial Period, learning 5 and 6. The material is packaged in the form of cards. -cards consisting of knowledge cards, question cards, and challenge cards, (2)

designing a presentation, where the product presented consists of several parts, namely the areca climbing board base and the card component compartment designed with the Corel Draw X7 application, a replica of the areca tree with 5 levels are designed with a picture book, component cards (science cards, question cards, and challenge cards) are designed with the Canva application, the game manual is designed with the Canva application, (3) language design, the language used is Indonesian according to the level social and emotional development of fifth grade students, (4) implementation of friendly/communicative characters that appear Advertisement in picture illustrations, command lines on challenge cards and in game guides. Then, the media is consulted with the supervisor and then the product is revised according to the suggestions and input from the supervisor. The next process is the preparation of validation instruments and the preparation of student response questionnaires which aim to determine the level of validity, practicality, and attractiveness of the product. Product validity is assessed by material experts, media experts and users. Meanwhile, the attractiveness and practicality of the product were assessed by students and colleagues based on a questionnaire.

The third stage is development, which includes the development of the areca climbing board media and product validation. The development of the areca climbing board media includes determining the physical form, product printing, product preparation, and consulting with supervisors. Product validation includes validation by material experts, media experts and users (Class V teacher). Quantitative data from the validation of material experts, media experts and users are presented in table 4.

Table 4. Recapitulation of the Validation Results of Material Experts, Media Experts, and Users

No	Aspect	Validator rating percentage			Rate rate
		material expert	media experts	User	
1	Content eligibility	95	-	100	97,5%
2	language	100	-	100	100%
3	language	-	91,6	100	95,8%
4	Aspects of graphics	100	-	100	100%
5	Kerayakan kegrafikan	-	91,6	100	95,8%
6	Curiosity	75	-	75	
7	Physical form	-	90	100	
amount		370	273,2	675	Very Valid
Rat-rate		92,5	91	96,4	Very Valid
category		Very Valid	Very Valid	Very Valid	Very Valid

Table 3 shows that the validators overall rate the same average for each aspect, which is >90%. In addition to quantitative data, it is also supported by qualitative data in the form of comments and suggestions from each validator, which is presented in table 5.

Table 5. Recapitulation of Suggestions and Comments of Material Experts, Media Experts, and Users

No.	Validator	Suggestions/Comments
1	material expert	<ul style="list-style-type: none"> • adding card components to the manual • Enlarged the font size of all card types • Use of simpler sentences • Can be produced in large quantities and can be used by teachers in learning.
2	media experts	<ul style="list-style-type: none"> • The media is good and complete • The choice of colors and illustrations is appropriate for elementary school students • Revising the wrong writing on the areca climbing board • It can already be used in learning.
3	User	<ul style="list-style-type: none"> • The media is good and can be used in classroom learning • During the trial, students must continue to be observed/conditioned, especially for students who are not actively involved in the game so that the goals of friendly/communicative characters can be met.

Based on quantitative and qualitative data, the areca climbing board media is declared to be very valid and can be used without revision. However, to produce maximum products, improvements were made based on suggestions and comments from experts, users and supervisors.

The fourth stage is implementation or testing. This trial was carried out with the aim of knowing the level of practicality and attractiveness of the areca climbing board media. The implementation/trial was carried out 2 times, namely a small-scale trial with 5th grade elementary school students who held 6 children who lived around the house and continued with a small-scale test with a total of 6 people who also lived around the house. a trial was carried out with students and colleagues around the house because the trial coincided with the covid-19 pandemi which resulted in all schools instructing their

students to study from home and there was an appeal from the government regarding Physical Distancing. So that it only comes to small-scale trials with students, it cannot proceed to large-scale trials. Therefore, small-scale trials with colleagues as comparisons and strengthening data from students. After the students and colleagues have finished doing the trials, they are then asked to fill out a questionnaire regarding the practicality and attractiveness of the product. The questionnaire produced two data, namely quantitative data in the form of assessment figures, while qualitative data in the form of comments and suggestions from students and colleagues. Quantitative and qualitative data from students and peers are presented in table 6 and table 7.

Table 6. The Pulling Score of the Areca Climbing Board Media

No.	Aspect	Percentage (%)		Rat-rate	category
		Learners	Peers		
1.	Attraction	97,2	93,75	95,47	Very interesting
2.	Practicality	100	95,8	97,9	Very Practical

Table 7. Comments and Suggestions from Students and Colleagues

No.	Student Comments and Suggestions	Peer Comments and Suggestions
1.	The betel nut climbing board is great. I hope I can play in groups again	I feel a little bored while waiting for another group's turn
2.	The areca climbing board game is very good and fun to play	I like the design and the color combination on the areca climbing board media

Based on tables 6 and 7 it can be said that the areca nut climbing board media is very practical and very interesting. The areca nut climbing board media is suitable for use in the learning process without revision.

4. DISCUSSION

4.1. Validity of Media

Aspects of the areca climbing board media that were validated included (1) content feasibility, (2) language aspect, (3) linguistic feasibility, (4) graphic aspect, (5) stimulation of friendly/communicative character strengthening, (6) physical form, (7) practicality and (8) product attractiveness. Feasibility of content, language aspects, graphic aspects and stimulation of friendly/communicative character strengthening were validated by material experts and users (class teachers). The feasibility of linguistics, the feasibility of graphics, and the physical form were validated by media experts and users (class teachers). The practicality and attractiveness of the product are based on the assessment of students and peers.

According to material experts, media experts, and users (class teachers) the average level of product validation reaches 93.3% with a very valid category and product test decisions can be used without revision. This means that the material presented is scientifically correct. The Basic Competencies (KD) used are in accordance with Permendikbud No. 24 of 2016, the material is packaged in an attractive manner and in accordance with the level of development of class V students, and can help students develop their knowledge and communication. The questions presented are in accordance with the indicators, objectives, content of the material and students' abilities. In line with the opinion of Asyhari (2016) that the requirements for making learning media, one of which is that the media must be appropriate and in accordance with the objectives or applicable competencies.

The graphics on the areca climbing board media are very balanced and adapted to the needs of class V students. This graphic relates to the size of the areca climbing board base, the size of the various card components, the size of the areca tree replica, the size of the guide book, the design and selection of illustration images for the climbing board base, areca nut, the design and selection of illustrations for manuals, as well as the design and selection of illustrations for the various components of the card. The size of all parts of the areca climbing board media is right, not too big or too small. The design and selection of illustration images in all sections of the areca climbing board media is appropriate, clear, harmonious and attractive. This is in line with the opinion of Rahmawati, et al (2016) that the media used in learning must pay attention to aspects of student needs, characteristics and learning styles of students, school conditions, and the ease of using the media.

Stimulation of friendly/communicative characters on the areca climbing board media is manifested in the form of game procedures, illustrative images and sentences on questions. The provision of a friendly/communicative character stimulus aims to foster good communication, easy to understand and a pleasant atmosphere in the learning process. In line with the opinion of Sudrajat (2016), that the character of a friendly/communicative attitude shows a person's ability to convey ideas or thoughts and is able to listen to what other people say in socializing.

The language used in the areca climbing board media product is in accordance with the developmental level of class V students and in accordance with the General Guidelines for Indonesian Spelling (PEUBI). The sentence structure used is clear, simple, uncomplicated and easy to understand. In accordance with the opinion of Arindono & Ramadhani (2013) that the language used in games or games should use Indonesian in a simple language style so that students feel more enjoy and are more involved in the game.

The validation from the material expert obtained a value of 92.5 (%) with a very valid category and the test decision can be used without revision. This value is good when compared to the research that has been carried out by Triastuti, et al. (2017) which obtained a validation value from material experts of 81.82%. Material validation was carried out twice and experienced an increase in scores on aspects of content feasibility, language aspects, and graphic feasibility aspects. Improvements made to the aspect of content feasibility are adding the types of card components to the manual. Improvements to the language aspect by using Correct Spelling Enhanced (EYD) writing. Improvements to the graphic feasibility aspect are to increase the size of the letters on all card components. Aspects of friendly/communicative character did not experience an increase in value because according to material experts it was good and material experts gave suggestions so that during implementation students really had to pay attention to directly assess friendly/communicative characters.

Validation from media experts obtained a score of 91% with a very valid category and the test decisions can be used without revision. This value is already good compared to research conducted by Anggreini (2019) which obtained a score of 89%. Validation is only done once because according to experts the media is good and the media can be used without revision. Media experts suggested that the wrong writing on the areca climbing board could be replaced after implementation.

Validation from users obtained a value of 96.4% with a very valid category and test decisions can be used without revision. This value is already good compared to research conducted by Rakhmayanti & Subagio (2019) which obtained a score of 90%. Validation is only done once because according to media users it is good and feasible to use without revision. The user advises that during the test, students must be observed and conditioned, especially if there are students who are not actively involved in the game so that the goals of friendly/communicative characters can be met.

4.2. The Attractiveness and Practicality Of Media

The assessment of the attractiveness and practicality of the areca climbing board media product was based on a questionnaire on a small-scale trial conducted twice, namely a small-scale trial with elementary school students and a small-scale trial with colleagues. The assessment aspect of the questionnaire is related to the attractiveness, practicality and strengthening of the character possessed by the areca climbing board media. The attractiveness aspect of the small-scale trial with elementary school students scored 97.2%, while the attractiveness aspect of the small-scale trial with peers obtained a score of 100%. The results of the

attractiveness aspect of the two trials were then averaged to obtain an attractiveness score of 98.6% with a very interesting category and product test decisions can be used without revision. This areca climbing board media is interesting in accordance with research conducted by Triastuti, et al. (2017) where combining game elements with learning media can be a tool in understanding the learning process and is considered interesting and fun by students.

The attractiveness of the areca climbing board product is assessed from 6 aspects and indicators. The attractiveness of a small-scale trial with students getting a score percentage of 97.2% with a very interesting category and product test decisions can be used without revision. The attractiveness score on a small-scale trial with students has not been able to reach 100% because there is one student who feels a little difficult to understand the material presented through the areca climbing board media. These students still feel confused with the material delivered through the media. Meanwhile, the attractiveness of small-scale trials with colleagues obtained a score of 100% in the very interesting category and product test decisions can be used without revision. The score can reach 100% because according to all students, the areca climbing board product is very interesting, especially in the aspect of color combinations and the selection of illustration images.

Through the media, the areca climbing board can make students and colleagues more interested in actively participating in thematic learning. So that it can make the process of delivering messages or materials easier. The easier the process of delivering messages or materials, the easier it is for students and colleagues to understand the material. In addition, the use of attractive colors and illustrations can also stimulate enthusiasm and motivation to learn for colleagues and students. So it can be said that the areca climbing board media is interesting and fun to use in the learning process.

Small-scale trials with students obtained a practicality score with a percentage of 93.75%, while small-scale trials with colleagues obtained a practicality score of 95.8%. The results of the practicality of the two trials were then averaged to obtain a practicality score of 94.77% with a very practical category and product test decisions can be used without revision. Prasetya and Khabibah (2016) argue that game learning media that obtain product test decisions without revisions or with minor revisions, then the product can be said to be practical. In addition, the practicality of the media can also be assessed from the activeness of all student activities while using the game media.

The practicality of the areca climbing board media is assessed from two aspects, namely practical use and friendly/communicative character. Practicality in small-scale trials with students getting a score percentage of

93.75%. The practicality score on the small-scale trial with students has not reached 100% because there are three students who have difficulties, one student has difficulty understanding instructions and instructions on the areca climbing board media, one student has difficulty actively participating in learning, and one student find it difficult to express their opinions in groups. Whereas in a small-scale trial with colleagues the practicality aspect obtained a percentage score of 95.8% because there was one colleague who felt bored while waiting for the turn of another group, and one colleague who had difficulty actively expressing his opinion to the group.

The friendly/communicative character aspect has 5 indicators. The friendly/communicative character aspect in the small group trial obtained an average percentage score of 96.66% with a very practical category and product test decisions can be used without revision. Meanwhile, in a small-scale trial with colleagues, the average percentage score was 93.32% with a very practical category and can be used without revision. Friendly/communicative character shows the attitude of students in getting along, expressing opinions and respecting others. Based on the percentage score, it can be concluded that the areca climbing board media can support the improvement of friendly/communicative characters.

5. CONCLUSION

Based on the results of the validation of material experts, media experts and users, respectively 92.5%, 91%, and 96.4%, all three have been included in the very valid category and product test decisions can be used without revision. The assessment of the attractiveness and practicality of the areca climbing board product was carried out by means of small-scale trials with students and small-scale trials with colleagues. The interest in small-scale trials with students and small-scale trials with peers obtained a percentage score of 97.2% and 93.75%, both of which were in the very attractive category, with the product test decision being able to be used without revision. Practicality in small-scale trials with students and small-scale trials with peers obtained a percentage score of 100% and 95.8% respectively, both of which were in the very practical category with product test decisions that could be used without revision. Based on the results that have been obtained, it can be concluded that the areca nut climbing board media with strengthening friendly/communicative characters on the sub-theme of the colonial era national events in class V SDN Kauman 2 Blitar city is very valid, very practical, and very interesting, so it is suitable for use in the learning process.

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