# Development of Tematic Learning Media Based on Smart Card in Pakam Lubuk

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#### Abstract

learning in grade IV SD Advent Lubuk Pakam low use of thematic learning media, the purpose of this study 1) describe the design of the development of smart card learning media 2) test the validity of the development of media media learning smart card 3) know the effectiveness of the use of thematic learning media. Research using Borg and Gall model. 1) Research and data collection 2) Planning, 3) Development of product draft, 4) Preliminary field trials, 5) Revise test results, 6) Field trials, 7) Improved product of field test results, 8) Field execution test, 9) Completion of the final product, 10) Dissemination and implementation This research data based on validation result done by material expert with percentage 91, 0%, validation of media design 91,0% and validation of language transfer 88,3%. The average preliminary test score before using learning media was developed on average pretest yield of 15.8, after using instructional media increased by an average of 81.8. The development of learning media is declared effective and very good. The development of smart card learning media implies increased effective student learning outcomes and can create a more effective learning atmosphere in thematic learning.

Keywords: Learning Media, Thematic, Smart Card

### 1. Background

Education is a complex process, the various problems in the learning process needs to be aligned and stabilized so that learning conditions are created in accordance with the objectives to be achieved and can be obtained optimally. To complement the learning and learning components in schools, teachers should use the media or learning tools to stimulate learning pupils effectively.Effective media as a result of development, gained considerable place and attention for the participants in the form of learning that is implemented in realistic and concrete, thus developing understanding and critical thinking and realizing in the student environment.

Developing learning media students learn about the elements contained in the learning to support the learning process, it takes a tool or learning media as a means of support. The use of tools or learning media is an inseparable part and it is an integration of learning aids including one dynamic element in learning. The position of media aids has an important role because it can help students' learning process. The use of learning media aids, can be concretized and make the learning atmosphere to be interesting. A really good choice or tool solution for learning to be effective, attracting aids or media for self-study is urgently needed to create a healthy quality of humanity through the transfer of verbal knowledge.

Improve the quality of education, the learning process takes place based on the preparations that have been made by educators. Educators should be able to develop, and broaden science, technology and community service to learners through the learning process. Learners involved in the process of learning knowledge are expected through changes both in the areas of knowledge, skills, and values and attitudes.

The success of improving the quality of education in schools is very dependent on the process of teaching and learning in the classroom. Where the role of teachers is very important for the success of teaching and learning process and in achieving learning objectives. Therefore teachers should be able to create a lively classroom atmosphere. So students can make students passionate and diligent in learning. The success of learning to improve the quality of education is the learning media used by teachers in the learning process, because the learning media is an intermediary or introduction of good and pleasant communication between teachers and students. The students' learning spirit will arise when the atmosphere is so fun and learning will be effective, if the students in the learning process are happy in learning. The ability of teachers in designing and implementing learning media is the key to the success of a fun learning process. Learning media is anything that can be used to distribute messages from teachers to students so as to stimulate the thoughts, feelings, interests and interests of students leading to optimal learning process. Media can make something better for the better, or the bad becomes worse, even making something bad becomes not so bad.

Learning media makes it easier for teachers to deliver lesson material and help learners understand the material. Interesting learning media will be able to increase interest and motivation learners learn. The use of media will make thematic learning more varied so that students do not quickly feel bored. Based on observational studies conducted, in SD ADVENT Lubuk Pakam, the thematic learning process on the theme of my place of origin and subtema The environment where I live two learning obtained data that the mastery of student learning outcomes is still low and tend to decrease, this is indicated by the low percentage of students who scored Above the Minimum Exhaustiveness Criteria (KKM) during the last 2 years of study.

The diversity of existing learning resources, does not guarantee the diversity of learning resources used. This is due to the fact that the use of learning resources is still minimally used by teachers, assuming the efficiency of time and material delivered. One of the important things in learning activities is Media Learning media can be interpreted as materials or subject matter arranged systematically based on certain principles and criteria. Learning media need to be owned by a teacher so that the learning done does not deviate from the purpose that has been determined, and for learners to move in the process of learning, learning media have a central role in learning because the success of a teacher in implementing learning depends on insight, knowledge, And the level of creativity

In the process of learning media well. From the observation that has been done by the researcher, the teacher only uses the blackboard and the picture that is in the book as media, the picture is in the book about the area that exist in Java to make students think abstra who can not imagine the condition of the area in Java, the media used in The learning process should be contextual that is about the area of the student environment in order to recognize the student environment that is Deliserdang environment, the media made in this study is in the form of cards in tersebuat presented Text and images in the form of new knowledge for the students that is the material environment of the environment Deliserdang divided into terrain High, lowland, and coastal areas, Teachers should be able to create a vibrant and lively classroom atmosphere in learning performances, because during the thematic lesson many of the material that feels strange, boring, is difficult for students to understand, because with the lecture method that is too Vacuum will make students feel bored and not effective learning. Based on the observations that researchers do in SD ADVENT Lubuk Pakam indicate that the thematic learning process in fourth grade students still have not happened media development in the learning takes place in the classroom.

Students are saturated following classical thematic learning sometimes sleepy due to lack of student activity in the thematic learning process, and based on interviews from some teachers, teachers still have low knowledge about teacher learning media development using only textbooks issued by the education department. The results of interviews conducted with teachers Class IV SD ADVENT Lubuk Pakam less effective thematic lessons and do not activate learners, create a boring classroom atmosphere in thematic lesson learning process only create students as a listener is able to master the theory cognitively that is understanding only memory. Interview with some grade 4 students, students who have been sitting in class VI this year students say teachers on thematic learning in grade IV have not used the media on the theme of my place of residence students say in this case they are difficult to understand in the explanation used by teachers, teachers only Relying on reading books and looking at the pictures in the book. Observations in the classroom, thematic learning less feedback for learners, and media gained by schools from offices very difficult to obtain especially sub themes The environment where I live, To meet the demands of teachers in the area of Lubuk Pakam which will be a collection of thematic teaching media in schools located in Lubuk Pakam region, the development of students' thinking ability has not been pursued in thematic learning. Researchers are interested to hold Smart Learning Thematic Based Teaching Student for Class IV SD in Lubuk Pakam, This matter I intended to provide thematic teaching lessons that are more interesting for learners so that learning becomes more meaningful. It also can improve the quality of learning peruses and can achieve the learning objectives that have been formulated. Whether by developing smart card-based media can improve the quality of eligibility in the theme Thematic learning in fourth grade students ADVENT SD Lubuk Pakam? Is it the development of Thematic Thematic theme theme media and the sub theme of My Smart Living Environment based on the smart card in fourth grade students of ADVENT SD Lubuk Pakam can improve the effectiveness of learning outcomes? There is also the purpose of research. The effectiveness of thematic learning outcomes by using thematic Thematic-based smart card on fourth grade students of SD ADVENT Lubuk Pakam.

#### 2. Theoretical Framework

Learning Media is a systematic lesson material developed by the teacher in the learning process. Learning Media has a structure and a systematic sequence, explaining the intructional structure that will, motivate students, anticipate the difficulties of student learning in establishing the provision of guidance for students to be learned,

giving exercises to learn, providing a summary. The use of media in learning is highly recommended, but in its use not all good media. There are things to be considered in the selection of media, including learning objectives, objectives. Students, the characteristics of the media concerned, time, cost, availability of facilities, context of use, and technical quality. Proper use of media will greatly support success in the learning process. The development of smart card learning media is developed by following the development model of Borg and Gall. One medium that can be used in thematic learning is the smart card media. Smart card media is one of the mold-based media. This learning medium is useful for presenting the memorization of the material presented

## 3. Research Methods

This research belongs to Research & Development (R & D) research type, this research in education is used to develop and validate education product, this research follow a regular and systematic step. The Procedure of Development of Borg & Gall in Nana Syaodih Sukmadinata (2006: 169-170) describes the ten steps of implementing research and development strategies. Research and data collection covering needs measurement, small-scale research, and value-added considerations. Planning is preparing a research plan, covering the capabilities required in the implementation of research, the formulation of objectives to be achieved with such research, design or research steps, and possibilities within a limited scope, the development of product draft. Development of learning materials, learning process, and evaluation instruments, preliminary field testing, field trials at one school with six to twelve test subjects, during observations, interviews and circulation questionnaires, revising the main product revision, Play field testing. Conducting trials in 1 school with 5 to 10 subjects, the quantitative data of the previous teacher's appearance and after using the tried model were collected. Improving the product of field test results. field field testing, implemented in 1 school involving 20 subjects. Testing is done through questionnaire, interview, observation and result analysis, final product revision, dissemination and implementation.

The smart card that has been produced, then evaluated the card product as a Thematic learning resource is validation. Validation is done in two stages. Phase I is a validation by material experts and media experts. Through this stage obtained the product feasibility data and advice from experts. The suggestion is then used for revision of phase I product. The revision result of phase I is used for revision II. The results of both revisions are used for student use trials. For analysis of learning outcomes, the data used is the gain test of Normality N-gain with a normalized average gain value hence can roughly measure the effectiveness of a learning.

### 4 Research result

The results collected in this study are validation data of subject matter experts, linguists and design learning experts as well as data from students. The data collection instruments are questionnaires for material experts, media linguists, media design experts. This can be seen from the scores given on the material content aspect, the material composition encourages this sense to know an average of 3.55 (88.9%). Then the feasibility of design in this section of the validator also gives a very good value of this aspect of the media design aspect by obtaining an average of 3.7 (92.5%), then the language feasibility at the end gives a very good score of 3.4 (85%). The effectiveness of learning result data obtained from pretest result before learning using smart card developed by the researcher, the percentage of students who have not reached the standard of completeness criteria (KKM) is 23 students with average 28,8. This makes the researchers change the system of learning that is using smart cards, where as then given postes to students who achieve the standard score of 21 students on average with an average of 81.1. The average result of N-*score* score of my environment theme learning using smart card learning media has increased. The average result of N- Gain score test result of my ligkung theme learning is 0, 74 and has high criteria.

Learning media play an important role in the implementation of education, and facilitate education in implementing learning and facilitate student learning. The form of learning media is important in the implementation of education, and facilitate education in implementing learning and facilitate student learning.

### 5. Conclusions

- 5.1 Smart card learning media developed using the conceptual theory of Deliserdang environment, based on the assessment by the validator of the assessment criteria is very good on the media Learning, material validator provides 91.0% value, media design member validator 82.00%, and language member validator Value is 76.00%. So it can be concluded that the learning media is feasible in use as a medium of learning in achieving elements of usefulness.
- 5.2 Student learning outcomes with learning media developed through smart cards higher, this is based on the average score gain and postes in class IV before using learning media that is 14.3.
- 5.3 The effectiveness before applying the instructional media has an average of N-*Gain* 0, 16. whereas after applying the instructional medium developed in thematic learning has high criteria. This is based on the average yield of N-gain of 0.77 with high criteria, then the smart card-based learning media effectively

used the learning theme of my residence.

## References

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Table Presetage of Media Learning Validation Results

No	Validator Name	Expert In The Field	Presentase
1	Prof. Dr. Khairil, M.Pd ahli Ahli	Language	76%
2	Dr. Sugiarto M.Si	Material	82%
3	Dr. Baharuddin, ST, M.Pd,	Design Expert	91%
Average percentage			83 %

