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Increasing Students' Learning Motivation in Science Subjects Using Powerpoint Media at SDN 1 Kuala Pembuang II

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Research Article

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ABSTRACT

This research aims to determine the increase in learning motivation of students at State Elementary School 1 Kuala Pembuang II which has experienced very significant changes. This research is very rational because it uses a research method of five steps/development phases including; Analysis, Design, Development or Production, Implementation or Delivery, and Evaluations. Data collection techniques in research use test instruments. Data analysis uses quantitative. Learning media is a tool that is considered good in helping convey information, whether in the form of pictures, videos, or readings packaged in PowerPoint form so that it can increase student learning motivation in any subject, especially Natural Sciences, to students at Kuala Pembuang II Elementary School. Analysis of the use of PowerPoint as a medium can be seen in two tables of research results which show that students are more happy, enthusiastic, and motivated to focus more on receiving information in Natural Sciences lessons.

Keywords: Learning Motivation, Media Use, Increased Motivation.

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INTRODUCTION

The world of technology, which has been developing for a long time, has often become a medium for conveying something to the public, so in implementing the learning process, we tend to say that it is difficult to do, even though basically if we want to stand on it, we can see that technological developments are very helpful in fulfilling learning needs. With technological advances, it requires the world of education to always adapt technological developments to efforts to improve the quality of education, especially adjusting the use of information and communication technology for the world of education, especially in the learning process (Rusman, et al, 2012).

To create a fun learning process, innovation is needed for an educator to create interesting learning media, from simple ones that can be learned by educators (Latuheru 1988). Seeing the many changes that have occurred in the world of education, where the transition period after COVID-19 hit various corners of the world, including in Indonesia, has had a very bad impact on the development of education, one of which is that they are more focused on gadgets, not without reason. One of the ways to prevent or break the chain of transmission of this virus is social distancing, learning is carried out online (in the network). This transition is what makes changes in children's psychological behavior very visible when they return to face-to-face learning. According to experts, motivation is an impulse that exists within an individual which causes the individual to carry out activities or activities to achieve certain goals. Kustandi et al, (2020) stated that the use of media in learning is a learning and teaching process that can trigger students' desires and interests, provide motivation and stimulate the learning process, and have a psychological impact on students. This is in line with Kustandi and Sujipto (2011) who stated that learning media is a tool to improve teaching and learning activities by clarifying the meaning of the messages conveyed, thereby enabling learning objectives to be achieved better and more precisely (Kustandi and Sutjipto, 2011). Moreover, the use of technology-based learning media. Teaching materials are part of learning resources. Teaching materials are all forms of materials used to assist educators in carrying out learning activities. The material in question can be written or unwritten material (Depdiknas, 2010: 7). Abdul Majid (2007: 173) defines teaching materials as all forms of materials used to assist teachers/instructors in carrying out teaching and learning activities. The material in question can be written or unwritten material. Lestari (2013: 3) in Nahdiyatur Rosidah (2013: 3) states that teaching materials are learning resources that currently have an important role in supporting the learning process.

By using PowerPoint is modified into an interesting video or animation according to current demand and has several advantages including, the material is easy to obtain, very simple, that is, easy to learn, videos and PPTs can be made according to the material you want to teach so that participants Students are believed to become interested and grow in motivation to learn because the media used is very interactive for them. PowerPoint is a software application for presentation media using slides and is an application made by Microsoft Office that is used for presentations.

Learning after the pandemic has caused students' motivation levels to decrease, especially when they only hear lectures from teachers. Based on data obtained in March 2023 at Kuala Pembuang II Elementary School, there is a decrease in student activity. This is based on students' lack of motivation to follow the process. learning only covers 40% of what was obtained from a questionnaire distributed to students in class IV of Kuala Pembuang II Elementary School, this is focused on Natural Sciences subjects which contain a lot of explanations both in terms of processes and sequences of events which students need a focus point for. tall one. So this research aims to improve students' task performance, attendance, attendance, and activeness.

METHOD

This research uses the ADDIE development model as a reference in research. The ADDIE development model was chosen because the development stages are quite concise, and efficient, and each stage can be evaluated, and the ADDIE development model is to the needs of researchers because each stage is sequential and the product developed in this research will only be applied in small-scale trials, namely in elementary schools. Negeri 1 Kuala Pembuang II. According to Pribadi (2014), the ADDIE model, as the name suggests, contains several stages that can be used to develop an efficient and effective training program.

In the sense that from the first stage to the fifth stage the application must be systematic. It has a simple and structured nature so that this design model is easy to understand and apply. The stages contained in the ADDIE model consist of (1) analyzing, (2) designing, (3) developing, (4) implementing, and (5) evaluating. The research stages of the ADDIE model can be described as follows:

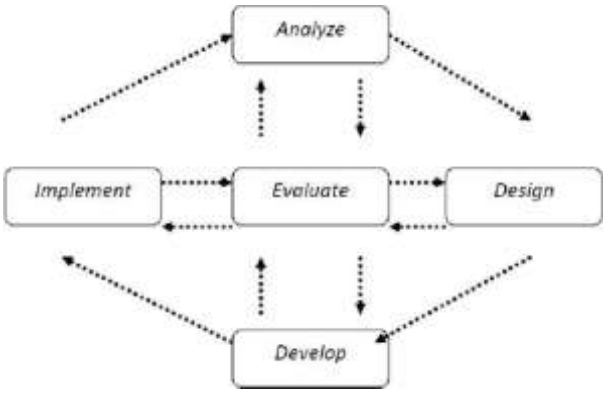

Figure 1. ADDIE scheme (Sugiyono, 2015)

The research was conducted on class IV students at Kuala Pembuang II Elementary School 1, Jalan Ki Hajar Dewantara, Seruyan Hilir District, Seruyan Regency, Central Kalimantan. Data collection is used to obtain data that is relevant, accurate, and can be used appropriately according to research objectives. The data collection technique used in this research was a questionnaire.

RESULTS AND DISCUSSION

Natural Science Learning Tools for Elementary School Students was carried out in Cluster III Seruyan Hilir which consists of 4 Elementary Schools, namely Elementary School-2 Pematang Panjang, Elementary School 3 Pematang Panjang, Elementary School 4 Pematang Panjang, and 4th Elementary School Negri-1 Sungai Bakau is located in Seruyan Hilir Timur District, Seruyan Regency. The geographical conditions of the 4 school areas are in coastal areas, especially the Negri-1 Sungai Bakau Elementary School which is approximately 150m from the coast of the Java Sea. So most of the residents in this area make their living by fishing and farming. The characteristics of the students themselves in learning activities are less active, so serious learning management is needed to create a learning process in the educational unit so that it can provide opportunities for students to learn appropriately and reflect on their identity through an active learning process. innovative, creative, and fun, plus the condition of schools is that on average there are minimal teaching materials and there are no teachers who are willing to take the time to process their learning materials other than just relying on the textbooks in the school.

For this reason, the author is preparing learning tools that will be able to fulfill some of the shortages of teaching materials in schools by developing the Dick & Carey Toolkit which will be outlined in 4 products, namely: (1) Modules (learning materials) which contain integrated Natural Science learning materials. for students in class VI semester 1 of Primary Schools/Madrasah Ibtidaiyah, (2) Media (PowerPoint) which contains pictures and examples of learning material accompanied by explanations, (3) Student Guide contains explanations about the use of the integrated Natural Sciences module for students in class VI semester 1 of Primary School/Madrasah Ibtidaiyah and (4) Teacher's Guide which contains a design of integrated Natural Science learning strategies (interactional design) for students in class VI semester 1 of Elementary School/Madrasah Ibtidaiyah which is equipped with a syllabus.

This product will be developed and tested starting from Draft I Expert Review which consists of an Expert Content Test, an Expert Design Test, Draft 2 Test on individuals (one-to-one) Draft 3 Test on Small Groups, and then the Final which will determine the feasibility of the module with see the results of the pretest and posttest scores. So that the data can truly be accounted for and the results of the development can be used as material for learning activities in schools in general and in cluster III Seruyan Hilir in particular.

In this Draft I design, a product package has been produced in the form of learning materials consisting of modules, media, student guides, and teacher guides, which in general we can describe as follows:

a. Module: the module developed consists of 6 parts starting from module 01 to module 06 which become one package. Each integrated Natural Sciences learning module contains explanations including an Introduction, Objectives, Reading Material, Exercises, Self-Reflection exercise results sheets, Glossary, and Bibliography.

b. Media: in the form of a PowerPoint containing images examples and explanations of learning material that are by the explanation of the content in the module.

c. Student Guide: contains an explanation of the use of the module starting from what is contained in the Introduction, Objectives, Reading Material, Exercises, Self-Reflection exercise results sheet, Glossary, and Bibliography, all explained for the smoothness and convenience of Students in studying the module.

d. Teacher Guide: contains an explanation of Interactional Design from which the teacher starts the learning activities to be implemented consisting of Identifying Needs, Formulating Indicators, Analysis of Competency Standards, Basic Competencies, Learning Strategies, Teaching Materials, Glossary, Bibliography and attachments equipped with grids, questions, and Syllabus.

In Draft 2, a product package has been produced in the form of learning materials consisting of modules, media, student guides, and teacher guides as explained in the outline in Draft I where the products from Draft I have gone through expert testing consisting of content expert test and design expert test and improvements have been made according to input from experts in their respective fields and can now be used as material for further research, namely individual trials (one to one). In discussing Draft 2, conclusions have been drawn on the data obtained from the results of the Draft I trial which was carried out through experts consisting of content expert testing and design expert testing. Based on the results of the content expert assessment as stated in the table above, the percentage of module achievement levels can be calculated as follows:

Table 1. Percentage of Expert Assessment of Learning Content

No	Product name	Percentage (%)	Criteria
1	Module	96	Very good
2	Media (PowerPoint)	92	Very good
3	Teacher's Guide	100	Very good
4	Teacher's Guide (Design Interactional)	100	Very good

After being converted using the conversion table, the percentage level of achievement is in the Very Good qualification. So that teaching materials do not need to be replaced. Written comments and suggestions from subject content experts will be used as input for improving the product. Meanwhile, for the design expert test, the results of Media Analysis (PowerPoint), obtained the following scores.

Table 2. Module Analysis Results

No	Criteria	Score
1	Binding quality	5
2	Attractive cover design	5
3	Accuracy of typing *layout*	4
4	Consistent use of spacing for titles, subtitles, and typing of material	4
5	Clarity of writing/typing	4
6	Completeness of components in each module	5
7	Accuracy in the way the material is presented	4
8	Accuracy of glossary placement	5
	Amount	36

Table 3. Media Analysis Results (PowerPoint)

No	Criteria	Score
1	The standard accuracy of the letters used	4
2	Clarity between images and the materials used	5
3	Match the animation with the images used	4
4	Consistency of steps for using PowerPoint	5
5	What is the general quality of appearance?	5
	Amount	23

Table 4. Results of Analysis of Student Guides

No	Criteria	Score
1	Accuracy of typing *layout*	4
2	Consistent use of title spacing and typing	5
3	Systematic accuracy of components	5
4	Accuracy of the contents of the guide with the modules used	4
5	Clarity of Student Guide	4
	Amount	22

Table 5. Results of Teacher Guide Analysis

No	Criteria	Score
1	Accuracy of typing *layout*	5
2	Consistent use of title spacing and typing	5
3	Systematic accuracy of components	5
4	Accuracy of the content of the teacher's guide	4
5	Clarity of learning steps	4
	Amount	23

Based on the results of the Design expert assessment as stated in the table above, the percentage of module achievement levels can be calculated as follows:

Table 6. Percentage of Learning Design Expert Assessments

No	Product name	Percentage (%)	Criteria
1	Module	90	Very good
2	Media (PowerPoint)	92	Very good
3	Teacher's Guide	88	Very good
4	Teacher's Guide (Design Interactional)	92	Very good

After being converted using the conversion table, the percentage level of achievement is in the Very Good qualification. So that teaching materials do not need to be replaced. Comments and written suggestions from learning design experts will be used as input for improving the product. So, after paying attention to these things, the revised draft 1 product (draft 2) is ready to be tested in a small group test.

Draft 3 tool is the result of draft 2 tool which has been revised based on input from the results of individual trials, then the material is ready for small group testing. This trial was carried out to measure the readability of product content for students. As for the results of the analysis of draft 2 consisting of student responses and teacher responses which are used as consideration for improving draft 3 of the student assessment results as stated in the table above, the percentage of module achievement levels can be calculated as follows:

Table 7. Percentage of Student Assessments

No	Product name	Percentage (%)	Criteria
1	Module	90.55	Very good
2	Media (PowerPoint)	88	Very good
3	Learner's Guide	92.23	Very good

After being converted using the conversion table, the percentage level of achievement is in the Very Good qualification. So that teaching materials do not need to be replaced, written comments and suggestions from students' responses will be used as input for improving the product.

Based on the results of the teacher's assessment and after being converted using the conversion table, the percentage of achievement levels is in good qualifications. So that teaching materials do not need to be replaced. The teacher's written comments and suggestions will be used as input for improving the product. So, after paying attention to these things, the draft

3 product is ready to be tested in a small group test, then the percentage of module achievement levels can be calculated as follows:

Table 8. Percentage of Teacher Assessments

No	Product name	Percentage (%)	Criteria
1	Module	92	Very good
2	Media (PowerPoint)	92	Very good
3	Teacher's Guide (Interactional Design)	90	Very good

The final device is a device that has passed small group testing which is the basis for improving the depth of the material looking at the posttest scores carried out after a series of small group testing activities. The reference for assessment is learning completeness. Thus it can be concluded that the device can be used in learning. Based on the evaluation results of the small group test analysis in the field, it can be concluded that the products made can be used for classroom learning activities because the level of completion can reach 100% of the number of students who take the small group test. The Minimum Completeness Criteria that has been set is 60, input from the readability of the evaluation looking at the value for each evaluation question item (Posttest) which is still low becomes material for improving the depth of the material in the module and media (PowerPoint) along with the data we obtained from these activities.

Table 9. Pretest and Posttest Result Values

No	Name	Mark Pretest	Note	Mark Posttest	Note
1	Dinata	51	Not Completed	89	Complete
2	isR	57	Not Completed	89	Complete
3	Miyati	52	Not Completed	78	Complete
4	Via	52	Not Completed	86	Complete
5	Andi Irwan	32	Not Completed	63	Complete
6	Wiyah	52	Not Completed	89	Complete

From the device development activities that have been carried out, there are several things that we can convey regarding supporting and inhibiting factors both in device development and in device implementation, as well as the strengths and weaknesses of the devices that have been produced:

1. Supporting Factors

   The modes developed in the form of modules, media (PowerPoint), student guides, and teacher guides provide convenience for teachers and students in their use because they are one interconnected tool for implementing learning activities that are well organized, by expert opinion." Learning media is anything that is used to channel messages from the sender to the recipient so that it can stimulate the thoughts, feelings, and attention of students" Dadan Juanda; 2018)

2. Inhibiting Factors:

   a. Limited references are one of the obstacles to smooth development.

   b. The absence of content experts and media experts in the Seruyan Hilir sub-district, Seruyan Regency where the research was carried out has become an obstacle in consulting about the material contained in the development materials.

3. Device Overload

   a. Systematic initial steps and repeated testing showed that the results obtained were acceptable and convincing.

   natural science learning principles so that it can make it easier for students to learn.

   c. Learning materials that are equipped with instructions for use can make it easier for students to use them either with teacher guidance or individually.

4. Device weaknesses

   a. This development step only reaches the formative stage without validating at the summative level.

b. Trials are not clearly explained when they must be carried out and revision activities are only carried out after the formative test is held and conversely formative test activities cannot be carried out before the revision is complete.

CONCLUSION

Based on the results of observations from two score tests carried out before and after using learning media, we can see that by using Powerpoint learning media as a means of conveying information to students at the Kuala Pembuang II Elementary School, we can conclude that students' understanding is faster in learning. understand information compared to not using media, in this case, PowerPoint, the impact of learning is more interesting and enjoyable because it is by students' learning needs.

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