



The Development of Teaching Materials Based on Slip Out on Plants in Class IV SDN Balun I Turi Lamongan

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ABSTRACT

This study aims to provide teaching materials for fourth grade elementary school students with material on knowing the parts of plants. This teaching material is designed attractively by paying attention to color and writing so that it aims to create a pleasant atmosphere. This study uses the ASSURE model which has 6 stages, namely: (1) Analyze Learner, (2) State Objectives, (3) Select methods, media and materials, (4) Utilize media and materials, (5) Require Learner's participation, (6) evaluate and review. This development research uses material expert validation, media expert validation and design expert validation. This research is also supported by the validation of classroom teachers. The subjects of this study were students in the fourth grade of elementary school. Based on the results of the study, it can be concluded: that the product development in the form of elementary science teaching materials with material on knowing the parts of plants based on Slip Out is suitable for use in elementary schools in grade IV.

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1. INTRODUCTION

In developing the challenges of global education, the implementation of learning must also pay attention to the environmental conditions of each region/country. In this case, it is important to make plans to anticipate the implementation of education policies in the event of an emergency (Mandasari et al., 2021; Subandowo et al., 2021). To deal with things that are not expected, educational institutions must determine ways so that education does not stop. One of them is by using online learning methods, offline and home visits. Of course, this activity still uses teaching materials that are easy to use for students in science subjects.

To improve the quality of quality learning, many things can be done. One of them is that the teacher has an obligation to be able to provide any material that will be presented by adjusting to the development of the 21st century. The development of teaching materials is something that teachers must pay close attention to, especially in terms of developing the content, materials and objectives of teaching materials in the learning process that will be developed. This is very influential for teachers and students in the implementation of

learning, because teaching materials are needed by students to provide a reference from where we will start and where we will end (Aslik et al., 2022; Mufida et al., 2022).

The implementation of the science learning process that is suitable for elementary school-aged children is to use a learning model that adapts students' learning situations to real-life situations in the community. Students are given the opportunity to use learning tools and media in their environment and apply them in real, everyday life. It is intended that students gain a deep understanding of nature and foster the ability to think, work and behave scientifically (Andriani et al., 2021).

The learning process and development of elementary school children has a tendency to learn from concrete things, viewing what is learned as a unified whole, integrated and through a manipulative process. An important aspect that teachers must pay attention to in implementing science learning in elementary schools is to actively involve students in learning to develop their thinking skills. Science learning begins by paying attention to students' prior conceptions/knowledge that is relevant to what will be studied. Furthermore, learning activities are designed through various real activities with nature. This real experience with nature can be done in the classroom or in the laboratory with learning aids or directly in the open.

Another problem that is often faced by students in receiving science learning in elementary school is that the teacher provides teaching materials or learning materials that are too broad and wide, too deep, the order of presentation is not systematic, and the types of teaching materials are not in accordance with the competencies that students want to achieve (Ermanda & Ariandani, 2020). In addition, another problem is how to use teaching materials. The intended use is how to teach it from the teacher's point of view, and how to learn it from the student's perspective and does not involve the environment of student participants. The availability of the number of textbooks can also be a problem faced by teachers in the learning process, some of these things affect student learning outcomes. Which can be said that the average score of students is still low.

Seeing from these circumstances, one way that can be used to reduce these problems is to develop teaching materials that can cover complex but not too broad teaching materials, in essence the learning objectives can be achieved in accordance with what is expected, can also be structured well in terms of general to specific or vice versa. To compile complex teaching materials, it is necessary to arrange a teaching material that is simple, easy to understand and in accordance with learning objectives, which can also make students develop their creativity through direct fieldwork observations.

2. RESEARCH METHOD

This study uses development research with the ASSURE model where there are six Assure components consisting of Analyze, State Objectives, Select Method media or Materials, utilize media and materials, require learner's participation, and Evaluate and revise. The ASSURE model was developed by Heinich (2005). The steps of ADDIE development research in this study are presented in the following figure:

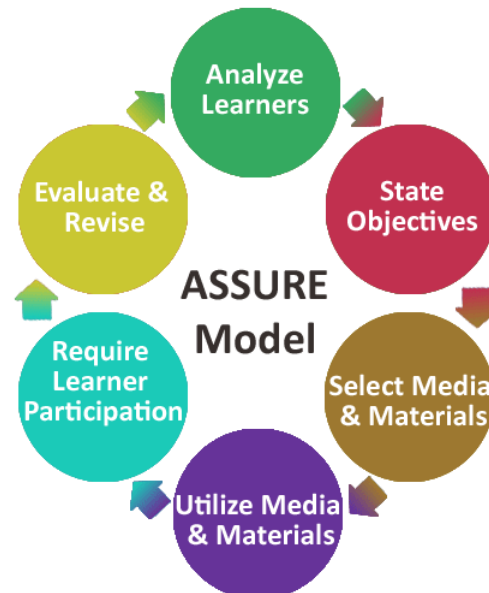


Figure 1. ASSURE Model

Researchers chose this learning model because this model has stages that are in accordance with the research process so that the resulting product will be more targeted and produce products that can be accounted for in the development process. This development research is used to develop teaching materials using Slip Out media)

3. RESULTS AND DISCUSSIONS

The product trial was conducted on fourth grade students of SDN 1 Balun. The trial was carried out three times, namely individual trials of 3 people, small group trials of 9 people and field trials of 21 people. Researchers conducted trials in order to obtain suggestions and comments from students that were useful for improving teaching material products in the form of an elementary science book based on Slip Out.

a. Material Expert Validation Data

Based on the results of the material expert validation, the researchers obtained the following data: Material expert validation aims to validate the material contained in the elementary science book teaching materials that have been developed. Based on the material expert validation data that has been carried out. Researchers got a score of 51 out of 12 criteria. Meanwhile, if it is presented, it is as much as 85% of the eligible qualifications without needing to be revised.

b. Design Expert Data Validation

Based on the results of the design expert validation, the researcher obtained the following data: The design expert's validation assessment includes four criteria, namely the appearance of writing, the appearance of images, the Function of the Slip Out Media, and the Benefits of the Slip Out. Based on the design expert validation data that has been carried out, the researcher gets a score of 74 with a scale of 5. As for when presented, the score obtained by the researcher is 90% with very decent qualifications.

The following is the outer cover of the elementary science teaching materials before and after the revision:



c. Media Expert Validation Data

Based on the results of the media expert validation, the researcher obtained the following data: The media expert validation assessment covers 4 aspects including: media aspects, linguistic aspects, presentation aspects and aspects of media effects on learning strategies. Based on the results of the validation conducted by researchers. The results obtained are 90% which can be qualified very well without revision.

d. Individual Validation Data

Based on the individual trials conducted, the following data were obtained: Individual trials were conducted on 3 respondents consisting of 1 male respondent and 2 female respondents who were conducted in the fourth grade of elementary school. Based on the validation results, there are 3 aspects that need to be assessed including: typos, wrong words using punctuation, and wrong words using capital letters. Then the things that need to be improved from the three respondents said that the next teaching materials can be used in learning in elementary school with revisions according to suggestions.

e. Small Group Validation Data

Based on small group trials, the results obtained are: Small group validation test conducted by 2 male respondents and 7 female respondents. In the validation sheet, the researcher asked 9 respondents to assess the feasibility of textbooks that included a scale of 5. From the table it can be concluded that the highest number was a score of 65 with a percentage of 92% and the lowest total score was 59 with a percentage of 84%.

f. Field Test Validation Data

Based on field trials, the results obtained are: Field group validation was carried out by 21 respondents from fourth grade students in elementary school. The trial was conducted by 11 male respondents and 10 female respondents. The researcher asked 21 respondents to assess the feasibility of the textbook which includes 14 components. From the table it can be concluded that the highest number is a score of 68 with a percentage of 97% and the lowest total score is 63 with a percentage of 90%.

The development of elementary science teaching materials received good responses from teachers and fourth grade students at SDN 1 Balun. The material provided is enough to make students more active in reading plus in the material there are also pictures that

can show the parts of plants. Elementary science textbooks also provide opportunities for students to conduct field studies in the form of observations of corn plants. In addition, students are also asked to practice creativity through drawing parts of plants that exist in the school environment.

In developing teaching materials, researchers also pay attention to the stages of child development to determine the abilities possessed by children at a certain stage. Researchers use the theory of developmental stages according to Piaget which according to Piaget, children aged 6-12 years are included in the concrete operational stage, marked by students starting to use clear and logical rules.

The teaching materials developed also contain balanced knowledge. Starting with the material, observations, practice questions and summarizing will make students learn more actively. The bonus too is that students don't feel like they're learning, many of them assume they're playing. For this reason, the teaching materials developed can be said to be innovative, easy to understand, and fun to learn.

The textbook developed by the researcher uses the ASSURE development model. The researcher uses the ASSURE development model because the model contains systematic steps to develop learning media without reducing or even adding to the stages that the previous ASSURE development model has.

4. CONCLUSION

The results of collecting data from content experts, design experts, media experts, individual trials, small group trials, large group trials, and peer trials in the Development of Slip Out Based Teaching Materials for Plant Materials Science Subjects in Class IV SDN Balun I Turi Lamongan, it can be concluded: that the product development in the form of elementary science teaching materials with material on knowing the parts of plants based on Slip Out is appropriate for use in elementary schools in grade IV.

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