

Validity of Ecosystem Material StoryBook Learning Media in Class V Elementary School

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ABSTRACT

A storybook is a book that contains stories about a situation or phenomenon. These circumstances or phenomena can be fact or fiction. In learning activities in elementary school story books can be used as a medium of learning for students. One of storybook utilization is in science learning. Storybooks can help the students at elementary school in learning activities as well as in school. In Science learning there is material that is absolutely contextually motivated, one of which is about the ecosystem. Ecosystem material can be the content of a story in a storybook for elementary students. The quality of a storybook that is used as a medium of learning in elementary school is determined by its validities. The aims of this study to describe the validity of learning media. The learning media is storybooks for grade V at elementary school students, in material of science especially. The subject in the study is a storybook that has been developed as a products in previous study. This study is qualitative research with data analysis used is quantitative descriptive. Data collection using storybook learning media validation sheets. The results of this study that the analysis of Storybook Learning Media Products that have been validated has a validation score > 75% with valid criteria It means that the storybook products that have been produced can be utilized as a learning medium in ecosystem materials in grade V elementary school.

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Key word: Storybook, learning media, ecosystems

Introduction

The development of education in Indonesia cannot be separated from the influence of globalization development, it is seen from the rapid development of science and technology is also a challenge to the world of Indonesian education and this condition can open opportunities of educational institutions and educators from abroad into Indonesia. The facts in the current era has given a significant influence in various fields including the field of education. Related to this, the government continues to make improvements in terms of national education policy. It aims to improve the quality of education, both academic and non-academic, and improve education management to be more productive and efficient and provide the widest access for the community to get education. ([Ngakan Putu et al., 2015](#)).

Widely knowed that education is an activity in which there is a process of changing attitudes and behavior and ways of thinking. Education is a conscious and planned effort to realize the learning atmosphere and learning process for learners to actively develop their potential to have religious spiritual strength, self-control, personality, intelligence, noble morals, as well as the skills needed by themselves and society. Imlementation of the government's mission in educating the nation, has been carried out various programs, Among other changes to the curriculum and national examinations. Curriculum change, intended to find the best curriculum, which can improve the quality of education in Indonesia. Curriculum 2013, is a curriculum that refers to the results of evaluation of the previous curriculum, namely KTSP. The use of the 2013 curriculum, began to be used since the new school year in 2013 ([Caesar, 2014](#)).

In the 2013 Curriculum plan there are very significant changes when compared to the previous curriculum, including in terms of school management, learning, assessment, and student interest. In addition, in the face of the demands of the times, it is felt that there needs to be a refinement of patterns and strengthening of the curriculum and deepening and expanding the material. In terms of learning that is no less important is the need to strengthen the learning process and adjust the learning load in order to ensure conformity between what is desired to produced ([Sutjipto, 2014](#)).

Based on Permendikbud Number 81 A in 2013, the learning process according to the 2013 curriculum is a process that provides opportunities for students to be able to develop all the potential they have into an increasingly increasing ability judging from the aspects of attitude (affective), knowledge (cognitive), and skills (psychomotor). This ability will be required by the students in his life and for society, nationhood and to contribute to the welfare of human life. Therefore, a learning activity should have a direction that leads to the empowerment of all potential students in order to become the expected competence, one of which is the character of the environment in students. This is in line with what is stated by [Nusantari et al., \(2020\)](#) that in the 2013 curriculum analysis, environmentally-friendly character is part of the content in the learning of science on ecosystem materials. On the other side [Astuti et al., \(2012\)](#) reveal in learning of science ideally students not only learn products, but also must learn aspects of processes, attitudes, and technology so that students can truly understand science as a whole as the nature and characteristics of science.

The existence between the 2013 curriculum and the previous curricullum include a change in the learning process. The learning process shifts from students being told to being told students, and the assessment process shifts from output-based assessment to process and output-based ([Hidayat, 2013](#)). The problem that then arises is the lack of ready learners to follow the curriculum changes. One of the things that according to the author contributes to IPA learning activities, especially to stimulate students to actively do activities in the learning

process is to use storybooks. This will make every child likes stories, besides that the storybook media is also a medium that is quite cheap and easy to obtain.

Book is a volume of paper, written or blank. A story is a speech that presents how things happen (events). So a storybook is a book that contains speech that tells how an event happened. Storybooks fall into the category of children's books ([Dan Yati, 2015](#)). Children are very fond of story books because the writing uses simple stories so that they are easy to understand and have their own appeal to them. Utilization of storybook media in this learning process is expected to be more able to help develop the learning progress of learners in order to achieve existing learning goals. On the other hand, [Fatimah & Maryani \(2018\)](#) suggests that story books have the power, which can convey predictions or estimates of events that will occur in the future. Children are invited to interpret images and predict what will happen next based on a series of image illustrations compiled by illustrators. The development of the storybook was used about ecosystem material.

An ecosystem is an ecological unit that has biotic and abiotic components that interact with each other and there is the uptake and transfer of energy, material cycle and productivity between these components. Ecosystems are the result of an artificial environment resulting from a process of interaction between humans and humans and between humans and their environment. Ecosystems are not static, can experience changes in balance (dynamic). This means that the constituent components of the ecosystem can experience increases or decreases in population numbers ([Pratiwi, 2016](#)). [Diella & Ardiansyah \(2020\)](#) report in learning of ecosystem concept there are often common regrets found in the explanation, including the definition and example of each component in the ecosystem. The definition of abiotic is often presented contradictorily that is less precise diction with the definition of biotic, where biotic is interpreted as a living thing and abiotic as an inanimate object, which should be an inanimate object. The author assumes that the existence of this fact should be in the presentation of ecosystem concepts, especially in science learning in elementary schools can be overcome with various strategies, one of which is by utilizing storybooks. This will be relevant to contextual principles in science learning.

The relationship of storybooks with the topic of ecosystem learning aims to get to know the surrounding environment and its maintenance for learners. Storybook is a source of learning that easily understood by students in the learning process. Story books are able to attract attention because the appearance is very popular among elementary students. Story books have a function that can be used as a support in the story that can facilitate the understanding process to contents of the book. ([Apriliani & Radia, 2020](#)). Through a storybook, it is expected that readers can easily receive information and descriptions of stories to be conveyed. So, storybooks can be classified as worthy to be used as a medium in the learning process for students in elementary school. ([Nurjanah & Hakim, 2018](#)). One form of applying storybooks in science learning activities, making it as a source of self-study for students at school or at home. Based on the description it can be said that the storybook learning media, especially about the ecosystem, can be a learning medium that is expected to be effective in IPA learning activities in grade V elementary school. It must further be supported by good and decent validity in the storybook, so that a study of the validity of story books can be done and depth description.

Methods

This research is qualitative research with data analysis used is quantitative descriptive. Data collection using storybook learning media validation sheets. This analysis is carried out according to data obtained from the review sheet, which is then analyzed using a likert scale reference. Based on data obtained from the review sheet by the validator then calculated the percentage validity of the storybook using the reference scale likert. The criteria for likert scale scores are, 4 = very good, 3 = good, 2 = Good Enough, and 1 = Less Good. The result of the score scale obtained is then calculated the percentage of validation using the equivalent formula.

$$\text{Validate storybook} = \frac{\text{Total Score}}{\sum \text{Highest Score}} \times 100\%$$

Criterion score = Highest score x number of aspects in criterion x number of validators

The results of the analysis of the review sheet are used to find out the feasibility of a storybook based on a storybook. The percentage of media validity is 86-100=Very valid, 71-85=Valid, 56-70=Valid Enough, 41-55=Less Valid, ≤ 40 =Invalid. The categories of learning media is to be good if the interpretation of the validator review sheet score reaches a percentage of 71% with valid criteria.

Result and Discussion

Storybooks can be used when they meet the criteria of merit and are very feasible. Storybook media has gone through the validation stages carried out by a team of experts in the field of science and given value in accordance with the harpability produce by the storybook. Validity consists of storybook validation has been done by expert lecturers to find out the validity of story books measured based on the cover of the book, the content of the storybook in accordance with the achievement of learning indicators, and the anatomy of the book.

The scoring score of each validator is calculated according to the storybook validation analysis in the authoring method, the results of the calculation are used to see the range of validation scores. Here are the criteria with various levels of aspects of the feasibility of the storybook shown in Figure 1.

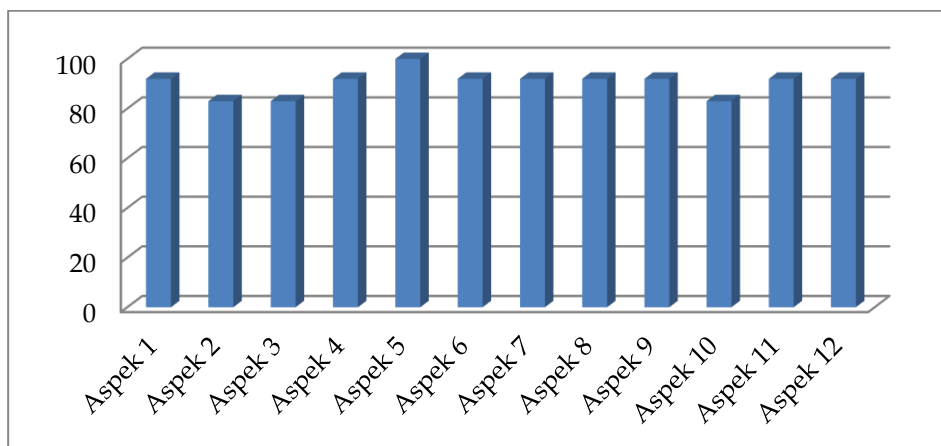


Figure 1. Storybook Validation Results

Aspect Description:

1. The cover aspect of a storybook represents the entire content
2. Aspects Of The title of the story cover attracts students to read more
3. The color aspect of the book cover carries the message to be conveyed
4. Aspects in accordance with the achievement of learning indicators
5. Aspects of stories are easy for children to understand
6. Aspects of Storybook provide learning character values related to daily activities

7. Aspects of storybook using simple language so that it is easy to read and understand by children
8. Aspects of storybooks have related images and text
9. Interesting storybook Picture Aspects
10. Aspects The number of pages is appropriate for a child's reading ability (not too long and not too short)
11. Aspects of Type and size of letters suitable for children
12. Aspects of image layout and proposional writing

The results of the validation of the storybook specified in figure 2 show that aspects contained in the storybook obtained valid criteria in the score range of 71%-85%. The results of validator assessments obtained criticism and suggestions used as a refinement of storybook media, namely changing the title of the storybook, changing the picture of the storybook, improving writing in order to enhance spelling in bahasa Indonesia (EYD). Related to this statement, the storybook that has been result in this study can train students in terms to increasing reading interest of the student because storybooks are a form of learning media in the form of print. As stated by [Lestari et al., \(2020\)](#) that a media in print form is recommended to train the interest in reading that is presented visually.

The validity of storybook media is obtained from the results of validation carried out at the development stage. Validation is done by the validator so as to produce a storybook that matches the criticism and suggestions of the validator. Validation results from this media get good values, assessment results get an average score range of 71%-85% with valid criteria, so it is worth testing by making small revisions. According to [Fatmawati \(2016\)](#), the assessment of the validity of learning devices is measured based on validation results. Media Storybook that has been validated was revised again according to the advice and input of the validator team so as to produce a good storybook (already validated), namely: paying attention to learning indicators adjusted to the material in the storybook. The advantages of story books are easy to use and can be used in many ways for teaching levels ([Rematha et al., 2020](#)). This is supported by the results of research conducted by [Marwati & Basri \(2018\)](#) that if every learning is enforced the use of storybook media, the average grade of students will increase higher. This is expected to make students more interested in learning about ecosystem materials. In addition, story books can stimulate imagination and help students in enriching the imagination, because the images in storybooks contain stories ([Burhan Nurgiyantoro, 2017](#)). The existence of story books as a learning media will also have implications for students' emotions. This is in line with the statement from [Ngura et al. \(2020\)](#), that the storybook used in the learning process will help children either individually or in groups to know and understand the emotional development of students who are used as problems. With this media, children are able to determine for themselves the path or how to solve the given problem.

Validation on storybook that gets some of the improvements suggested by validators is to improve the way writing is adjusted to EYD, and include images that interest to the students. EYD is a language aspect in a storybook and this aspect becomes important in a storybook. The use of good and correct language is one of the important things to consider because it is concerned with the ease of students to understand the meaning of the story and also with regard to the formation of student characters ([Lubis & Dasopang, 2020](#); [Kristiawan, 2016](#); [Sholehah & Irawati, 2017](#)).

Conclusion

The conclusion obtained that the media of ecosystem material story books has a good validity ring by paying attention to learning indicators that are adjusted to the material in the storybook. Media Storybook is declared valid by 3 validators with a score of at least 75% with a valid category.

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