The implementation of a story-based module to improve students’ learning outcomes: a needs analysis study

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ABSTRACT
This study aims to analyze the needs of students for teaching materials that are creative, innovative and in accordance with the level of development of students. Module based on picture story can assist students to understand the material and improve cognitive learning outcomes. The study was undertaken at SD Negeri Berundung, Ketapang District, South Lampung Regency with a total sample of 28 students. Data collection was undertaken by distributing questionnaires to students. There are several aspects that become references in making the questionnaire, namely regarding the learning that has been carried out, the use of teaching materials used during offline and online learning, interest in picture story-based modules, strategies and methods used by educators in learning. The results of the data were analyzed by calculating the percentage, besides being presented in the form of a percentage, descriptive analysis was also undertaken. The analysis has indicated how interested students are in the picture story-based module and the picture story-based module analysis was the needs of students in the learning process. Dealing with the results of the study, students needed teaching materials in the form of modules based on picture story to facilitate learning and improve students’ cognitive learning outcomes during the Covid-19 pandemic.

KEYWORDS
Module, Picture Story, Learning Outcomes

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Introduction

The 2013 curriculum is a curriculum based on Indonesian culture and character that applies to all levels of education and uses a scientific approach (Haryani & Purwantoyo, 2013). The scientific approach / scientific process-based approach is the grouping of learning experiences that have a sequence in the implementation process, namely: 1). Observing, 2). Asking, 3). Collecting information, 4). Reasoning/associating, 5). Communicating, which is abbreviated and known as 5M (Setiyadi & Gani, 2017). The 2013 curriculum in elementary schools is implemented using thematic learning. Thematic learning in the 2013 curriculum is a learning concept that involves several subjects to provide meaningful experiences for students (Setiawan et al., 2019).

Currently, learning is guided by the 2013 curriculum. In the 2013 curriculum, learning is student-centered, which emphasizes the active role of students in building knowledge and educators act as facilitators (Mutmainah et al., 2021). The learning process in educational units is held interactively, inspiring, fun, motivating students to participate actively in learning (Nofrion, 2017). The 2013 curriculum requires an educator to be more creative to improve the quality of learning processes (K. Pratiwi et al., 2020). Learning in the 2013 curriculum, educators are required to be able to present integrative thematic-based learning (Pohan & Dafit, 2021) Thematic learning is the unity of a theme that contains teaching ideas and integrates in several topics (Apriliani & Radia, 2020) thematic learning is applied at the level primary school.

The thematic learning process in schools, interaction between students, educators and subject matter is very necessary, thus, teachers must be motivated to use their skills in processing learning resources, namely by providing teaching materials in accordance with the criteria so that it will build effective and fun learning (Desyandri et al., 2019). Teaching materials are part of learning resources. Teaching materials play an important role in helping students achieve learning objectives. Teaching materials will make it easier for educators to carry out learning and students will be helped in learning (Purmadi & Surjono, 2016).
Along with the development and progress of education, teaching materials are increasingly varied. Learning has improved from various sides, offset by its usefulness in the world of education. Facts on the ground show that educational institutions do not still use effective teaching materials in learning (Fatohah & Yunianto, 2021). Thematic learning, teachers merely focus on theme books and worksheets, not practical and creative teaching materials that are liked by students, this is due to the lack of attention to the needs of students for teaching materials. The teaching materials used can be in the form of information, texts, or tools that are arranged in a coherent and systematic manner that reflects the learning competencies and goals that will be achieved by students (Nopiani et al., 2021).

In the process of learning, students have difficulty understanding the material because the students are not interested to teaching materials. Lack of time allocation because learning still follows the rules of limited face-to-face meetings, and the condition of students who are less active in learning due to online conditions. This leads to low cognitive learning outcomes of students. Learning that adapts to the character of students, creative and innovative teaching materials have not been used that can be used for learning at school when face-to-face is limited or online.

Overcoming the problems above, the appropriate solution is to do learning using creative teaching materials (S. Pratwi et al., 2020). One of the teaching materials that can assist the learning process in the classroom and at home is the learning module. The module is a teaching material that is written in sequence using language that is easily understood by students according to the level of knowledge and age of students, so that students can learn independently. The module as a development product used is able to increase interests, attitudes, critical thinking skills, and learning achievement (Nizaar et al., 2021).

Efforts to support an effective learning process require teaching materials that are in accordance with the development of students, such as the use of picture story-based modules as teaching materials (Lubis & Dasopang, 2020). Picture stories in assert that picture stories as graphic media used in the learning process have a practical meaning, namely being able to convey facts and ideas clearly and strongly through a combination of words and pictures. The picture stories contain reading texts combined with unique pictures that can attract children’s attention so that the information or messages contained in the reading can be conveyed more optimally (Amril & Pransiska, 2021). Module packaging is one of the things that need to be considered in the preparation of the module. Interesting modules can arouse students’ interest in reading so that students can be motivated to study independently (Agustin et al., 2018). Picture stories can be chosen as a strategy in module packaging innovation because students tend to be interested in reading picture books, compared to ordinary textbooks. The combination of pictures and writing arranged in an illustrated storyline makes information more easily absorbed so that student learning outcomes will increase (Waluyanto, 2005). Picture stories are story books that are equipped with pictures to help explain the content of the story.

Various previous studies on teaching materials in the form of picture story-based modules have succeeded in achieving learning objectives. Such as the development of teaching materials based on mathematics picture stories with very effective results which used in the mathematics learning process (S. Pratwi et al., 2020) Another relevant research is the development of a picture story module based on e-learning material on economic activities in social studies subjects, with the result that is feasible to be used in learning (Nopiani et al., 2021). Moreover, research on the Development of Direct Instruction-Based Thematic Modules in Improving Student Learning Outcomes in Elementary Schools, with results that are very feasible and practical to use (Nofrión, 2017).

The explanation above shows that teaching materials in the form of module based on picture story are needed in the learning process. Module based on picture story will help students learn both offline and online. The success of previous studies regarding picture story-based modules developed to achieve learning objectives, this study analyzes the needs of students for teaching materials in the form of picture story-based modules to improve cognitive learning outcomes.

This study used a qualitative descriptive method to find out the needs of students for teaching materials in the form of picture story-based modules. Previous learning only focused on theme books and worksheets, it was not creative teaching materials so then students could not enjoy it. This study was conducted on second grade students at SD N Berundu with a total of 28 students.

Data collection was carried out by distributing questionnaires to students who were accompanied by educators. Several aspects were used as a reference in making the questionnaire, namely the learning that had been carried out so far, the use of teaching materials used during offline and online learning, interest in illustrated story-based modules, strategies and methods used by educators in learning. The results of the data were analyzed by calculating the percentage, besides being presented in the form of a percentage, descriptive analysis was also carried out. The analysis showed how interested students are in the picture story-based module and the picture story-based module analysis was the needs of students in the learning process. The table of assessment criteria is as follows:

### Methods

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Funding and Discussion

The implementation of learning that was carried out online and offline, it led to many problems. Among the problems that occur are not only the availability of learning facilities but also the absence of a quota (Amelia & Abdurrohman, 2018). Parents in the middle and lower economic circles have difficulty regarding the budget in providing internet quota. It is difficult for students to be conditioned when having learning online. Students feel bored with online learning resulting in students often not participating in online learning. Students' learning motivation has decreased as well as learning outcomes, this is due to a pandemic which has resulted in less effective learning. Teachers are still not using effective teaching materials in learning (Fatonah & Yunianto, 2021). This is a problem that often occurs in students in online learning. Offline or face-to-face learning is limited, students lose the enthusiasm to learn. Students’ learning motivation decreases as well as learning outcomes. In thematic learning, educators only focus on theme books and worksheets, not practical, innovative and varied teaching materials that are liked by students, this is due to the lack of attention to the needs of students for teaching materials.

The teaching materials used by students in online and offline implementation must be noticed. The teaching materials needed by students are teaching materials and it must be interesting, innovative and in accordance with the character of the students. Picture story books are able to attract attention because their appearance is very popular with children (Apriliani & Radia, 2020). Picture story books invite students as readers to understand how the outside world is with illustrations so that students enjoy reading them (Ramadhan & Setyaningtyas, 2021).

The teaching materials needed by students are teaching materials and it must be interesting, creative and in accordance with the character of the students. The teaching materials can be in the form of learning modules. The module is an independent learning package that includes a series of learning experiences that are planned and systematically designed to help students achieve learning goals (Setiyadi & Gani, 2017). Good organization of material in modules can help students understand the material better, so that students are expected to students are able to achieve mastery learning. Modules can be used as independent teaching materials for students (Prastowo, 2012).

The function of the module is as a provider of basic information, as well as being complementary materials used in the learning process which can be supplemented with illustrations or pictures, photos that are communication. The content of a module should be complete both in terms of the presentation pattern and its content (Sukatman et al., 2013). The module as a development product used is able to increase interests, attitudes, critical thinking skills, and learning achievement. Interesting modules can arouse students’ interest in reading so that students can be motivated to study independently.

Module packaging is one of the things that need to be considered in the preparation of the module. Interesting modules can arouse students’ interest in reading so that students can be motivated to study independently (Agustin et al., 2018). Picture stories can be selected as a strategy in module packaging innovation because students tend to be interested in reading picture books, compared to ordinary textbooks. The combination of pictures and writing arranged in an illustrated storyline makes information more easily absorbed so that student learning outcomes will increase (Waluyanto, 2005). Picture stories are story books that are equipped with pictures to help explain the content of the story (Lubis & Dasopang, 2020). Picture stories contain reading texts combined with unique pictures that can attract children’s attention so that the information or messages contained in the reading can be conveyed more optimally (Amril & Pransiska, 2021). Picture stories in Sudjana and Rival (2007) say that picture stories as graphic media used in the learning process have a practical meaning, namely being able to convey facts and ideas clearly and strongly through a combination of words and pictures.

Picture stories as graphic media used in the learning process have a practical meaning, namely being able to convey facts and ideas clearly and strongly through a combination of words and pictures (S. Pratiwi et al., 2020). According to Nurgiantoro (2018), picture story books have an important influence on children's growth and development because children learn about nature, recognize other people, and relationships that occur and can develop feelings for students. Picture story books can make students more motivated in learning. Picture story books have a big and important role in the growth and development of children, through story books children's personal and interpersonal values can develop well, as well as with children's story books can socialize in the community (Amril & Pransiska, 2021). Another benefit of a picture story book comes from Davis (Faizah, 2009). It is asserted that picture story books can be used as a good and interesting educational tool.

The module based on picture story is able to attract attention because the appearance is very popular with children (Apriliani & Radia, 2020). The module based on picture story invites students as readers to understand how the outside world is with illustrated images so that students enjoy reading them (Ramadhan & Setyaningtyas, 2021). The module of picture story is a teaching material that is written in a coherent manner using language that is easily understood by students and is equipped with illustrated stories, so that students can learn independently. In a picture story module, there are two components that make up the picture story module, namely text and images. The text and images used have relevance and continuity in the delivery of a material or message that will be conveyed to students as the initial target for making a module (Nopiani et al., 2021).

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<th>Table 1. Assessment Criteria</th>
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<tr>
<td><strong>Final Score</strong></td>
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<td>41 % - 60 %</td>
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(Riduwan, 2012)
The study was conducted at SD Negeri Berundung in class II, it consisted of 28 students. Data were collected by means of interviews and questionnaires, interviews were conducted to class II educators and questionnaires were given to class II students. Based on a needs analysis questionnaire given to 28 students at SD N Berundung class IIA. Collecting data on the analysis student needs for teaching materials to support student learning outcomes during the pandemic. The results of the student needs analysis questionnaire are described in the following graph:

Graph 1. The Questionnaire Result of Students’ Need Analysis (N=28)

The Result of Need Analysis Questionnaire

Based on the needs analysis graph, it was given to 28 students at SD N Berundung class IVA. Collecting data on student needs to see the needs of students for teaching materials to support student learning outcomes during the pandemic. The results of the needs analysis questionnaire showed that students had difficulty understanding the material due to the lack of use of interesting teaching materials, 61% of the total 28 students stated that learning in class and online was not fun. 89% stated that educators taught in a monotonous way every day. 100% of students needed learning that made them think and act but was still fun. 89% of students learned merely from the teacher’s explanation and did not try to find out on their own by means of literacy. 79% of students did not read books to find out information both in learning materials and general information. 89% of students stated that educators did not use teaching materials that were interesting and liked by students. 71% of students had difficulty understanding the material using teaching materials used by educators both in online and offline learning. 100% of students liked textbooks and it contained lots of stories, students will find it easier to follow lessons. 100% of students argued that they needed teaching materials in the form of picture story-based modules to increase learning motivation and make the learning process more fun, and all students needed teaching materials in the form of modules that contained stories and pictures in the learning process, both offline and online learning.

Based on this description, students needed teaching materials that can support cognitive learning outcomes, namely in the form of creative teaching materials and in accordance with the character development of students. Module based on picture story can be used to support the online or offline learning process. Online learning, printed teaching materials were the best choice for schools, this was because not all students had smartphones, as well as the difficulty of procuring quotas. Students needed teaching materials that can be used easily. The teaching materials needed were module of picture story and it was creative and in accordance with the development of students. Creativity is an action that leads to novelty and the realization of imaginative ideas into real activities. A product is argued to be creative if (a) it is an original work, not imitating others, (b) is a great concept, (c) is a pioneer that triggers other people to think and work further (Sukatman et al., 2013).

Teaching materials according to the character of students means that the teaching materials adjust to the stages of cognitive development of students and learning styles of students. The cognitive development of class II students is in the concrete preoperational stage. At this stage, students learn to use and present objects with pictures and words. The stage of its thinking is more symbolic but does not involve operational thinking. It is more egocentric and intuitive than logical.

This research shows that students need creative, innovative and interesting teaching materials in accordance with the development of students. Then the picture story-based module is the teaching material needed by students. The research was conducted by distributing questionnaires to students and also interviews with educators at SD N Berundung schools. Printed teaching materials are chosen as teaching materials that can be used by all economic levels of students, can be used anywhere without worrying about being disturbed by the internet network.

Previous research on the development of teaching material based on picture story in mathematics learning provided results that were feasible to use. Another relevant research is the development of a picture story module based on e-learning material on economic activities in social studies subjects, with results that are suitable for use in learning. It is line with this research, this study analyzes that it is true that students need teaching materials in the form of print modules based on picture stories to support thematic learning, both offline and online learning.
Research on picture stories, namely research from Delora Hati Amelia and colleagues (2021) in this study, the researcher looks for solutions to the problems faced during online learning by developing Student Worksheets based on digital illustrated stories in fourth grade elementary school students. The results of the study show that the illustrated story-based Student Worksheets that were developed can be used as an alternative to teaching materials used during the COVID-19 pandemic. Other research (Dessiane & Hardjono, 2020). The Effectiveness of Picture Stories or Comics Learning Media for Elementary School Students, is a type of meta-analysis research from research that has been done previously with the result that there is an increase in student responses to picture story books.

Research on Development of Thematic Modules Based on Direct Instruction in Improving Student Learning Outcomes in Elementary Schools (Kingen, 2021) with very feasible and practical results. This shows that the use of modules can be used to improve student learning outcomes. It is in accordance with this research, during the pandemic, the module based on picture story is needed by students to improve cognitive learning outcomes.

Conclusion
Regarding to the results of a study conducted by distributing questionnaires to 28 students at SD Negeri Berundung and also to 2 educators from SD Negeri Berundung, it can be concluded that in the learning process, students had difficulty understanding the material because students were less interested in the teaching materials used by educators. This emerged in low cognitive learning outcomes of students. Another problem related to this current situation of learning carried out by referring to government regulations regarding the Covid-19 outbreak. Learning in schools was undertaken 50% face-to-face (offline) and 50% online. The problems faced were the interest of students in the teaching materials used by teachers, students also did not all have smartphones and not all of them always had an internet quota. Online learning was getting boring because teachers merely sent assignments via photos without any material first.

Students needed teaching materials in the learning process. The use of teaching materials that were creative and appropriate to the development of students in the form of printed modules based on picture stories could help students understand the material, and also to improve cognitive learning outcomes. The use of print module based on picture story can be used anywhere and anytime without worrying about internet networks and quotas. Thus, it has proved that it could the learning process, both online and offline.

References


