



## **IPS Learning on Natural Environmental Material and Artificial Environment Based on Contextual Teaching And Learning Through Interactive Comic Media**

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Received: 06 January 2022; Revised: 14 March 2022; Accepted: 28 April 2022  
DOI: <http://dx.doi.org/10.37905/aksara.8.2.1085-1092.2022>

### **Abstract**

This study aims to produce and describe the process of developing interactive comics media for IPS learning material on natural environment and artificial environment based contextual teaching and learning. Researchers developed procedures include 1) potential and problems, 2) data collection, 3) product design, 4) design validation, 5) design revision, 6) initial field trials, 7) field trials, 8) product revisions, and 9) final products. Data analysis by quantitative, data obtained from material expert, media expert, teacher and student response questionnaires. Based on the data analysis, it can be concluded that the feasibility of interactive comic media is in the appropriate category with an average 98.2% from material experts get average 94.2% from media experts, while the teacher gets average score 97.9%. Students' responses to interactive comic media in a limited field trial with 10 students obtained 95% with valid category and field trial with 34 students obtained average score of 90%.

### **Keywords**

IPS learning, Interactive Comic Media, CTL

### **INTRODUCTION**

Education is held so that students can develop their potential, according to (Sani, A. kadri, 2016:5) explained that education functions to develop the ability of students to form dignified national character and civilization in the context of educating the nation's life and making students democratic and responsible citizens. based on the Law on the National Education System Number 20 of 2003, the purpose of holding education is for students to actively develop the potential that exists within themselves. Developing the potential that exists in students is an important key in the implementation of education (Azzet, 2011: 15).

Learners are community members who try to develop their potential through a learning process that is available at certain paths, levels and types of education. According to (Thobroni, 2015: 19) explained that, learning is a learning process that is repeated and causes a conscious change in behavior and tends to remain. learning activities are



activities that can foster understanding, creativity, activeness, thinking power, potential, and interests of students. Learning activities are directed to activities that encourage students to learn actively. In classroom learning, especially in elementary schools, the teacher is one of the main factors that can affect the quality of the learning process. The low quality of teaching staff, especially those related to the implementation of the learning process will negatively affect the quality of graduates (Indawati, 2012).

According to (Uno, H & Lamatenggo, 2016: 2-4) explained that, the teacher in the teaching and learning process is the person who gives the lesson. Teachers are people who are authorized and responsible for education. However, current learning activities are not only marked by the dominant role of teachers and also by students who still memorize learning material so that the material taught in schools is easily forgotten, one of which is Social Sciences (IPS) which teaches social science concepts. One of the causes of the lack of enthusiasm of students in learning activities is the lack of attractiveness of the available textbooks (Megawati et al., 2021).

In addition, learning activities are determined by various supporting factors, including teacher competence, character values that must be instilled, learning materials, approaches and use of modules. The module includes a supporting element in the success of the learning process. Modules are teaching materials to train students to be independent, including the goals to be achieved, the main thing is the material to be studied, learning activities that are carried out outside, filled out worksheets, and evaluations carried out (Indawati & Zainuri, 2021). The module is a form of book written so that students can study independently or with teacher guidance (P. Y. A. Dewi & Primayana, 2019).

One of the fields of study taught in schools is Social Sciences (IPS). According to (Wahidmurni, 2017: 31-32) explained that, IPS contains material from a combination of several social science disciplines selected for the benefit of education in schools, IPS is compiled from various combinations of social science disciplines to be a review in studying certain phenomena. Social Sciences (IPS) is composed of various disciplines selected for the benefit of learning, Social Sciences is designed to build the ability of students to face community life that is always changing and developing continuously and also Social Sciences can foster students to be responsible for themselves and In the community, here the teacher has an important role in carrying out learning. In teaching social studies, the teacher should be able to make students participate actively in learning. In addition, the learning atmosphere must be fun so that students do not feel bored and burdened with the concept of learning social studies which contains quite a number of steps that must be achieved. Many ways include using learning media in the implementation of learning.

According to (Sadiman, 2012: 6) Media are all physical tools that can present messages and stimulate students to learn, for example, books, films, tapes and much more. Through good and varied management of learning resources and media, it is hoped that the quality of learning will increase. Media is anything that can be used to convey messages or information in the teaching and learning process so that it can stimulate students' attention and interest in learning (Azhar Arshad, 2013).



Media has several advantages (Hamalik, 2011) states that the use of learning media in the teaching and learning process can generate new interests and desires, generate motivation and stimulation of learning activities and even bring psychological effects on students. Therefore, teaching materials are needed that are able to attract students' interest to learn them (N. R. Dewi et al., 2019).

In the current condition, students tend to prefer learning that is creative, innovative and utilizes technology, the dependence of students on cellphones makes students tend to get bored quickly with casual learning, this makes teachers have to be more innovative towards learning. Based on observations at SDN Tumpang 04 students were less enthusiastic and easily bored with the learning process, many students did not pay attention to the teacher's explanations, they were more interested in joking and playing and even some students disturbing their friends during the learning process. This is due to the ineffectiveness of the learning media used by the teacher. Therefore, it is necessary to make improvements in learning so that students are more interested in participating in learning, namely with variations in the presentation of material in the form of audio-visual. The results of the study (Ninik Indawati, 2018) state that the use of media in social studies learning can improve student achievement. According to (Sukoco et al., 2019) the learning process using well-designed learning tools can improve scientific thinking skills, and make learning scientific concepts and process skills more effective (Sukoco et al., 2019).

Researchers developed this interactive learning media because this media can be used repeatedly, with this media it can attract students' interest in participating in the teaching and learning process. This interactive comic media based on Contextual Teaching and Learning can be an innovation for teachers and students in the learning process, especially social studies subjects for grade 3 elementary school materials for the natural environment and the artificial environment.

CTL-based interactive comic media is a medium that aims to motivate students to understand the subject matter being studied by relating the material to the context of their daily lives. According to (Baharuddin & Wahyuni, 2015: 190-191) explained that Contextual Teaching and Learning (CTL) learning is a learning concept that helps teachers link the material being taught and the real world situation of students and encourages students to make close connections between their knowledge and application in everyday life. With this concept, learning outcomes are expected to be more meaningful for students. The learning process takes place naturally in the form of activities for students to work and experience.

Based on the explanation above, the objectives of this research are (1) to describe the process of developing interactive comic media for social studies learning material for the natural environment and the artificial environment based on contextual teaching and learning (CTL) in the form of a video and a duration of approximately 6 minutes. (2) To produce interactive comic learning media products for social studies learning material on the natural environment and the artificial environment for third grade elementary school students.



## **METHOD**

In this study, the researcher refers to the R&D (Research and Development) research and development model according to the Sugiyono (2015) method which consists of several steps as follows: (1) Potential problems; (2) Data collection; (3) Product design; (4) Design validation; (5) Design revision; (6) Initial field trials; (7) Field trials; (8) Product revision; (9) Final product.

## **RESULTS AND DISCUSSION**

The results and discussion are presented in a section consisting of several paragraphs. This section is the most dominant part of the whole article, which is 60%. To facilitate understanding and reading, the results of the research are described first, followed by the discussion section. Results and discussion subtitles are presented separately.

The product trial was made with the aim of making social studies learning media well structured in its manufacture and to determine the quality of the interactive media produced. There are 3 trials for the product being developed, namely: (1) Validation of material experts and media experts using a validation assessment sheet (2) Initial field trials, carried out by class III SDN Tumpang 04 with a total of 10 students using a participant response questionnaire. (3) Field trials, conducted by class III SDN Tumpang 04 with a total of 35 students using student response questionnaires.

The types of data used in the development of interactive comic media are qualitative and quantitative data regarding the product development process and the level of feasibility or product quality according to the specified development procedure. Qualitative data was obtained from the results of expert validation in the form of suggestions and comments on the use of interactive comics media for social studies learning material for the natural environment and the artificial environment based on Contextual Teaching and Learning in class III. Quantitative data was obtained by calculating the average score of each criterion assessed by media experts and material experts and then compared with the ideal score to determine the feasibility of the interactive comic media produced.

In this study, the instrument used is a questionnaire. According to Sugiyono (2015: 93) the questionnaire is a data collection technique carried out by giving a set of questions or written statements to respondents to answer. The instrument used to indicate the level of validity of a module. The assessment sheet used in this study is a checklist. The research assessment scale used in this research instrument is: (1) Score 4 for Valid (V), (2) Score 3 for Fairly Valid (CV), (3) Score 2 for Less Valid (KV), (4) Score 1 for Invalid (TV).

The data analysis technique was carried out using quantitative descriptive analysis techniques, namely by analyzing quantitative data obtained from media expert questionnaires, material expert questionnaires, mathematics teacher questionnaires and student response questionnaires. According to (Akbar, 2016) quantitative data in the form of numbers calculated or measured are processed by adding up and then compared with the expected amount so that the percentage of eligibility is obtained. The formula used is as follows:



$$\text{Percentage of eligibility / validation (\%)} = \frac{\text{Observed Score}}{\text{Expected Score}} \times 100$$

## Result

Product testing was carried out by material experts, media experts, third grade teachers and student responses. The aim is to determine the quality of interactive comic media. It can be seen in Table 1 below:

**Table 1** Analysis of Validation Results, Teacher Assessments and Student Responses

No.	Validator	Percentage	Description
1.	Material Expert	98,2%	Sangat valid
2.	Media Expert	94,2%	Sangat valid
3.	Teacher Questioner	97,9%	Sangat valid
4.	Student Responses	95%	Sangat valid
<b>Percentage Average</b>		<b>96,3%</b>	

Based on Table 1, the results of the assessment of validators, teachers and students have been presented with an average of 98.2% from material experts, 94.2% from media experts, 97.9% from third grade teachers and 95% of student responses. Based on the criteria for interactive comic media, it is stated that it is very valid in social studies learning with an average of 96.3%.

## Discussion

The advantages of Interactive Comic Media are: (1) This interactive comic media explains the meaning of the natural environment and the artificial environment as well as how to utilize and preserve the natural environment and the artificial environment; (2) This interactive comic media can be copied because the interactive comic media is in the form of video; (3) This interactive comic media can attract the attention and interest of students because it is equipped with cartoon images and attractive colors. Meanwhile, the Disadvantages of Interactive Comic Media are: (1) This interactive comic media only includes material on the natural environment and the artificial environment; (2) This trial is limited to material experts, media experts, social studies teachers and students. The results of this study are in line with the results of research conducted by Suganda Eko Welly Prisma in his research entitled "The Effect of KOMPA Media (Science Comics) on Symbiosis Materials Between Living Things in Science Subjects Class IV for Elementary Schools", states that comics can improve science learning outcomes (Suganda, 2012).



The results of the research above are in accordance with the opinion (Sadiman, 2010) which argues that learning media are forms of communication tools both printed and audio visual that can be used to channel messages from the sender (teacher) to the recipient (student) so that it can stimulate thoughts, feelings, attention, and interest of students in such a way that the learning process can take place. Likewise with Asyhar (Asyhar, 2012) who argues that teaching aids are tools or materials used by learners to: (1) assist learners in improving the skills and knowledge of learners; (2) illustrates and reinforces messages and information; and (3) eliminate the tension and obstacles as well as the laziness of students. Teaching aids have a function to facilitate understanding of a learning material. Abstract material is usually difficult for students to understand without the help of teaching aids. By seeing, feeling, using visual aids, the level of abstraction of a material can be reduced so that it is more easily understood by students. So that the learning process using media becomes more effective (Bulut et al., 2016).

Subjects that students learn will be easier to learn and understand when the learning process looks real to them (Entwistle, 2015). Therefore, students need learning media in the form of actual objects and multimedia (teaching aids) during the learning process (Cope, 2015) said that the results of research on the effectiveness of using mathematical manipulations are supported by the use of concrete, pictorial, and virtual manipulatives that positively affect student learning manipulatives, mathematics learning objects have a positive impact on student learning processes (Boggan et al., 2010). Media is everything that can convey and distribute messages from sources (teachers) so as to create a conducive learning environment so that the teaching and learning process is more effective and efficient (Y. Munandi, 2020).

## CONCLUSION

The process of research and development of interactive comics media for social studies learning material for the natural environment and the artificial environment based on Contextual Teaching and Learning for class III SD. This development research refers to the development of Sugiyono there are ten steps in the research, but the researcher limits it to nine stages. The stages carried out in this research include potential problems, data collection, product design, validation and testing stages, design revisions, initial field trials, field trials, product revisions and final products. These stages are carried out sequentially in order to obtain maximum results. Based on the results of the research that has been carried out, it can be seen the validity of the interactive comic media for social studies learning material for the natural environment and the artificial environment based on Contextual Teaching and Learning for class III SD. The validation carried out by media experts and material experts obtained an average of 98.2% for material experts with valid criteria and obtained an average score of 94.2% by media experts, while the results of teacher assessments received an average score of 97.9%. The results of the student response questionnaire in a class limited to 10 students obtained an average score of 95% in the valid category and the results of the student response questionnaire in a wide class with 35 students obtained an average of 90% in the valid category. Based on the criteria of interactive comic media, it is said to be feasible in social studies learning material for the natural environment and the artificial environment.



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