

Validity and Practicality Test on Social Studies Learning Module-Based Interactive Multimedia by Employing CTL Approach for Elementary Students

Yulfia Nora, Ade Sri Madona and Selfa Idriani
Bung Hatta University, Padang, Indonesia
{yulfianora, idrianis}@yahoo.com, adesrimadona@gmail.com

Keywords: Social Studies, CTL, Interactive Multimedia.

Abstract: The research was an attempt to determine the validity and practicality of Social Studies learning module based interactive multimedia by using CTL approach for elementary students. This research was carried out in the form of development research. The results of validity test analysis on multimedia devices on the content aspect was obtained the average score 3.56, the average of construct aspect was of 3.18 and the average of language aspect was 3.67. The average of those three aspects was 3.47 that hits a valid category. The result of practicality of Social Studies learning modules based interactive multimedia was obtained an average score 3.56 which it includes in the category of very practical. Briefly, Social Studies learning modules-based interactive multimedia by employing CTL got valid and very practical in learning.

1 INTRODUCTION

Social studies are one of the subjects taught in elementary school. Learning social science get aims to enable the students to get sensitive and responsive dealing with social problems in a rational and responsible.

Social studies cover wide range of lives which related on social relations, economics, psychology, culture, and history, all is learned in the social sciences.

Based on the purpose and studies, Social studies should be delivered as attractive as possible so that students can understand easily all the study in the social science. However, to be frankly, the process of learning social science committed by the teacher still has many limitations, they are: (1) teachers tend use only textbooks, (2) media which are used only such an image, (3) the lecturing method still dominates on the learning process so that it tends to be teacher centered learning. These problems lead the learning that was delivered by the teacher has not been able to provide clear information and has not been able to foster students' attention and interest.

Related to these problems, it is necessary to develop a module that is supported by the module based interactive multimedia module, it can provide clear information for students (Ramansyah, 2014).

In line with Kunandar (2008), the module is learning material that is arranged, can be presented in written one in such a way, so the reader is expected to be able to understand the material itself, it aims as students' self-learning materials.

The advantages of the module are : (1) it allows the learning presentation that is uniform in a large class, but the base of learning provides self-learning material, (2) it provides a huge flexibility for students and teachers to study in a small unit that can be arranged in a various format; (3) it provides maximum students' deliberacy to learn independently; (4) it provides the active students' participation; (5) when it is used properly, it helps teachers to teach the same material frequently in a class; and (6) it can be designed to foster each student's' interaction in learning (Kunandar, 2008).

Social studies learning module can be designed by using learning technology based interactive multimedia. Learning based multimedia is a learning activity that utilizes computers to create and combine text, graphics, audio, video and animation by combining links and tools that allow users to navigate, interact, create and communicate.

Based on the opinion, it can be concluded that Social Studies learning module which is designed and developed, must be able foster students' attention and interest. This conclusion was

correspondence with Sari (2017:23), Module which is developed and designed properly, it can significantly catch students' attention on learning and help teacher to achieve teaching and learning goals.

Social Studies learning module – based interactive multimedia can also use some learning approaches, one of them is Contextual Teaching and Learning (CTL) approach. As Fadillah (2017) stated, is Contextual Teaching and Learning (CTL) is a conception of teaching and learning that helps teachers relate subject matter content to real world situations, and motivates students to make connections between knowledge and its application to their daily lives.

Moreover, according to Hudson and Vesta (2008) CTL and Constructivist Theory, incorporating the principals of contextual teaching helps to promote authentic learning and increases students' success by allowing them to make connections as they construct knowledge. In his writings, well-known Swiss biologist, philosopher, and child psychologist, Jean Piaget views the origin of knowledge as genetic epistemology, which he also calls constructivism, due to his belief that "knowledge acquisition is a process of continuous self-construction". It means that CTL approach is learning approach which assist teacher to drive real situation in the classroom and encourage students to connect learning material with their daily lives.

Related to the explanations above, Social Studies learning module – based interactive multimedia by employing CTL can create the learning be more meaningful for students and help the teachers to deliver learning material easily.

2 METHODS

This research is the development research. It develops and produces new products in a learning system which will be applied to students as users (users).

The procedure in the development of social studies learning modules based Interactive multimedia are as follows:

1. Needs Analysis.
2. Design
3. Evaluation

Module validation is one of steps of research development. Module validation was committed by validator to have a valid module. Meanwhile, questionnaire analysis (teachers' and students'

response) was employed to obtain practicality of learning devices.

2.1 Validity Analysis of Social Studies Learning Module – Based Interactive Multimedia by Employing CTL Approach

The data validation of learning media that was obtained, was analyzed to all aspects presented on a table by using the Likert Scale, then average score was calculated by using the formula as follows:

$$R = \frac{\sum_{j=1}^n V_{ij}}{nm}$$

With:

R: average score of the experts/practitioners' assessment

V_{ij}: score of the experts'/practitioners' assessment to-j criteria i

n: number of the experts / practitioners who do an assessment

m: number of criteria

The average obtained was confirmed to the criteria that were set. How to get criteria, there are some steps, they are as follows:

- a. Range scores start from 0-4
- b. The criteria are divided into four levels, which are very valid, valid, valid enough, lack of valid and invalid
- c. The range of scores is divided into five interval classes

Procedure validity rate determination is obtained by criteria such as Table 1 below.

Table 1: Criteria for determining the level of validity.

Range	Category
1,00 - 1,99	Not Valid
2,00 - 2,99	Less Valid
3,00 - 3,49	Valid
3,50 - 4,00	Very Valid

Thus, the learning media is valid if the average score can hit 3.00.

2.2 Practicality Questionnaire and Observation Sheets Analysis of Social Studies Learning Modules Based Interactive Multimedia by Employing CTL Approach

The data of learners' response on learning activities were analyzed by using the following rubric, it is described on Table 2 below.

Table 2: Scale assessment of student responses on questionnaire.

Alternative Level Practicality	Description
1	Less Appropriate
2	Quite appropriate
3	Appropriate
4	Very Appropriate

Range of scores start from 1-4, practicality questionnaire toward the learning media was described by using techniques of data frequency analysis by using the formula (Riduan, 2009: 89):

$$P = \frac{\text{Item Score Obtained}}{\text{Maximum score}} \times 100\%$$

The data found from observation and questionnaire were analyzed by using qualitative descriptive statistics based on the following table.

Table 3: Criteria of determining students' response.

Range	Category
from 1.00 to 1.99	Less Practical
2.00 to 2.99	Quite Practical
3.00 to 3.49	Practical
3.50 to 4.00	Very Practical

Learning media will be categorized as a practical one if the score practicality can hit 3.00.

3 RESULTS AND DISCUSSION

The development of Social studies learning module based interactive multimedia was designed to be able to be used by teachers and elementary students.

Social Science learning module based interactive multimedia as a tool in the implementation of learning. Social science module based interactive multimedia that was being as a guidance, it is expected to improve the quality of students' learning outcomes. The study that was carried out to aims to determine the validity and practicality of Social science learning modules based interactive multimedia.

3.1 Validity of Learning Module

Validation that was conducted in this study emphasizes on the internal validity (rational) by using criteria that is in product development. Aspects observed were content construct aspect. To test the validity of these two aspects can be used an expert's judgement. Here is the result of data validation that was committed by the validator.

Table 4: Results of validation social science module based interactive multimedia.

No.	Aspect	Average	Category
1.	Content	of 3.56	Very valid
2.	Construct	3.18	Valid
3.	Language	3.67	Very valid
Average		of 3.47	Valid

As shown data on Table 4, it describes that the average of validation test on Social Studies module-based interactive multimedia by employing CTL approach was 3.47. It could be categorized into a valid category. Thus, it can be concluded that the Social Studies module-based interactive multimedia by employing CTL approach is valid and can be applied in the learning process. It is in line with Sari (2017), module that was developed properly can be used as a guidance in learning process.

3.2 The Practicality of Module

The practicality of media which was developed can be seen from the implementation of try out. Practicality Data developed was obtained from

observations on implementing of the learning module, teachers and students' response.

3.2.1 Students' Response to the Practicalities of Learning Module

After the learning process by implementing interactive multimedia module, students responded very well. The analysis of students' responses on questionnaire to the practicalities of interactive multimedia modules developed indicates that learners got interested in studying social studies based interactive multimedia. It was shown on the average number of responses 3,57. It means that it is in category of very practical. It describes that the multimedia has an attractive appearance.

3.2.2 Teacher Response on Practicality of Learning Module

The analysis of teachers' responses on questionnaire of the interactive multimedia module meet with the use of this media in the learning process. It means that Social studies learning modules based interactive multimedia which was developed can assist teachers in delivering an explanation for teaching materials, so it could be easy to learn. It can be concluded that the modules developed was practical.

Table 5: Result of practicality of social studies learning modules based interactive multimedia.

No	Aspects assessed	Score Average	Category
1.	Practicality use	3.75	Very Practical
2.	Compliance time	3	Quite Practical
3.	Compliance illustration	4	Very Practical
4.	Language	3.5	Practical
Average		3.56	Very Practical

Based on the table 5, the result of practicality of Social Studies learning modules based interactive

multimedia was obtained an average score 3.56 which it includes in the category of very practical. Thus, it can be concluded that in general the response of students to the learning modules used are positive.

4 CONCLUSIONS

Related to findings of this study that Social Studies learning module – based interactive multimedia by employing CTL approach is valid and practical to be applied in learning process.

The results of the validation of multimedia devices on the content aspect obtained an average score 3.56, in the construct aspect was 3.18 and language aspect was 3.67. The Average of these three aspects was 3.47 in a valid category.

The results of testing the practicality of Social Studies learning modules based interactive multimedia was 3.57, it is in a very practical category. It means that Social Studies learning modules based interactive multimedia can significantly attract students' interest.

The teacher responses to the practicality of Social Studies learning modules based interactive multimedia was also in a practical category (3.56).

Based on the conclusion, researchers suggest to teachers to use learning module based interactive multimedia by using CTL approach to enhance the quality of student learning outcomes.

REFERENCES

- Fadillah, F., 2017. The effect of application of contextual teaching and learning (CTL) model-based on lesson study with mind mapping media to assess student learning outcomes on chemistry on colloid systems International Journal of Science and Applied Science: Conference Series: *Int. J. Sci. Appl. Sci.: Conf. Ser.* Vol. 1 No. 2 101-108.
- Hudson, C. C., Vesta, R.W., 2008. *Contextual Teaching and Learning for Practitioners*. Volume 6, Number 4 ISSN: 1690-4524.
- Imam, F. M. 2007. Struktur Kompetensi Ilmu Pengetahuan Sosial Sekolah Dasardan Pengorganisasian Pengalaman Belajar Siswa. *Jurnal Interaksi*, 3 (1): 4-19.

- Kunandar, K., 2008. *Langkah Mudah Penelitian Tindakan Kelas Sebagai Pengembangan Profesi Guru*, Rajawali Pers. Jakarta Utara.
- Ramansyah, W., 2014. Pengembangan Multimedia Pembelajaran Interaktif Berbasis Adobe Flash Cs3 pada Kelas 1 SDN Bancaran 3 Bangkalan. *Jurnal Ilmiah Edutic*, 1 (1): 4-13.
- Sari, R. T., 2017. Uji Validitas Modul Pembelajaran Biologi Pada Materi Sistem Reproduksi Manusia Melalui Pendekatan Konstruktivisme Untuk Kelas IX SMP. *Jurnal Scientiae Educatia: Jurnal Pendidikan Sains*, Vol 6 (1): 22–26.

