

Development of Quiz Card Based Media To Improve Understanding Reading Skills Of 5th Grade Students

Ristuhi Anggar Kusumadewi¹, Setya Yuwana Sudikan², Wahyu Sukartiningsih³

Basic Education Study Program, Postgraduate, Universitas Negeri Surabaya,
[e-mail: ristudewi@gmail.com](mailto:ristudewi@gmail.com)

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Abstract: This study aims to develop and test the feasibility, practicality, and effectiveness of learning media in the form of *quiz card*-based learning media to improve reading skills of understanding. The research model used is the Four-D research and development (R & D) model. The feasibility of learning media is based on the results of validation. The practicality of the media is based on the results of observations student and teacher activities, and media practicality questionnaires. The effectiveness of the media was tested by *nonequivalent control group design*. The results showed that *quiz card*-based learning media were feasible, practical, and effective. *Quiz card* based learning media has an influence on student learning outcomes. This can be seen from the results of the t-test showing that t_{count} which is $2.565 >$ than t_{table} 2.093. The use of *quiz card*-based learning media also received a very good response from students, which amounted to 90.5%. So it can be concluded that the *quiz card*-based learning media is feasible, practical, and effective to improve reading skills in the fifth grade students' understanding in primary school.

Keywords: *critical thinking, learning media, nonfiction text, quiz cards.*

INTRODUCTION

Reading comprehension skills are very important to be mastered by students because reading comprehension skills play a role in the activities and results of everyday student learning. According to Dalman (2013, p. 87), reading aims to understand the meaning of the contents of the reading in the text. In line with the opinion of Tarigan (2008, p. 21), understanding reading skills have the purpose of understanding the contents of the reading correctly and accordingly. In accordance with the 2013 curriculum, there is material on nonfiction texts in five class semester 2. According to Pranoto (2009, p. 5) Nonfiction is an essay or text that is not imaginary, a text that is a form of real experience based on the field. Through learning nonfiction texts, students will be required to understand the reading, conclude the reading text, find out the location or target stated in the text, and answer questions based on the text.

Based on observations at Tuban State Elementary School in general, the implementation of Indonesian language learning in relation to reading comprehension skills in texts still uses traditional methods. The teacher presents it with the lecture method and only uses textbooks as a source of learning. In addition, the teacher is also still having difficulty in determining the appropriate media to deliver material on understanding reading skills. The teacher only relies on the reading text in the book to deliver learning material, even though if only the reading text contained in the book is taught the atmosphere of learning becomes less interesting and seems boring because it is not interspersed with *games* or interesting images. This situation causes teacher-centered learning and the atmosphere of learning to be monotonous, unattractive, and cannot stimulate students to think critically (Ariani, 2010, p. 26). As a result, motivation and interest in student learning is reduced so that the learning outcomes obtained are less than the minimum completeness criteria. These conditions need to be considered by fifth grade teachers to create changes in learning activities in order to attract students' attention and can stimulate students to think critically so that the learning outcomes obtained increase.

Based on these problems, learning media are needed that can facilitate students in understanding the learning material delivered and stimulating students to think critically. As expressed by Gagne (in Sadiman et al., 2010, p. 6), media are various types of components in the student environment that can stimulate them to learn. Meanwhile, Briggs (in Sadiman et al., 2010, p. 6) suggests that media are all physical tools that can present messages and stimulate students to learn. Submission of students' reading comprehension skills should use media that is more interesting and fun for students. 5th grade students in elementary school like games that can hone strategies and brains like a quiz game. One of the appropriate media to implement is a *quiz card* based learning media. This media will make students think critically and answer questions pleasantly. Students can think critically and will better understand what they see compared to just listening to the explanation by the teacher. From this description, a *quiz card*-based learning media can be developed to improve reading comprehension skills of fifth grade students in elementary school. The use of *quiz card*-based learning media in learning is expected to provide a new atmosphere for students so that

learning is more interesting and fun. In addition, the *quiz card*-based learning media are also expected to be able to improve student learning outcomes.

This study aims to describe the feasibility of *quiz card*-based learning media to improve comprehension reading skills of fifth grade students in Tuban State Elementary School, describing the practicality of *quiz card*-based learning media to improve reading skills in fifth grade students' understanding at Tuban Elementary School, and describe the effectiveness of *quiz card*-based learning media to improve reading skills in the five grade students' understanding at Tuban Elementary School.

METHOD

The development model used in developing *quiz card*-based learning media is the R & D model Four-D which adapted from Thiagarajan (1974, p. 37). Based on the steps of the Four-D development model, this study reached up to four stage. Data collection instruments used in this study were interviews, documentation, observation sheets, questionnaires, and test results. The feasibility analysis of *quiz card*-based learning media is done with a validation sheet that uses a linkert scale. The practicality analysis of *quiz card*-based learning media uses the teacher and student response observation sheets, as well as the practicality *quiz card*-based media practicality questionnaire. Furthermore, the effectiveness analysis of *quiz card*-based learning media can be seen from student learning outcomes tests. Tests of learning outcomes through the processing stages as follows, (1) test the validity of the expert (lecturer) and tested on students using the *product moment* correlation formula, (2) the test of learning outcomes is tested reliability using the *spearman brown* formula, (3) test normality with Chi squared formula, (4) homogeneity test with variant formula, and (5) t-test test using *nonequivalent control group design*.

RESULT OF RESEARCH

The results of the feasibility test of *quiz card*-based learning media were obtained from the validation sheet and the media feasibility questionnaire filled in by students. Validated components are media *quiz cards*, learning devices, and research instruments. While the media feasibility questionnaire was given during individual trials and small group trials. The results of the validation sheet from the validator are as follows:

Table 1. Validation Result

Validation sheet	Percentage	Category
<i>Quiz card</i> media (media expert)	75,16%	Revision
<i>Quiz card</i> media (media expert)	88,78%	Worth using without revisions
Material/contents	90,41%	Worth using without revisions
Language	86,55%	Worth using with revisions
Pre-test	86,98%	Worth using without revisions
Post-test	88,78%	Worth using with revisions
Teacher and Student Activity Sheets	88,75%	Worth using without revisions
Teacher and Student Response Sheets	91,75%	Worth using without revisions

Source: secondary data proceed, 2019

From the results of the validation sheet, it was stated that the *quiz card* media, learning devices, and instruments were suitable for use in learning. While the results of the results of the questionnaire response to the *quiz card* media eligibility are as follows.

Table 2. Results of Feasibility Questionnaire Media

Trials	Number of Students	Scores Obtained	%	Interpretations
Trial Limited	10	88	79,77	Very good with

Scale Trial Size	25	478	95,16	revisions Very good
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Source: secondary data proceed, 2019

The results of the student questionnaire responses state that the *quiz card*-based learning media are appropriate according to the percentage of trials limited and scale trial size. The practicality of *quiz card*-based learning media can be seen from the results of the learning implementation observation sheet, student activity observation sheet, and the practicality *quiz card*-based media practicality questionnaire filled by two grade fifth teachers of elementary school. The results of the percentage of learning implementation are as follows.

Table 3. Teacher Activity Observation

Observer	Total	Percentage	Information
O1 22	O1 23	45	93,75 Very good

Source: secondary data proceed, 2019

Based on the data above, it can be concluded that the implementation of learning using *quiz card* based learning media is very good. Furthermore, student activities during learning can be seen as follows.

Table 4. Student Activity Observation

Observer	Total	Percentage	Information
O1 74	O1 74	158	93,75 Very good

Source: secondary data proceed, 2019

According to the table above, it can be concluded that student activities during the implementation of learning using *quiz card*-based learning media are in a very good category. For the media practicality questionnaire, the results can be seen in the following table.

Table 5. Results of Practicality Questionnaire Using *Quiz card* Media

Respondents	Total	Information
1 2		
26 27	53	Very good
Percentage	94,6%	

Source: secondary data proceed, 2019

Table 5 shows that *quiz card*-based learning media is very good or practical to use in learning activities. The effectiveness of *quiz card*-based learning media is known through the results of student learning outcomes. Before being used for research, the learning outcomes test questions are first validated to the expert (lecturer). After that, it was tested on 10 students and calculated using the product moment correlation formula, with the criteria of the question said to be valid if $r_{count} > r_{table}$, which is 0.514. The results of the validation test can be seen in the following table.

Tabel 6. Result of Question Validation

Valid Questions	Invalid Questions
1, 2, 4, 7, 10, 11, 12, 14, 15, 17, 18, 20, 22	3, 5, 6, 8, 9,13, 16, 19, 21, 23, 24, 25

Source: secondary data proceed, 2019

From the 15 valid questions, 10 questions were taken to serve as learning outcomes test instruments. After testing the validity, then performed reliability testing using the spearman brown formula. From the results of the calculation, the reliability of the problem is 0.876. Referring to the interpretation of reliability according to Guilford, the test can be concluded to have very

high reliability. Questions that have been tested for validity and reliability will be used for questions of pretest and posttest in the experimental and control classes during the field trials. The results of the pretest and posttest will be tested by t-test to determine the effectiveness of *quiz card*-based learning media. However, before being tested by t-test, the results of pretest and posttest were tested for normality first using the chi-square formula. The results of the pretest and posttest normality test are as follows.

Table 7. Normality Test

Normality test	X count	X table	Information
Experimental pretest	1,823	9,49	Distributed data normal
Control Pretest	2,342	9,49	Distributed data normal
Experimental posttest	2,075	9,49	Distributed data normal
Control posttest	2,613	9,49	Distributed data normal

Source: secondary data proceed, 2019

After a normality test, the next step is to conduct a homogeneity test to find out whether the two classes are homogeneous or not. The homogeneity test is carried out using the variance formula. The sample is said to be homogeneous if the value of $F_h < F_t$, with F_t of 2.15. The following are the results of the pretest and posttest homogeneity test.

Table 8 Homogeneity Test

Homogeneity Test	F count	F table	Information
Pretest	1,84	2,15	Homogenous
Posttest	1,96	2,15	Homogenous

Source: secondary data proceed, 2019

After it is known that the two classes are normal and homogeneous, the next step is to do a t-test with the criteria used is H_0 accepted if $t_{count} < t_{table}$. The t-test is carried out using the following formula (in Arikunto, 2010, p. 349):

$$t = \frac{\bar{x}_1 - \bar{x}_2}{\sqrt{\frac{SD x_1^2}{N_1 - 1} + \frac{SD x_2^2}{N_2 - 1}}}$$

Based on the results of the calculation above, it is found that student learning outcomes after learning are 2,565. This can be interpreted that $2,565 \geq 2,093$, it can be concluded that H_0 is rejected and H_a is accepted. Thus it can be concluded that there is a significant difference between the learning outcomes of the experimental class students and the control class.

DISCUSSION

The feasibility of learning media is based on the results of validation to media experts and material experts, the development of *quiz card*-based learning media to improve reading comprehension in very good categories. After going through the validation stage and declared feasible to use, the *quiz card*-based learning media can be continued in the next stage, namely trials limited and scale trials size. In addition to validating *quiz card*-based learning media, validation of learning devices and research instruments was used. The results of all the validations state that the research instruments and instruments are feasible to use. Based on the results of the feasibility analysis, the appropriate *quiz card*-based learning media is used to improve reading skills in the five grade students' understanding in Tuban Elementary School.

The practicality of *quiz card*-based learning media can be seen from the observation sheet of the implementation of learning with a score of 93.75%, observation sheet of student activity with a score of 93.75% very good category, and practicality *quiz card*-based learning media questionnaire filled by two class five teachers elementary school scores 94.6% with very good categories.

The effectiveness of instructional media is based on the question of pretest and posttest for the experimental and control classes in the field test, namely five class of primary school. Five class as the control class, while next five class as the experimental class. Field trials were carried out using the *nonequivalent pretest posttest group design* technique. Furthermore, to find out the effectiveness of *quiz card*-based learning media is to do a t-test. Based on the t-test that has been done, the results are 2,565. With t_{table} for df 19 is 2.09. From these results it can be interpreted that $2,565 \geq 2,093$, it can be concluded that H_0 is rejected and H_a is accepted. Thus it can be concluded that there is a significant difference between the learning outcomes of the

experimental class students and the control class. Supported by previous research from Sofiya (2018) that the use of lower learning outcomes compared to traditional learning using learning outcomes sparkol media. So, learning using media based *quiz card* learning is effective for improving student learning outcomes, this is evidenced by the existence of significant differences in learning outcomes between the experimental class and the control class.

CONCLUSION

Based on the results of the research and discussion the results of the study can be concluded, among others: (1) a decent *quiz card*-based learning media is used to improve reading skills in the fifth grade students' understanding at primary school. This can be seen from the results of the media feasibility validation and questionnaire which states that based *quiz cards* media are suitable for use. (2) practical *quiz card*-based learning media are used to improve reading skills in the fifth grade students' understanding at primary school. This is based on the calculation of the percentage of the results of observations of the implementation of learning, teacher and student activities, and the practicality questionnaire of learning media. The percentage of learning implementation was 93.75%, the percentage of student activities was 93.75%, and the practicality questionnaire of *quiz card*-based media was 94.6%. The three results are in a very good category. (3) effective media *quiz*-based learning media used to improve reading skills of students' understanding in five class at primary school. This is based on the results of the t-test, where the value of $t_{\text{count}} > t_{\text{table}}$, which is $2.565 > 2.093$. Based on this, H_0 is rejected and H_a is accepted. So it can be concluded that learning uses a *quiz card*-based learning media effective to improve student learning outcomes, because there are significant differences in learning outcomes between the experimental class and the control class. This research is limited to the learning process understanding reading skills. Based on the results of the data analysis and Conclusions, it can be suggested a number of suggestions in the learning process Including the use of instructional media is expected to be improved not only the media but Also *quiz cards* of other media to encourage students to learn and in this study still have many shortcomings. media design so that further Researchers are expected to add more interesting media updates.

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