Improve Indonesian Language Writing Skills using Educational Multimedia Games for Elementary School Students

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Abstract: This study aims to improve Indonesian writing skills by using multimedia education games for third grade students of Sidangsari elementary school, Bogor Regency. The type of research used is collaborative classroom action research. The research design used was the Kemmis and Robin Mc Taggart models. The methods used in this study are: (1) tests, (2) observations, and (3) documentation. The data analysis technique used in this study is descriptive statistics, namely the mean. The results showed that the use of multimedia game education improved Indonesian writing skills in Sidangsari 3 grade students. The use of multimedia game education makes students more active, enthusiastic, and enthusiastic in learning to write in Indonesian language learning.

1 INTRODUCTION

The scope of Indonesian language learning includes aspects of listening, speaking, reading and writing. Writing skills as one of the four language skills have a very important role in human life. In writing learning activities, students are directed to be able to communicate using written language (Zulela et al. 2017). The purpose of writing learning is that students are able to express their opinions in writing to express their ideas or ideas in a coherent manner, with the right diction, the structure that is right in the context (Little et al. 2018). Writing is one of the fields of language skills activities that have an important role in Indonesian language learning in elementary schools. One of the objectives of Indonesian Language subjects in the Elementary Education Curriculum is so that students have the ability to use Indonesian to improve their intellectual abilities, maturity, emotional, and social maturity (Mudiono 2012).

As said by Tarigan (2008) that writing is lowering or describing a symbol of a graph that describes a language that can be understood by someone so that other people can read the symbols if other people understand the language and graphic images. Writing skills need to be trained and developed through the educational process. Writing skills are not automatically mastered by students. Skills can only be obtained and mastered by practice and lots of training (Parkes 2018) According to Tarigan (2008)the ability to write is one type of writing language skills that are productive, meaning the ability to write is an ability that produces, in this case, produce writing.

Writing skills is one aspect of language skills that must be mastered by students, in addition to the three other skills, namely reading, listening and speaking. Learning to write at elementary school is given through Indonesian subjects. In the opinion of Pelly (MS and Rachmadtullah 2019). Although writing learning has been realized is an important part of learning Indonesian in elementary school, but in fact, writing learning lacks the attention of teachers and students. Learning to write or compose is not handled seriously so that the writing skills possessed by students are inadequate (Rietdijk et al. 2018).

Writing skills are activities that require complex abilities. As Puranik et al. (2018) that writing activities are very complex activities because they involve regular ways of thinking and various requirements related to writing techniques, including the existence of unity of ideas, the use of clear sentences and effective, well-arranged paragraphs, application of correct spelling rules, and adequate vocabulary mastery. In elementary school, writing learning is one of the language skills that students

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must master well (Anon 2017). Writing learning takes place as a gradual process. The process carried out in writing learning in elementary schools is adjusted to the class level and level of difficulty, as well as the type or form of writing that is destroyed. In essence writing learning in elementary school is expected to train students to think critically and logically, and be able to express feelings, ideas and ideas in written language (De Smedt, Van Keer, and Merchie 2016). The statement clearly gives the sense that writing activities are very important to be mastered by students because of writing because writing trains students to think critically and logically (Nackaerts et al. 2016).

Basically learning writing in Indonesian language lessons for class V students is a fun and very easy lesson to do, but in reality, there are students who have difficulty writing. To overcome difficulties in teaching writing in Indonesian language learning a tool is needed as a learning media, these tools can be educational multimedia applications.

The birth of multimedia technology is the result of a combination of advances in electronic technology, computer engineering, and software. The ability to store and process digital images in dozens of millions of colors with high resolution and reproduction of sound and video in digital form(Lee and Owens 2004; Nan 2018; Rachmadtulla et al. 2019). Multimedia is a concept and technology of elements - elements of image, sound, animation, and video put together in a computer to be stored, processed and presented in order to form a very innovative interactive between computers and users (Rachmadtullah, Nadiroh, et al. 2018; Wiana 2018). Multimedia technology is a combination of computer technology both hardware and software with electronic technology, development, and utilization of multimedia technology are widely used in almost all aspects of activities (Shilpa and Sunita 2016).

Multimedia is the use of computers to present and combine text, sound, images, animations, and videos with tools and connections so that users can navigate, interact, work and communicate (Rachmadtullah, Ms, and Sumantri 2018). When compared with information in the form of text (letters and numbers) commonly found on computers today, of course information in the form of multimedia that can be received with the two human senses in a form that matches the original or in a real world (reality) besides multimedia as a tool in learning not only used as presentation material or self-learning material (Iasha et al. 2018). Multimedia applications can be designed to be game education or often called multimedia-based game education.

The use of multimedia can provide concrete learning experiences through simulations, fun learning through games, and interesting animated content so as to foster student learning motivation. Multimedia adapts to information technology such as flash and multimedia application programs that are currently developing rapidly. In addition to multimedia, games are something that is popular with students. The use of games as a means of education is the latest innovation in enriching learning methods in improving the quality of education in Indonesia. The game is the latest breakthrough in making the learning process not saturating and increasing student motivation. In addition, the use of games in education can foster positive attitudes of students towards the educational process and also foster positive attitudes of parents that games are not always synonymous with negative images.

The media and learning games are very appropriate to be chosen to be developed because according to the needs analysis carried out in elementary schools in Bogor Regency, the district is one of the advanced districts in West Java and strategically close to the capital so that the development of information and technology is very fast. But in reality the development of information and technology is less visible in the education sector, especially in elementary school education.

Multimedia Educational game is a game application that has been designed to teach players about certain topics, expand concepts, strengthen development, understand a historical or cultural event, or help them learn skills because they play (Juliantari et al. 2018). The emergence of various kinds of games, including educational games is also influenced by the development of technology around us.

Multimedia Educational game is a game designed or created to stimulate thinking power including increased concentration and solving problems (Moreno-Ger et al. 2008). Multimedia Educational games are media that are currently quite popular and have been developed to support the learning process (Essel et al. 2016). To integrate a game through interactive multimedia, teachers need to pay attention to the compatibility between the material and the game to be chosen. Interactive multimedia loaded with educational games used in Indonesian language learning can be used properly if the content is in accordance with the learning objectives formulated.

Many studies have discussed learning media to improve writing for elementary school students in this research using presentation media, media games, media cards and media writing skills, but there are still few studies that discuss improving writing in Indonesian language learning using multimedia game education, therefore we conducted this study aimed at improving the quality of writing learning with the help of multimedia game education. As for the use of multimedia game education reinforced by the results of research by (Nasrudin et al. 2018) stated that the use of technology as a tool in learning is very helpful in the learning process activities in the classroom, especially improving learning achievement. The use of multimedia in a precise and varied manner can overcome student saturation in learning (Chang et al. 2017). Based on these statements interactive multimedia is very suitable for use in learning activities to improve the quality of student learning both during the process and results. For this reason the research focuses on improving the writing skills of elementary school students using multimedia game education.

2 METHOD

The method in this study used a type of Collaborative Class Action Research. Collaborative classroom action research means that researchers work with classroom teachers in carrying out the learning process. This research is used to improve the ability of the subject by applying a new strategy in teaching which is felt to have several advantages. The purpose of this study is to improve Indonesian writing skills by using multimedia game education for fifth-grade students of Sidangsari elementary school, Bogor Regency.

This action research was carried out through two cycles, which were adjusted to the conditions and results of reflection on the achievement of the expected improvement in the previous cycle, in accordance with the actions taken. In the first cycle it has not been successful, then continued in the next cycle. The design of this study uses a spiral action research model developed by Kemmis and Robin Mc. Taggart, there are four stages commonly passed in this action research, namely 1) planning, 2) implementation, 3) observations, and 4) reflection (Kemmis and McTaggart 2005).

At the planning stage starts from finding the problem and then designing the action to be taken. In more detail, the steps are as follows. (a). Find research problems in the field. This phase is carried out through discussions with class teachers, as well as through observation in the classroom. By recording things and learning problems that exist in the class (b). Explain learning writing skills using multimedia game education.

At the stage of Action and Observation carried out problem-solving as planned. This action is guided by the planning that has been made in the meaning of the planning, must be flexible and open to changes in implementation. So, actions are non-permanent and dynamic, which requires a quick decision about what is needed. The implementation of the action plan has the character of material, social, and political struggles towards improvement. Perhaps negotiation and compromise are needed, but compromise must also be seen in the context of its strategy (Mills 2011).

At the stage of observation. namely the effort to observe the implementation of actions. Observation of the process of action being carried out to document the effect of the actions carried out oriented to the future, and provide a basis for more critical reflection activities. The process of action, the effect of intentional and unintentional actions, the situation in which the action is carried out, and the constraints of action are all recorded in planned and flexible and openly planned observation activities.

In the Reflection, Reflection stage is an important part of the action research process step, because reflection activities will strengthen activities or actions to overcome problems, by modifying the previous plan according to what arises in the field. In this study reflection activities are carried out in three stages, namely: (1) the problem discovery stage, (2) the stage of designing the action, and (3) the implementation stage.

3 RESULT

3.1. Improving Writing Skills using multimedia game education in Cycle I activities

Learning Activities Indonesian language writing skills in the fifth grade of Sidingsari elementary school beforehand were limited to examples and teacher explanations without using any media. This situation resulted in students being less interested in learning. Students have not been able to understand and remember clearly what has been conveyed by the teacher. Most students still have not reached the minimum completeness criteria determined by the school. The average class is only 60.4.

Learning Indonesian writing skills in the first cycle of the teacher uses multimedia game education to facilitate students in writing descriptions. By using this multimedia game education, students look more enthusiastic and interested in participating in learning. Students are more focused on the following learning and listening to the teacher's explanation. Although there are still some students who pay less attention, most of them have paid close attention to learning. The teacher rebukes students who pay less attention to the lessons so as not to disturb other students.

After carrying out the cycle I action, there is an increase in writing skills. The increase can be seen from the values of writing description skills and the number of students who complete the Minimum Completion Criteria. The average value of student writing skills increases by 78.5 in cycle I. The initial average value before the action is 60.4 but in the first cycle of learning There are still several problems, one of which is the presence of students who have not yet fulfilled the Minimum Completion Criteria. These problems are caused by several factors. These factors include: a) there are still some students who pay less attention to spelling, b) students still do not understand writing descriptions, c) the teacher has not maximally provided guidance to students who have difficulty writing descriptions. The problems that exist in the first cycle try to be overcome in the second cycle by making learning changes that are not too different from the previous cycle. These changes are made to overcome the problems that arise in the first cycle so that the results obtained are in accordance with what is expected.

3.2. Improving Writing Skills using multimedia game education in Cycle I activities

In the implementation of learning writing skills at the stage of the second cycle, students still look enthusiastic in participating in learning. Learning in cycle II is done using multimedia game education. Learning in cycle II is almost the same as its implementation with learning in cycle I. In cycle II there have been improvements to overcome the problems that exist in cycle I. In cycle II there have been improvements to overcome the problems that exist in cycle I In the second cycle the teacher conditions students to be calmer when the material is delivered and the teacher slows down the tempo in delivering the material so that students understand better. In addition, the teacher also explained the written material description to students and gave the opportunity to ask students who did not understand, so students became more understanding.

After carrying out the second cycle of action, the average value of writing Indonesian language skills using multimedia game education has increased by 90.5. The initial average value before 78.5. At this stage of Cycle II the number of students who completed the Minimum Completion Criteria also increased compared to cycle I. The following is a comparison chart between pre-cycle, cycle I and cycle II in learning Indonesian writing skills using multimedia game education:



Figure 1: Comparison of pre-action results, cycle I and cycle II in learning activities using multimeda game education to improve writing skills

Referring to the research success criteria, the average grade value achieved at the end of cycle II is 90.5. The results of research on writing skills in Indonesian language learning using multimedia game education conducted in two cycles showed that there was an increase in students' writing skills, most students had reached the minimum completeness criteria specified. At the end of the second cycle, students are brave and able to retell the stories that they have written in front of the class. Students feel more pleasant when the activity of writing student descriptions is based on media images. Indonesian Language Learning is not boring and students are eager to take lessons even though learning takes place in the last hour of teaching and learning activities in schools.

4 **DISCUSSION**

Based on the findings in this study that multimedia game education has a positive impact on improving the writing skills of elementary school students. The use of multimedia education games makes it easy for teachers to teach students how to write good skills. With multimedia game education students are taught how the writing stage is a discussion of each topic item contained in the essay framework. In the framework of the essay, more detailed explanations are still needed so that the

reader can understand the intent of the text delivered. In writing, essays are very necessary to choose the right, careful, and straightforward words, so that the writing is resistant. The use of multimedia as a teaching aid about writing skills is supported by the results of research conducted by Wang et al. (2018) which suggests that the use of multimedia in the learning process aims to improve understanding of students' concepts, increase student learning motivation and create a more meaningful learning process. Meaningful learning is defined as a deep understanding of a material, the process of mental regulation that is linked reasonably with cognitive structures and connects new knowledge with existing knowledge. Meaningful learning describes a person's ability to apply the knowledge that is already known to real, new and different situations and conditions then Mayer (2014) in his research suggests that meaningful learning requires the participation of students in cognitive processes during learning, but the capacity of students to use cognitive processes has limitations. To overcome this, the teacher must create recognition through the use of multimedia, the use of multimedia learning has a sensitivity to a load of cognitive processes of students during learning (Clark and Mayer 2016; Rusli and Atmojo 2015) Furthermore according to (Rachmadtullah, MS, and Sumantri 2018; Rachmadtullah, Zulela, and Syarif Sumantri 2019) The benefits of multimedia in the learning process in general are able to create an interactive atmosphere in students, improve the attractiveness, increase quality learning, of willingness, students' imagination on complex subjects, and the process of understanding and deepening of the material becomes faster and more effective. multimedia excellence Can present forms of animation and simulation of objects or events.

5 CONCLUSIONS

Based on the results of research and discussion, it can be concluded that the use of multimedia game education can improve Indonesian language writing skills in class students. Improvement of writing skills in the first cycle is 78.5, with an initial score of 60.4 and an increase in writing skills in the second cycle of 90.5. so that it can be said that learning with the help of multimedia game education contributes to writing ability learning activities.

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