Applying Flash as an Interactive Media in Mastering Simple Present Tense at Junior High School

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Abstract:
This study aims at describing the implementation of interactive multimedia and to describe the success rate of class VIII of Junior High School students in learning Simple Present Tense. This study used a quantitative research approach, and it was a quasi-experiment. The experimental design was randomized pre-test and post-test comparison group design. The sample was class VIII PK-1 as the experimental group 1, while class VIII PK-2 as the experimental group 2. The sample was taken by using cluster random sampling technique. Pre-test was given before the treatment and post-test was held immediately after the treatment was over. The results indicated that the experimental group 1 score is higher than experimental group 2 in where the mean of experimental group 1 was 87.00 while the mean of experimental group 2 was 80.80. It was proved that the students did better in learning simple present tense when they were taught by using an interactive multimedia. Then, the Interactive multimedia contributes in many ways: helping the students to develop their inner self, motivating students to learn independently actively, training students in creative freedom as they feel less embarrassed or afraid and become more self confident, and giving a challenge to solve problem in enjoyable situation. Interactive multimedia also give some contributions to the student’s mastery of simple present tense since it help students in facilitating their understanding of the material provided. Interactive multimedia also help the students associate what they hear with their real experience, so learning process becomes more interesting.

Keywords: Interactive Multimedia, Implementation, Simple Present Tense

1. INTRODUCTION
Improving the quality of education is an important thing in the implementation of national education development. Some studies have shown that the quality of Indonesian human resources is still low in competitiveness, globally and needs serious attention. Indonesia’s low ranking in the quality of human resources is a picture of an unsatisfactory quality of education. The low quality of education is influenced by a number of factors. Among the most important factors is the quality of the learning process.

Learning is a process of teaching and learning with all interactions in it. The learning process in the classroom that has occurred so far has always placed students as object that must be influenced by a variety of information and a number of other teaching materials, so it causes a communication that takes place only in one direction, that is between teachers and students.

According to Djamarah (2006), learning essentially is a process, namely the process of regulating, organizing the environment around students so that it can arise and encourage students to carry out the learning
Learning is also said to be a process of providing guidance or assistance to students in carrying out the learning process. Based on this statement, it can be concluded that learning is a form of knowledge development that includes many things that are taught to a person in order to know and understand better the true meaning of what he is or will learn. More, the essence of learning is all the efforts made by educators so that the learning process occurs in students. It means that the success of students in a learning process is influenced by some efforts done.

When a teacher lacks in innovations during teaching learning process, this results a decrease in students’ creativity and interest on a material that presented by the teacher in front of the class. In connection with this, it is necessary for an educator to look for an innovation to develop the potential for students. The development of students’ self-potential will run more effectively if an educator uses the right learning media (Riza, 2013). In this case, educators must develop a learning media, both those that use technology and those that do not.

An effective and efficient learning process can be achieved through the use of information and communication technology. Educational technology in a narrow sense can be an educational medium or learning media. In a broad sense, learning media is the result of technology used as a learning tool to be effective and efficient. It can be concluded that learning media has a function to improve learning outcomes efficiently and effectively and can improve understanding for students, which in turn can improve the quality of learning outcomes.

Learning media is one of components in the lesson that has an important role in teaching and learning activities. The use of learning media in the teaching learning process can generate the new interest and desires, motivation and stimulation of learning activities, and even bring psychological effects on students, so that it will help the effectiveness of the learning process in delivering messages and lesson content at that time (Sari, 2018). In addition to arouse students’ motivation and interest, learning media can also help students to improve the understanding and to present the data in an interesting and condensed way (Surasmi, 2016).

One of the learning media that utilizes technology is interactive multimedia. Interactive multimedia is an intermediary tool that conveys messages with collaboration from various elements that are able to create an active learning, so that the message from the information conveyed can be well received.

### Multimedia

Multimedia comes from two words, those are multi that means many, various and media that means something. In general, multimedia relates to the use of more than one kind of media to present information. Multimedia is a combination of various media (file formats) in the form of text, sound, graphic images, video animations, interactions and others that have been packaged into digital files (computerized), used to convey or deliver messages to the public. Multimedia is a combination of data or media to convey information so that the information is presented more attractively (Alberta: 2011).

According to Sutedjo (2002: 51), multimedia is a variety of media that are combined into a single work unit and produce information that has a very high interactive communication value. In line to Sutedjo’s statement, Wajiman (2010) suggests that multimedia is a combination of at least two input or output media. This media can be in the form of audio (music sound), video animation, text, graphics and images.
From the definitions above, it can be concluded that multimedia is a combination of data, sound, video, audio, animation, graphics, text and sounds, in where the combination of these elements can be displayed on a computer.

Suyanto (2012) states that multimedia as a presentation medium is different from multimedia as a learning medium. Presentation media does not require users to interact actively in it even though there is vague interactivity. Specific mental skills needed in learning media can be generated through systematic manipulation of instructional events.

Multimedia is able to create an active learning for students, so it can influence students’ thinking power and can provide input for the media (Surasmi, 2016). Multimedia display will make students more free to choose in synthesizing and elaborating the knowledge they want to understand. Furthermore, the use of interactive multimedia in teaching can increase new desires and interests, generate motivation and stimulate learning activities, and even bring the psychological effects on students.

Elements of Multimedia

Vaughan (2004) in his book entitled “Multimedia, making it work” described about multimedia and the elements contained in it. According to Vaughan, these elements are: text and graphics. Text is the simplest medium in conveying information. It is a vital element in most multimedia applications, such as in the menu section, navigation system, and even in the program itself, while graphics is two or three dimensional which represents an illustrative medium that clarify the delivery of information.

Utilization of Learning Multimedia

According to Arifin et al (2015), there are 3 types of learning multimedia utilization, they are:

1. Multimedia is used as an element of learning in the classroom teaching or based on a reference book, then multimedia is used as a complementary medium to explain the material being taught in front of the class. Exercises and test in the first type are not given in a multimedia package but in printed form provided by the educator.

2. Multimedia is used as an independent learning material in this second type, multimedia may or may not support learning in class, it may or may not be different from the first type. In this type of secondly all the instructional needs of the user are met entirely in the multimedia package. This means all facilities for learning, including exercises, feedback and tests that support learning objectives are provided in packages.

3. Multimedia is used as the only medium in learning. Thus, all learning facilities that support learning objectives have also been provided in this package. This kind of package as described above is often called CBL (Computer Based Learning).

Multimedia in Teaching English

Some researchers have reported the use of multimedia technology for EFL instruction, Jonasen, et al (2000) cited in Mayora, C. A. (2006: 15). This research shows that using multimedia technology in the classroom: a) Allows students to work individually at a computer station, at their own pace, and according to their own needs; b) Helps teachers to deal more effectively with a large group of students; c) Makes the introduction and presentation of content...
more dynamic and attractive for students; d) Increases student motivation due to the interactive nature of the activities; e) Trains students to self-monitor and self-assess their progress, which promotes autonomous learning; f) Promotes a task-based approach to learning; g) Allows students to experience real-life and communicatively meaningful language situations and contexts; and h) Introduces a variety of print, audio, and visual materials that match different student learning styles and preferences.

Interactive Multimedia

Blackwell (2009) in multimedia application in education states that interactive multimedia is a combination of various media with links or tools that allow teachers or students to control, interact and communicate with the computer. When the user can control what and when the elements in the media, this process is called interactive multimedia. So, by using multimedia, students can not only see and hear but they can also manage the commands in it simultaneously.

Conceptually, the interactive multimedia fully combines with computer technology, video system and audio system to get a better combination and to increase interaction between users and computers. Audio and visual presentation in multimedia make visualization more interesting.

Basically, one of the goals of learning with interactive multimedia is to replace or complement and even support derived elements of the material, methods, and assessment tools that exist in the teaching learning process in the conventional education system which is usually done.

Criteria of Appropriate Interactive Learning Multimedia

The development of interactive learning multimedia must be referring to the good criteria of multimedia development. Chee and Wong (2003) state that the good criteria of instructional multimedia are as follow:

1. It allows learners to use the tools easily so that they can concentrate on content rather than on knowing how to use these tools.
2. It provides online help to the learners which can explain various menus, buttons, keys, etc.
3. It allows learners to easily create or produce materials.
4. It provides clear, effective, and consistent layout of tools, icons, and menus.
5. It provides flexibilities, so that the learners can easily modify and edit the previous work.
6. It provides flexible graphics capabilities for importing and exporting graphical images.
7. It allows for easy manipulation data (e.g., text, numbers, and graphics)

Interactive Multimedia Model

Computer-based interactive multimedia in learning according to Kusyani (2017) are as follows:

Model Drills

Model drills is a form of computer-based interactive learning model (CBI) which aims to provide a more concrete learning experience through the provision of sparing exercises to test student performance through the speed of completing the exercise questions given by the program. In general, the stages of the drill model material are as follows:

The material presented in the form of questions at a certain level of students, then students work on practice questions. If the answer given is correct, then the program
provides the next question, and if the answer is wrong, so the program provides facilities for repeating the exercise or remediation, which can be given, partially or at the end of the whole question.

Tutorial Model
The tutorial model is an interactive learning program that is used in the teaching and learning process by using software in the form of a computer program containing subject matter.

In simple terms, the patterns of operating a computer as an instructor in this tutorial model are: the computer presents the material, then learners respond. More, student responses are evaluated by a computer with an orientation towards the direction of students in taking the next achievement. Then continuing or repeating the previous stage.

Tutorials in interactive multimedia learning programs are intended as a substitute for humans as instructors directly, given in the form of text or graphics on a screen that has provided question points or problems

Simulation Model
The simulation model basically is a learning strategy that aims to provide concrete experiences through the creation of imitations of forms of experience that are close to the actual experience which taking place in a risk-free atmosphere. The simulation model is divided into four categories, namely: physical, situation, procedures, and processes. In general, the stages of the material for the simulation model are as follows: the introduction, the integration, the question, the information and the response to the response assessment, providing feedback on responses, repeating the segment of teaching arrangements, and then closing.

Instructional Games Model
The Instructional Games model is a method in computer based interactive multimedia learning. The aim of The Instructional Games model is to provide an environment that provides learning facilities that enhance students’ abilities. Instructional games model do not need to imitate reality but can have characters that provide fun challenges for students. This model is a motivational generator by bringing up ways to compete to achieve something.

Previous study on the use of interactive multimedia in learning was conducted by (Sari, 2018 ; Elviana, 2020) showed a significant increase in learning outcomes. In line with Sari and Elviana, study conducted by (Wahyuni, 2016) showed that the interactive multimedia is included in the feasible criteria.

Strengths and weaknesses of Interactive Multimedia

Interactive multimedia contains several components, namely text, audio, animation, graphics, simulation animation, video. According to Siyamta (2013), the components contained in interactive multimedia have advantages and disadvantages. These weaknesses or obstacles have a significant impact on learning.

Technical barriers due to technical problems such as the availability of computers or laptop and LCD in schools. There are also schools that have equipment and the teacher has been able to use multimedia, but electricity as the main energy source in the use of this multimedia equipment is not available in the classroom.

The philosophy of learning is related to the basic theories of learning. According to the theory of constructivism learning, the teacher does not only providing knowledge
to students, but students must build their own knowledge within themselves. The role of teacher is to provide convenience in the learning process, provide opportunities for students to learn discover or apply their own ideas, teaching students to became aware of their own abilities and apply their own learning strategies. Meanwhile, learning with multimedia seems that student only pay attention to the presentation presented by the teacher. There are few opportunities for students to convey their ideas.

Barriers of a social nature are barriers that are in the nature of relationship or interaction between one individual and another. The intended interaction is teacher-student interaction and student-student interaction in class. These interactions are very unlikely to occur during the learning process, because students focus their attention on multimedia itself. Students seem to be conditioned to be independent and social with friends becomes something unfamiliar

Based on those researches, it can be concluded that the use of interactive multimedia will enable the students to develop themselves, their feelings and it can also aid for the students to learn actively and as well solve the problem for the difficult subject.

Multimedia technology empowers the educational process by means of increased interaction between teachers, students, and courseware also innovative ways to make learning more dynamic, longer lasting, and more applicable to the world outside the classroom.

Considering the importance of interactive multimedia as a learning media in the teaching learning process, then this study was conducted. This study is motivated by students’ difficulty in learning English, especially in learning simple present tense, and also need for interesting learning media.

2. METHOD

The research method used by the researchers was the experimental method, in which the researchers conducted experiments and different treatment into two groups of subjects. The first experimental group was assigned by T1 who given the treatment by using interactive multimedia, while the second experimental group was assigned by T2 who given the treatment by using handout.

The reason for using this experimental method is to compare the results of two treatments carried out, so that it is known how far the contribution of the interactive multimedia for students in learning simple present tense.

The research design is presented in table 1 below:

<table>
<thead>
<tr>
<th>Table 1. Experimental Group Design</th>
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</thead>
<tbody>
<tr>
<td>Group</td>
</tr>
<tr>
<td>Experiment 1</td>
</tr>
<tr>
<td>Experiment 2</td>
</tr>
</tbody>
</table>

Notes:
R₁ = pre-test in experimental group 1
R₂ = pre-test in experimental group 2
R₃ = post-test in experimental group 1
R₄ = post-test in experimental group 2
T₁ = Interactive multimedia
T₂ = Conventional
(Source: adopted from Martyn Shuttleworth [https://explorable.com/users/martyn])

The study was carried out at Junior High School. Subject was class VIII PK-1 and class VIII PK-2, consisted of 20 students in each class. The material given was still the same, namely Simple Present Tense, but what made the difference was the development of the material which included descriptive text, procedure text and report.
The learning process was carried out for 10 meetings (8 treatments + 2 pre-test and post-test). The data analysis carried out after all the data had been collected. The reliability test used the Lilliefors significance correlation. Hypothesis testing in this study used non-parametric test. In this study, the Wilcoxon SPSS 16.00 test was used to test the hypothesis about the use of interactive multimedia in teaching learning process. The research hypothesis (Ho) is rejected if the Z count ≤ Z table or sign (2-tailed) > 0.05. Then, the research hypothesis is accepted if Z count ≥ Z table or sign (2-tailed) < 0.05.

3. FINDINGS AND DISCUSSION

FINDINGS

Before the treatment was carried out in the two experimental groups, a pre-test was first held. The pre-test data from the two experimental groups are presented in table 3 below:

The implementation procedure began with collecting information from the questionnaire, by giving a try out, giving a pre-test, doing revise product, developing the format / model, providing treatment into both groups, and then giving the post-test.

The study was carried out in September to October 2021, in where researchers conducted a series of follow-up experiments or trials in developing simple present tense material from the previous year. Treatment was carried out directly (face to face) in the classroom for 60 minutes.

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Based on the data presented, it was known that the t count was in the HO acceptance, so it can be said that result of experiment group 1 was not better than the experiment group 2. From the achievement, it can be interpreted that both of groups have the same level of ability.

Furthermore, the post-test results of both groups are presented in table 4. The data showed that the highest mean score was obtained by the first experimental group, in where the mean score of the first of experimental group was 1740, while the mean score of the second experimental group was 1616. From these data can be concluded that learning SPT by using multimedia is better than by using a handout. The difference result of two groups was very significant, in which t count ≥ t table 1.69, α = 0.05 which was presented below:

Table 4. Result of Post-test of Both Groups

<table>
<thead>
<tr>
<th>Source of Variation</th>
<th>Experiment Group 1</th>
<th>Experiment Group 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sum</td>
<td>1740</td>
<td>1616</td>
</tr>
<tr>
<td>n</td>
<td>20</td>
<td>20</td>
</tr>
<tr>
<td>x</td>
<td>87.00</td>
<td>80.80</td>
</tr>
<tr>
<td>Variance (S²)</td>
<td>77.2632</td>
<td>71.7474</td>
</tr>
<tr>
<td>Standard Deviation (S)</td>
<td>8.79</td>
<td>8.47</td>
</tr>
</tbody>
</table>

Based on the data contained in table 4, it gets the result as follow:

DISCUSSION

Data were obtained through a series of tests given to students, they are pre-test and post-test. Before conducting the experimental research, the researchers gave the pre-test to the students. It was to know the students’ score before the interactive multimedia was applied in treatment. Then, after treatment was completed, the post-test was carried out. More, the data got and shown in Table 4

The data of both groups were analyzed by using SPSS to find out the difference between pre-test and post-test. There were three statistical analyses used, they were the statistical analysis on the results of pre-test and post-test for experiment group 1 and experiment group 2 by using one group design (paired sample t-test), the statistical analysis on the post-test for experiment group 1 and experiment group 2 by using independent sample t-test, and the statistical analysis on the result of pre-test and post-test for both of groups by using paired sample test.

From the data got, the mean score of pre-test in experiment group 1 was 62.60, while the mean score of pre-test in experiment group 2 was 65.60. It means that both groups were having the same achievement because the difference score of both were only 3.00. The result of pre-test showed that there was no significant difference between both of
groups. That’s indicate that both of groups were in the similar level of ability The mean score of both classes are shown in Table 3.

Then, after calculating the post-test score, it got that the mean score of experiment group 1 was 87.00 while the experiment group 2 was 80.80. In this case, the experiment group 1 got higher score than the experiment group 2. It meant that, after researchers implementing the interactive multimedia in the treatment for the experiment group 1, the students’ score rose significantly than before.

Based on the explanation, it can be concluded that alternative hypothesis (Ha) was accepted. So, it meant that there was any significant improvement between the students who are taught by using the interactive multimedia and those who are not taught by using interactive multimedia.

The result of research finding known that the use of interactive multimedia was not only help the teacher in delivering the lesson, but it also can make the students to learn individually and motivate them to learn. The use of multimedia was also give real life experience where it served the audiovisual material to the learners.

This is in line with Nasution (2019). He stated that interactive multimedia allows students to work individually at a computer station, at their own pace, and according to their own needs, helps teachers to deal more effectively with a large group of students, makes the introduction and presentation of content more dynamic and attractive for students, and increases student motivation due to the interactive nature of the activities.

Finally, the discussion comes to the point that the use of multimedia can help teachers deliver the material easily and effectively. This will support student centered learning. The effectiveness of interactive digital multimedia excretory system to improve student’s achievement and student activity The results of the study showed that learning using interactive multimedia system effective excretion on student’s achievement and student activity.

4. CONCLUSION

Learning English in schools requires a new approach in the teaching and learning process, so that English learning is more interesting and students’ interest can increase. One of the efforts made is the use of interactive multimedia which in the process can involve students and media directly and interactively.

Interactive multimedia can contribute to the students’ understanding of the simple present tense material, because students who are taught by using interactive multimedia have a higher mean score than those taught conventionally. So, with a such good achievement, the media is recommended in the learning process.

It hoped that students can absorb all material given better. Furthermore, students will not be fixated on the existing material, but can choose according to what they need and their abilities through different conditions from conventional learning in the classroom. The use of interactive media cannot be separated from the use of computers because interactive multimedia can only be run through computer or technology-based computer. In the use of interactive multimedia, it very depends on the type of content that will be given, especially in English subject matter.

Currently, interactive multimedia can and should be used as one of the learning media at schools, and educators can teach various fields of study since it is seen as one of the most sophisticated media among other learning media.
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