The effectiveness of the digital books’ usage to improve the XII IPS 3 class students’ motivation at SMAN Pakusari Jember

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Abstract. This research aims to determine the effectiveness of the digital books’ usage in increasing student motivation in XII IPS 3 class at SMAN Pakusari Jember. The method used in this research is descriptive qualitative. The use of digital books in learning is useful to make it easier for students to learn and it also can reduce the weaknesses in printed books. The students feel easy and comfortable to use them in learning process, so it increases the students’ motivation at XII IPS 3 of SMAN Pakusari. The results showed that the use of digital books was very effective in increasing student motivation. The score of student learning motivation before using digital books is at a value of 3.4 which is included in the medium category. After using digital books in the learning process, the student’s motivation score increased to 4.5 which is in the high category. For further research, it is hoped that researcher can use digital books with more complete features and materials than the digital books used in this study.

1. Introduction

Education is manifested in the form of learning activities which done by human to get or achieve certain goals. While the students are learning In the school, they also hope to get the expected results in accordance with the efforts they do. However, to achieve maximum results in learning activities, of course there must be a driving factor so that students have enthusiasm for learning. One of the factors which encourages students to be an active learner is high learning motivations. According to Khanifatul [1], Learning motivation is one of the factor that can improve learning objectives.

Learning motivation is one of the most important dynamic aspects [2]. Students who do not excel are not always caused by low abilities, but it can be caused by a lack of motivation to learn so that the abilities possessed by students cannot develop optimally. Therefore, teachers need to balance the learning material and motivate students, because both are important to obtain maximum learning outcomes. Mc Donald in Kompri [3] stated that learning motivation is a condition which is owned by an individual in the form of an encouragement to make efforts to achieve a goal. The emergence of learning motivation is marked by changes in energy, feelings, and reactions to achieve these goals. The stronger motivation of a person, the stronger the person's behavior to achieve his goals and vice versa. Wina Sanjaya [2] has a similar opinion that the strength of a person to achieve goals is determined by the amount of motivation they have.

Students’ learning motivation can affect success in the teaching and learning process. Wina Sanjaya [2] suggests that the function in learning motivation is to encourage students to be active in and outside the classroom and to get good grades. It is also conveyed by Winarsih [4] which states that the function of motivation is to drive business achievement, because someone is doing business he or she must encourage his or her desires, and determine the direction of thier actions towards the goals to
be achieved. Thus students can select actions to determine what to do and which is beneficial for the goals they want to achieve.

The students’ learning success is strongly influenced by their motivation. One of the indicators of the quality of learning is the high motivation of students. Students who have high learning motivation towards learning will be moved or have a desire to do something which can help to get certain results or goals. According to Kompri [3] learning motivation is a psychological aspect which is experiencing development, and it is affected by the physiological conditions and psychological maturity of students. Several elements which affect the learning motivation are as follows:

a) The ideals and aspirations of students.
b) Ideals will strengthen students’ motivation to learn, both intrinsic and extrinsic.
c) Student Abilities
d) The desire of a student needs to be accompanied by abilities and skills in achieving it.
e) Student Condition
f) Student condition which includes physical and spiritual conditions. A student who is sick will interfere with his attention in studying.
g) Student Environment
h) The student environment can be in the form of the natural environment, the environment in which they live, peer group and social life.

According to Kompri [3] the position of motivation in learning does not only provide the direction of learning activities correctly, more than that with one's motivation will get positive considerations in learning activities. Motivation is very important in giving the spirit of teachers and students to teaching and learning activities and can provide guidance on behavior to be more focused in achieving learning success according to the expected goals.

The learning objective is to achieve success with optimal performance. Teachers are required to continue to improve creativity in achieving learning outcomes. There are several indicators used to assess the level of student motivation in class, these indicators are students' interest and attention to the lesson, students' enthusiasm for doing their learning tasks, responsibility for doing their learning tasks, the reaction shown by students to the stimulus given, teachers, as well as a sense of pleasure and satisfaction in doing assignments, Sudjana N [5]. If the students' motivation is high, they will get maximum results. According to Dimyati and Mudjiono [6] human behavior, including learning behavior, is driven and directed by a mental impulse called motivation. Therefore, it takes high motivation in learning to be able to produce maximum learning outcomes for students in school.

The learning resources used in Economy class of XII IPS at SMAN Pakusari Jember are still simple teaching materials, namely printed books. Printed books are considered to have many weaknesses including, not easy to carry, easily damaged, and their content cannot motivate students. Ideally, by following the development of the world of technology, teachers and students can take advantage of various forms of technology to support learning activities, one of which is to use digital book technology which can be accessed via smart phones. Buzzeto [7] also adds that digital books can be a complement or alternative to conventional books.

The world of education has a great opportunity to use smartphones in the learning process, especially as a learning resource. Digital books are a form of alternative learning resources which help to develop current learning. The presence of digital books makes it easier for students to study learning material which are not understood yet whenever and wherever students are [8]. The digital books can also be applied by students of SMAN Pakusari, because the results of previous observations of researcher in class XII IPS at SMAN Pakusari shows that all students have smartphones that can be used as a means to use digital books.

Basically, digital books are an evolution of printed books which usually contain text and images on a collection of paper displayed using electronic media such as smartphones. This book can contain reading texts, images, graphics and other information which can be read on smartphones, desktop or laptop screens, PDAs (Personal Digital Assistants) and other portable devices. Digital books can be
used in a variety of file formats and can be added with other features, such as hyperlinks. In addition, digital books can also include comments which are useful for teachers or students to add additional notes in it. Digital books can be obtained through several sites for free and are legal in nature, such as those on the site www.smartaccounting.worpress.com. Buzzeto [7] also adds that digital books can be a complement or alternative to conventional books. Based on these explanations, researchers and subject teacher think this research needs to be carried out in order to improve as well as student motivation in class XII IPS 3 at SMAN Pakusari Jember.

2. Methods
This research is a qualitative descriptive research which aims to explain the effectiveness of using digital books in increasing student motivation. Sources of data were obtained from XII IPS 3 class students at SMAN Pakusari Jember as samples and other supporting documents. The technique of collecting data was carried out through observation, interviews, and document analysis. Observations were made to obtain data related to student learning motivation when using digital books on the learning activities took place. The following is a table of the observation sheets used.

| NAMA | NO | ASPEK YANG DINILAI | Skor rata-rata |
|------|----|-------------------|----------------|
|      |    | A B C D            |                |
| 1    |    |                   |                |
| 2    |    |                   |                |
| 3    |    |                   |                |
| 4    |    |                   |                |

Tabel 1. Student Learning Motivation Observation Sheet

There are several steps to analyze the observation assessment, namely:

a. Determining the score which will be given to students in each indicator by:
   1) If students have fulfilled 4 aspects of each indicator, they will get a score of 5.
   2) If students only fulfill 3 aspects of each indicator, they will get a score of 4.
   3) If students only fulfill 2 aspects of each indicator, they will get a score of 3.
   4) If students only fulfill 2 aspects of each indicator, they will get a score of 2.
   5) If students do not fulfill all aspects of each indicator, they will get a score of 1.

b. The data collected from observations with frequency distribution and the next steps taken are:
   1) First add up the scores of each student, then divide number by the number of indicators.
   2) Second, add up each aspect and indicator, then describe it.
   3) Third, add up each indicator, then divide it by the number of students so that the average score for each indicator is obtained. Each score has an average indicator = \( \frac{\sum \text{score}}{\sum \text{student}} \)
   4) Fourth, add up the average score of the indicators, then divided by the number to obtain the average score on student learning motivation. The number of scores of students’ average student motivation = \( \frac{\sum \text{skor x}}{\sum \text{indicator}} \)
   5) The fifth did tabulation, then calculated the average score of learning motivation
   6) The six researchers describe the average score of learning motivation in terms of indicators and aspects, then determine the criteria for student learning motivation
   7) Seventh, in order to know the criteria of student learning motivation from the observation results, researchers can divide it into five criteria, namely, very low, low, medium or moderate, high and very high. In determining the class interval you can use the following formula:

\[
\text{Class Interval} = \frac{\text{Range}}{5} = \frac{5-1}{5} = 0,8
\]
Table 2 Interpretation Guidelines for the Average Score of Student Learning Motivation

| No. | Average score | Learning Motivation Criteria |
|-----|---------------|------------------------------|
| 1   | 1,0-1,8       | Very low                    |
| 2   | 1,9-2,6       | Low                         |
| 3   | 2,7-3,4       | Moderate                    |
| 4   | 3,5-4,2       | High                        |
| 5   | 4,3-5,0       | Very high                   |

Source: Sukardi (2013:150)

3. Results and Discussion

The results showed that the students of class XII IPS 3 at SMAN Pakusari Jember were able to operate digital books on economics subjects in journal adjustments to trade feelings well. The use of digital books is a new breakthrough for students in the learning process, so that it can attract students' attention and provide motivation for students in learning. Ease of use really helps students to study anywhere and anytime. Digital books are an alternative to using smartphones in a positive way.

Before using the digital book, the learning process went well even though when discussing many students did not pay attention to the opinions of friends and did not respond, there were some students who were just silent and did not ask friends or teachers, and students did not record trading company adjustment journal material in notebooks. It reflects that the learning motivation of class XII IPS 3 students has not shown the desired results by the teacher. According to Sudjana [5] there are several things which can be seen in learning motivation, namely students' interest and attention to lessons, student enthusiasm for carrying out learning tasks, responsibility for carrying out learning tasks, reactions shown by students to the stimulus given teachers and a sense of pleasure and satisfaction in doing assignments. The average score of student learning motivation is at a moderate level to be precise 3.4.

Diagram 1 Percentage of student learning motivation before using digital books

The diagram shows that 47% of students have high motivation at the time of learning, while the rest shows that the level of learning motivation is moderate before the use of digital books.

Student motivation after the use of digital books has increased and is in the high category. It can be seen from the majority of students becoming more active in the learning process as indicated by the increase in the average score of student learning motivation. The average score of student learning motivation is at a moderate level, to be precise, 4.5.
The diagram shows that 47% of students have high motivation at the time of learning, while the rest shows that the level of motivation to learn is moderate before the use of digital books.

4. Conclusion
Based on the results of research and discussion, it can be concluded that the use of digital books can increase student motivation in XII IPS 3 class at SMAN Pakusari Jember. The ease and convenience of students in accessing digital books as a learning resource can provide motivation to be able to study wherever and whenever students are. The results showed an increase in student learning motivation, which was originally in the moderate category with a value of 3.4, increased to the high category with a value of 4.5. In addition, the results of this study are expected to contribute to the academic world. For further research, it is hoped that you can use digital books with features and materials that are more complete than the previous version

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