

THE FREEDOM OF LEARNING WITH *ACCELERATED LEARNING* THROUGH THE UTILIZATION OF SAVI-BASED STUDENT'S ACTIVITY SHEET (LKPD) (*SOMATIC, AUDITORIAL, VISUAL AND INTELLECTUAL*) IN MARITIME ECONOMIC MATERIAL

Oleh:

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Abstrak

Kajian penelitian ini tentang pemanfaatan Lembar Kegiatan Peserta Didik (LKPD) berbasis SAVI (*Somatic, Auditorial, Visual dan Intelektual*) menggunakan pembelajaran *Accelerated Learning* pada materi ekonomi kemaritiman. Tujuan penelitian untuk mengetahui keefektifan LKPD dengan memperhatikan kecerdasan gaya belajar akan mampu meningkatkan motivasi dan hasil belajar peserta didik. Data penelitian adalah LKPD yang disusun untuk mengetahui kecerdasan gaya belajar siswa dengan pendekatan SAVI (*Somatic, Auditorial, Visual dan Intelektual* (SAVI). Teknik pengumpulan data penelitian adalah observasi dan eksperimen semu (*quasi-experimental non-equivalen design*). Hasil penelitian menunjukkan bahwa keefektifan LKPD mampu meningkatkan motivasi dan hasil belajar peserta didik yang dilihat dari pendekatan *Somatic, Auditorial, Visual dan Intelektual* (SAVI).

Kata Kunci : LKPD, *Accelerate learning*, SAVI (*Somatic, Auditorial, Visual dan Intelektual*)

1. INTRODUCTION

The development of education in the modern era affects the patterns of thinking and reasoning in every learning taught in formal schools. Education in Indonesia experiences a paradigm shift about learning from behavioristic theory shifting to the theory of cognitivism which recognizes how important individual factors are in learning without ignoring external factors. The definition of learning is the meaning of knowledge, which is obtained from the results of continuous interaction between individuals and the environment through the process of assimilation and accommodation. So, the students will have broader knowledge and experience. So that, the knowledge they get remains and is faithful in memory. In cognitive theory a student is trained to think about how to solve the problem by exploring his own knowledge, so that wider knowledge can be formed.

Basically students will have different abilities, so that these differences will cause gaps between students. However, this can be avoided if the teacher as a facilitator in learning can know the intelligence of each individual's learning style. By controlling the differences that occur in students, the gap can be minimized, at least the objectives of learning will be achieved conducive. To describe the obstacles faced by teachers as mediators and facilitators in learning today, teachers should also be able to prepare students to face the challenges of learning in the 21st century. Problem solving, creative thinking, and critical thinking, more

communicative and collaborating (Trilling, Bernie & Fadel, Charles: 2009).

In this study, there are several findings of obstacles that actually emerge and are faced by teachers of subjects in geography and social sciences relating to the elaboration of conceptual material to be abstract in making it easier for students to understand the nature of spatial on the earth's surface which is related with a place or environment. Spatial concept material requires some reasoning with the help of appropriate learning models and is supported by more complex media or infrastructure. In addition, the lack of understanding of the concept of spatial dimensions that have not been elaborated thoroughly when in elementary school, makes understanding of the spatial concept difficult to understand.

The concept of the spatial potential of maritime potential in Indonesia in a number of textbooks in junior high schools (SMP) indeed has not been much elaborated thoroughly. If analyzed in broad outline, Indonesia's maritime potential is very important to study because geographically Indonesia is an archipelago with two-thirds of the sea area larger than the land area. By ranking second in the world after Canada, Indonesia also has the longest coastline in the world. But on the other hand the fact is that the Indonesian people have not felt the potential role of the sea significantly, this is marked by the not yet optimally managed marine potential.

The limited material provided to students can be one of the reasons for the lack of

management of marine potential in Indonesia. One theory of "Sea Power" derived from a book called "*The Influence of Sea Power upon History*" from Alfred Thayer Mahan, suggests that the power of a marine element plays an important role in the progress and glory of a State. If the sea power is empowered, it will be able to improve the welfare and security of a country. Meanwhile, if the sea forces are ignored, it will result in losses for a country or even bring down the country. For this reason, it is necessary to have a learning concept that introduces the nature of learning that leads to marine potential material in Indonesia.

In learning activities in the classroom, students prefer when educators display a variety of learning aids to help them describe and understand the subject matter. They will feel bored if the teacher only explains directly without giving and showing the spatial concept that will be observed both in terms of location and geographical position observed. In essence, children learn various things that are congressional, so as to find out real concepts as visualizations (Amin, 2010). As one method or approach that can involve students as a whole actively and efficiently is to use one method of learning that involves all the senses, learning by moving physically and involving all thoughts involved in the learning process, namely with the *Somatic, Auditorial, Visual approach*, and *Intellectual* (SAVI).

Several studies related to *Somatic, Auditorial, Visual* and *Intellectual* (SAVI) learning models such as those conducted by Tan Hian Nio (2016) turned out to be able to significantly improve student learning creativity. In addition, research on the SAVI model approach is also able to improve student learning outcomes and have a good effect on students' thinking abilities (Kusniyah, 2013). Meanwhile according to Meier (2002: 100) learning will be able to have an optimal effect if the four elements of SAVI are in a learning situation. Students will learn about spatial concepts and interactions between rooms by watching maps or presentations (*Visual*), but they will learn more when doing something (*Somatic*), discussing and discussing what they learn (*Auditory*), and thinking and take conclusions or information that they obtain to be applied in solving problems (*Intellectual*).

2. RESEARCH METHODS

This research uses a quantitative approach, which deals primarily with numerical or numerical data. In this study, researchers want to develop knowledge by collecting data in the form of numbers (*numerical data*) based on actions or behaviors that can be observed from a sample and then process the data with numerical analysis. This type of research is a *quasi-experimental non-equivalent design*. Written test and performance test were conducted to assess the effectiveness of

psychomotor aspects and cognition of eighth grade students in Social Sciences subjects (IPS).

The research subjects or study participants were not randomly chosen to be involved in the experimental group and the control group. There are two groups of subjects one received treatment and one group as a control group. Both of them get pre-test and post-test, the difference with equivalent groups is that groups are not chosen randomly or randomly. The research design is as follows:

O1	x	O2	E
O3		O4	K

Noted:

E : The Group Experiments
K : A Control Group
O₁ : The Pre-test Experiments Group
O₂ : The Post-test Experiment Group
O₃ : The Pre-test Control Group
O₄ : The Post-test Control Group
X : The Treatment at the Group Experiments

The design does not use random assignment, this design is carried out with a very careful treatment and observation schedule. This design provides a strong foundation in providing reasons for controlling threats related to internal validation. If we look at the picture above, the dotted line between the two groups shows the specified groups are not chosen randomly (no randomly assigned groups).

The data source of this study came from students of eight grade students at SMP Negeri 1 Karanggeneng Lamongan, East Java. The research sample consisted of 2 classes out of eight grade at the school. By considering sampling based on class or homogeneous equality. Class eight grade A as an experimental class, and class eight grade B as a control class. Data analysis techniques using SPSS 18.0, to test the validity and reliability test of the instrument. Normality test, conducted to show that the sample data comes from populations that are normally distributed. The formula used in the normality test is the *Kolmagrov-Smirnov* formula as follows:

$$D = \text{Max } F_0(X) - S_n(X)$$

Noted:

F₀(X) : The proportion of cases expected to have a score that is equal or less than X

S_n(X) : Cumulative distribution of observable choices.

Homogeneity Test, used to determine whether a population group has the same variant or not by comparing the largest variant with the smallest variant. The variant analysis formula as follows:

$$F_0 = \frac{v^1}{v^2}$$

Noted:

F₀ : Variant observation

V¹ : The biggest varian (n-1)

V² : The smallest variant (n-1)

The description of the data, in this study will use the n-gain calculation to see the increase in scores between the pretest and posttest scores of each sample. The equation to find out the n-gain is as follows:

$$\text{n-gain} = \frac{\text{posttest score} - \text{pretest score}}{\text{maximum possible score} - \text{pretest score}}$$

Table 1. The Interpretation of the n-gain Value

Normalized n-gain average	Interpretation
$0,70 < \text{n-gain} \leq 1,00$	High
$0,30 < \text{n-gain} \leq 0,70$	Average
$\text{n-gain} \leq 0,30$	Low

If both samples have the same level of interpretation, then to find out the difference can be done by using *the effect size* calculation to find out the students' metacognitive improvement. The learning outcomes of each class are analyzed using the Cohen equation, as follows:

$$d = \frac{M_A - M_B}{\sqrt{SD^2 A + SD^2 B}}$$

Noted:

- d = the magnitude of the effect size
- M_A = the value of average pre-test class
- M_B = the value of average post-test class
- $SD^2 A$ = the standard deviation of the pre-test class squares
- $SD^2 B$ = the standard deviation of the post-test class squares

Table 2. The Value Classification of *Effect size*

n-gain Value	Interpretation
$d \geq 0,80$	High
$0,50 \leq d < 0,80$	Average
$0,20 \leq d < 0,50$	Low

From the value of t_0 (observation test) obtained from the above calculation results, it is interpreted with a table of values of t (critical price table t) with the following conditions:

- a. If t_0 is equal or greater than the criticism value 't' listed in the table (given the symbol tt) or (sig.) > 0.05 H, it states that "there is no difference between the two groups" accepted.
- b. If t is equal to or smaller than the criticism value 't' listed in the table (given the symbol tt) or (sig.) < 0.05 H, which states "the difference in the mean of the two groups" is rejected.

3. RESULTS AND DISCUSSIONS

This chapter presents LKPD products which is based on *Somatic, Auditorial, Visual and Intellectual* (SAVI). Based on the results of research and discussion of the effectiveness level of SAVI-based LKPD to improve student learning outcomes, the following conclusions are drawn:

1. There is an increase in the effectiveness of SAVI-based LKPD with results (*sig.2-tiled*) 0.70 for pretest data, and (*sig.2-tiled*) 0.001 for posttest data. The decision making criteria of

the pretest results is if (*sig.2-tiled*) > 0.05 then there is no significant difference in the experimental class and the control class. Another case if the decision-making criteria posttest results is if (*sig.2-tiled*) < 0.05 then there are significant differences in the experimental class and the control class. This can be seen from the value of *N-gain* in each class that shows an increase in different categories. The experimental class has an *N-gain* value of 0.45 which belongs to the medium category. The control class has an *N-gain* value of 0.27 which is in the low category.

2. There is an increase in learning outcomes in the experimental class with results (*sig.2-tiled*) 0.55 for pretest data, and (*sig.2-tiled*) 0.02 for posttest data. Where the pretest decision making criteria are if (*sig.2-tiled*) > 0.05 then there is no significant difference in the experimental class and the control class. It can also be seen from the value of *N-gain* in each class that shows an increase in different categories. The experimental class has an *effect size* value with a price of 0.78 included in the medium category, the control class has an *effect size* value with a price of 0.01 which is included in the low category.

4. CONCLUSION

The LKPD based learning SAVI (*somatic, auditory, visual and intellectual*) which is designed by measuring the level of movement intelligence somatic, auditory, vision (visual) and intellectual learners, turns out to be able to increase learning motivation in accordance with the concept of accelerated learning. The effectiveness of SAVI-based LKPD significantly increases learning activities and attracts students to be motivated in learning.

The accelerated learning is an acceleration in the assignment and understanding of subject matter that is studied with a short time. Freedom of learning means also presenting an interesting and fun learning model with a marked increase in motivation to learn for students. With increased learning motivation, the results will be able to improve learning achievement and learning outcomes as planned in the learning objectives.

5. SUGGESTION

The practical research suggestion is that the researcher hopes that the teacher as a facilitator will be able to develop various Student Activity Sheets by paying attention to the intelligence of each student's learning style. With LKPD based on SAVI learning, it can also be used as one of the appropriate and effective teaching materials as one of the solutions to problems faced by educators.

Educational institutions should further improve the quality of education quality and also

the quality of the ability of students with a variety of intellectual backgrounds. It should also be noted in improving the quality of educators by providing comfort and understanding of multiple intellectual intelligence of students.

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