

Visual Auditory and Kinesthetic Learning Model to Improve Students' Motivation, Creativity, and Learning Outcomes

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ARTICLE INFO

Keywords:

Creativity; Motivation;
Learning Outcomes

ABSTRACT

This study aims to identify how well the application of the VAK learning model can improve students' motivation, creativity, and scores in social science subjects. The study applies Classroom Action Research with two cycles. Each cycle consists of planning, implementing, observing, and reflecting. The respondents are 30 students of grade 9C grade at SMP N 1 Mlati which consists of 19 females and 11 males. The data analysis technique used quantitative descriptive methods. The results of the study show that applying the VAK learning model can increase the motivation, creativity, and outcomes of the students. The score of motivation of the pre-cycle is high and very high categories; as much as 43.34%, in cycle I it gets 70%, and finally, in cycle II it gets 100%. The score of creativity in the pre-cycle stage is good and very good categories; as much as 20%, the cycle I it gets 66.67%, and it gets 96.67% in cycle II. The minimum score for students in the pre-cycle stage is 46.67%, in the first cycle it gets 70% and the cycle II it gets 93.33%. It can be concluded that applying the VAK learning model can increase the students' motivation, creativity, and scores in social science.

DOI: [10.30595/rissej.v1i2.128](https://doi.org/10.30595/rissej.v1i2.128)

1. Introduction

The development and progress of a nation is greatly influenced by the quality of education. Education according to its form can be divided into two, namely formal education and non-formal education. Formal education is education that takes place in a regular, tiered, and continuous manner, while non-formal education is education that is carried out in a certain way but does not follow strict regulations. As an organizer of formal education, schools hold activities in stages and continuously.

To improve the quality of learning, various efforts have been made, namely by increasing learning motivation. In terms of learning, students will succeed if in themselves there is a willingness and awareness to learn and a desire or urge to learn. Motivation is not only important because it is a factor causing learning, but also facilitates learning and affects learning outcomes (Wiyono, 2018).

Motivation is the basic drive that drives a person to behave. Motivation and learning are two things that influence each other. The nature of student learning motivation includes the desire and desire to succeed, the motivation and needs in learning, the hopes and ideals of the future, the rewards of learning, the interesting activities in learning, and the conducive learning environment (Uno, 2016). Learning motivation is proven to significantly affect learning outcomes. The existence of high motivation in students will affect the learning process and the learning outcomes achieved (Sustianingsih, 2021).

Success in education is influenced by several factors. These factors can be grouped into two, namely factors from within or internal and factors from outside or external. An internal factor that is thought to influence success in education is learner creativity. Learner creativity is the ability of learners to develop imagination in constructive thinking (Wiyono, 2018). Creativity is the potential of every human being and

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Received June 11, 2023; Received in revised form Oct 13, 2023; Accepted Dec 13, 2023; Available online Dec 20, 2023
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not what is received from outside the individual. Creativity is a potential possessed by children that must be trained and familiarized from an early age. This is because creativity is one of the basic skills that must be possessed so that children can solve problems well, can think rationally and can adapt to change. Every learner has the potential to do something creative. In this life, creativity is very important, because creativity is an ability that is very meaningful in the process of human life (Siregar & Yunitasari, 2018).

Social Science is one of the subjects taught to students at the Junior High School (SMP) level. This lesson not only emphasizes the theoretical aspects but also emphasizes the practical aspects of studying, examining, and studying the symptoms and social problems of society. In social studies learning students not only have a limited knowledge, but students are expected to be able to have attitudes and social skills in social life. Knowledge, attitudes, and social skills of students can be seen from the learning outcomes in social studies learning.

Learning outcomes are a reflection of the level of success or achievement of the objectives of the learning process that has been implemented and ends with an evaluation that is measured using values or numbers (Rewa et al., 2019). Learning outcomes include cognitive, affective, and psychomotor domains. Lack of interest and motivation of students is an internal factor that affects learning outcomes (Nabillah & Prasetyo, 2019). In addition to internal factors, there are also external factors that affect learning outcomes, one of which is the learning model used by the teacher when teaching (Higuita & Harnanik, 2017). Social studies subjects are considered boring lessons for students so teachers in teaching need to use a variety of learning models. Teachers need to apply learning models that can attract the attention of students and follow the learning style of students so that learning can feel more fun and easy to understand. Teachers as implementers of learning in the classroom must be able to determine the right learning model used to optimize student learning outcomes.

Learning models are very diverse and one of the learning models that can be used in learning social studies is the visual, auditory, and kinesthetic (VAK) learning model. The VAK learning model is a learning model that prioritizes direct and enjoyable learning experiences for students. Each learner's learning model is different. Each learner has a dominant factor that directs learning either visually, auditory, or kinesthetic (Hussain, 2017). The visual learning model of students predominantly uses the sense of sight, in the auditory type the most dominant is the sense of hearing, and in the kinesthetic type prioritizes physical movement in the learning process (Rahayu et al., 2020). The results showed that as many as 42% of students were kinesthetic learning models, 23% of students were visual learning models, and 35% of students were auditory learning models (Gutierrez et al., 2018).

The VAK learning model can be interpreted that learning is carried out by utilizing the potential of students by training and developing it. The VAK learning model centers on how students learn with systematic steps, namely learning through seeing something, learning through hearing something, and learning through physical activity or direct involvement. With this learning method, student activeness increases, especially in the aspects of the ability to ask questions, the ability to answer, the ability to argue, and the ability to work together. The VAK learning model has proven effective in improving social studies learning outcomes (Hakim & Purwandari, 2020).

The results of preliminary studies conducted by the author at SMP N 1 Mlati found that there is still a lack of variety of learning models used by teachers. This resulted in students experiencing boredom in learning social studies which affects the low motivation of students to learn which is 56.64%. Students look less focused when learning takes place but also the creativity of students is not maximized at 80%. The results of the acquisition of values in the learning process carried out at the beginning of semester 2 of class 9C in the 2023/2024 academic year are still many students who get scores below the Minimum Completion Criteria (KKM), namely as much as 53.33%. Based on this, the authors are interested in researching increasing motivation, creativity, and social studies learning outcomes through the VAK learning model for students in class 9C SMP N 1 Mlati in the 2023/2024 academic year.

2. Method

The classroom action research was conducted in collaboration with teachers at SMP N 1 Mlati, Sleman, Yogyakarta. Subjects were students of grade 9C as many as 30 students which consist of 19 females and 11 males. This research was referred to the Spiral Model by Kemmis & Mc Taggart where there are four stages in classroom action research, namely planning, actions, observation, and reflection, resulting in cycles as shown in Figure 1. This study was carried out in two cycles.

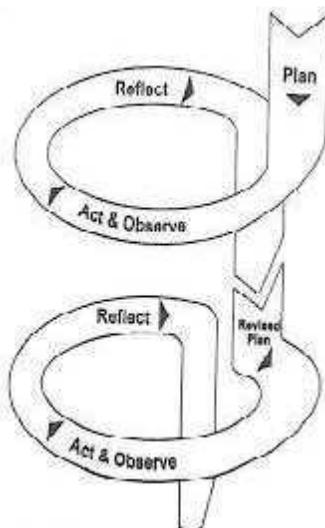


Figure 1. Model of Classroom Action Research by Kemmis & Mc Taggart

The technique to analyze data applies quantitative descriptive analysis of the results of the questionnaires, observations, and the scores of the students. The motivation questionnaire and creativity questionnaire were used in this study. The motivation questionnaire consists of 24 statements and covers 8 aspects, namely: 1) diligence, 2) perseverance, 3) interest in various issues, 4) willingness to express opinions, 5) collaboration, 6) enjoyment in learning social studies, 7) problem-solving, and 8) resistant to influence. Another instrument used was a creativity questionnaire consisting of 16 statements, in terms of aspects of fluency, flexibility, originality, and elaboration. Motivation was categorized into low, moderately high, high, and very high. While creativity was categorized into very low, low, moderate, good, and very good. The validity and reliability of both instruments were performed in 30 students and the results showed valid and reliable instruments. The indicator of the success of this study is if students who have motivation >75% minimum category is high and students who have creativity >75% minimum category is good. The learning outcomes of students as seen from the results of daily assessment scores. Students' achievement in this study was measured with at least 75% of the number of students reaching the minimum criteria of cognitive. The observers were involved in the study to minimize the potential for such variability.

3. Result and Discussion

From the research that was conducted from the precycle to the second cycle, the percentage results of motivation, creativity, and student learning outcomes can be obtained, as shown in Figure 2. The application of the Visual Auditory and Kinesthetic (VAK) learning model to students proved effective in increasing motivation, creativity, and social studies learning outcomes. The results of increased motivation and learning creativity directly contribute to the improvement of social studies learning outcomes.

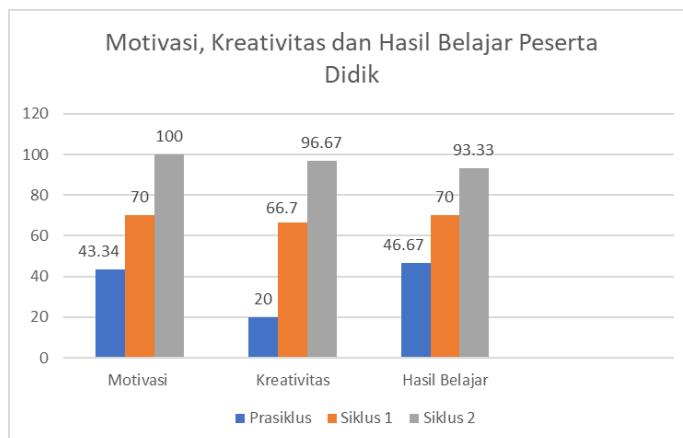


Figure 2. Increase in the percentage of motivation, creativity and learning outcomes of students in the pre-cycle, cycle I and cycle II stages

Learners who have a high level of motivation will be more likely to make extra efforts in understanding the material, following lessons, and doing exercises, which can ultimately improve their understanding and mastery of the material. Motivation not only affects how hard learners learn but also how they perceive learning and how they engage in the process. High motivation tends to create a more productive learning environment and has a positive impact on learners' learning outcomes.

Creativity can improve learners' learning outcomes as it allows learners to develop deeper understanding and contribute to a more effective learning process. Creativity not only helps learners understand and remember subject matter but also develops skills that impact critical thinking, problem-solving, and self-confidence. All of these contribute to better learning outcomes.

Figure 3 illustrates the detailed results of increasing learner motivation. The results of the learner motivation questionnaire at the pre-cycle stage showed that 43.34% of learners were in the high and very high motivation categories. Learning at this pre-cycle stage seemed unable to inspire learners to learn enthusiastically. Learners looked less enthusiastic, tended to be passive, and sometimes engaged in chatting with classmates both during the learning process and during discussions.

In cycle I, there was a significant increase in learners' motivation, which reached 70% in the high and very high categories. Learners began to show higher levels of activity and confidence in learning. Although the level of motivation was already quite high, the indicator of success had not been met, which had not reached at least 75%. Therefore, the research continued in cycle II. Furthermore, in cycle II, the results of the questionnaire showed a very positive increase, with the motivation of students reaching 100% in the high and very high categories. Learners have been able to follow learning using the VAK method well.

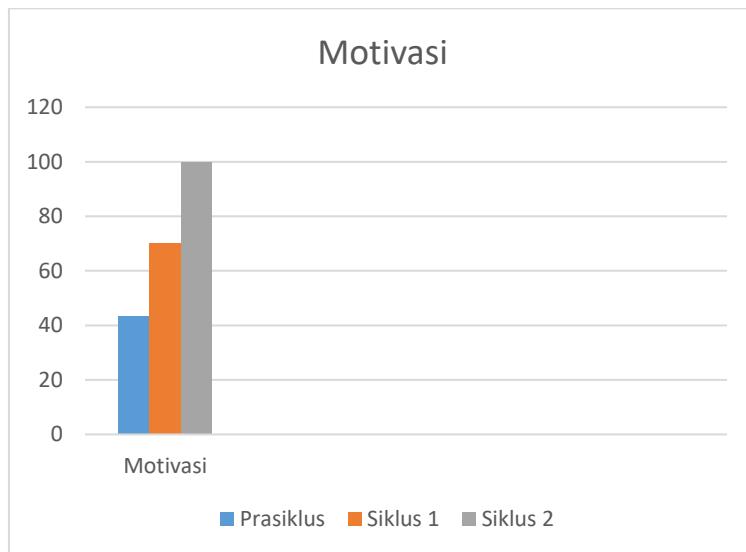


Figure 3. Percentage increase in motivation of students in pre-cycle, cycle I and cycle II

There was a significant increase in learner motivation from cycle I to cycle II. One of the factors causing this is the very important role of the teacher in providing motivation and direction to students so that the learning methods used can facilitate students in the learning process. In addition, learners' awareness of applying appropriate learning methods also contributed to the increase in learner motivation. Learning methods are one of the external factors that influence students' learning motivation in social studies subjects (Marjito & Nurhalipah, 2018).

Based on the results of the research conducted, it can be concluded that learning with the VAK method can increase students' learning motivation. This method allows learners' various learning styles to be met, thus allowing learners to be more engaged and feel more connected to the subject matter. By considering learners' preferences and learning styles, as well as providing variety in learning approaches, the VAK method helps to create a more engaging learning experience. Learning by applying the VAK method can be one of the learning innovations that can increase learning motivation. The use of different types of materials and approaches in VAK learning creates variety in learning. This variation can avoid boredom and monotony in learning, which can maintain learners' motivation.

The VAK learning method can improve social studies knowledge competence for students. There is a significant difference in social studies knowledge competency between students whose learning process uses the VAK learning model and groups of students with conventional learning processes (Parbawa & Sujana, 2018). The results of this study are in line with research which states that the VAK learning method

has a significant effect on student learning motivation (Kumala et al., 2022). Each learner has different learning style preferences, such as visual (learning through pictures and diagrams), auditory (learning through hearing and conversation), and kinesthetic (learning through physical experience). The VAK method accommodates these learning styles, so that learners can learn according to their preferences, which in turn can increase their sense of comfort and interest in learning.

Visual methods help learners visualize concepts, auditory methods can help them hear and understand information, and kinesthetic methods allow them to feel concepts through physical experience. This can make the material easier to understand. The use of the VAK method allows learners to experience learning holistically, by combining visual, auditory and kinesthetic aspects. In addition, the use of VAK methods often involves the use of real examples and practical applications, which can help learners see the relevance and importance of the subject matter in everyday life.

Figure 4 illustrates in detail the improvement of learners' creativity. The results of the learners' creativity questionnaire at the pre-cycle stage showed that 20% of learners were in the good category, 70% in the fair category, and 10% in the very poor category. Most learners have not been able to explore new ideas or ideas when responding to problems. Learners tend to be silent and follow the opinions of other friends who first express their opinions during discussions.

In cycle I, only 6.67% of students were in the category of less creativity, 26.67% were included in sufficient creativity, 40% of students were at the good creativity level and 26.67% had very good creativity levels. Although there was a significant increase in the level of creativity, the success indicator had not been met, which had not reached a minimum of 75% so that the research continued in cycle II. At the second cycle stage, the data from the creativity questionnaire showed a significant increase, reaching a level of 96.67% in the good and very good categories.

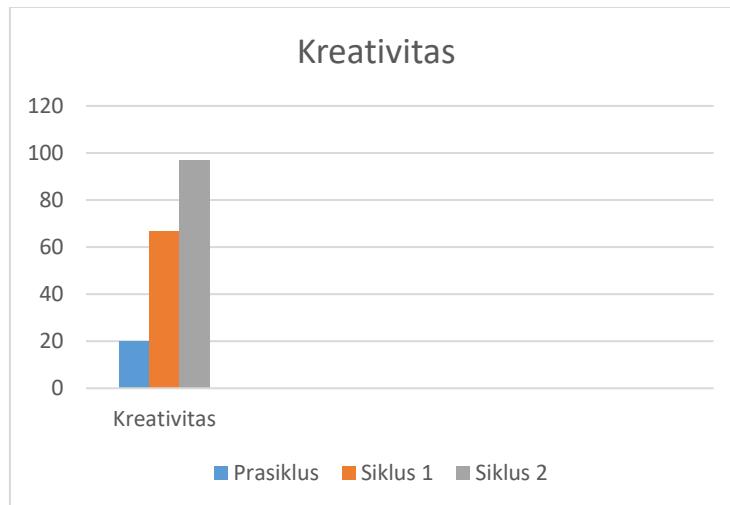


Figure 4. Increase in the percentage of creativity of students at the pre-cycle, cycle I and cycle II stages

Many factors can affect the level of creativity of learners. One of the factors that influence the level of creativity of learners is the role of the teacher. Teachers as mentors and facilitators can choose the right learning models and strategies so that students can think creatively (Widia et al., 2020). To instill creativity in students requires hard work from the teacher. Fostering creativity in learners can be done by not using a one-way learning approach and not being oriented to grades or exams (Khairy et al., 2022). An education system that focuses on standardized tests and evaluations can limit learners' space to express creativity. The pressure to achieve high academic results, especially in standardized tests, can lead to an approach to learning that is more focused on memorizing information rather than developing creative thinking.

Teachers can adopt a flexible approach by utilizing a combination of visual, auditory, and kinesthetic, to adapt learning methods to learners' individual needs and preferences. By considering diverse learning preferences, the VAK learning method can create an environment that supports the development of learners' creativity.

Based on the results of the study, it shows that the application of the VAK learning model can improve the learning outcomes of students, especially in social studies subjects. This can be seen by the increase in student learning outcomes through pre-cycle, cycle I, and cycle II daily assessments as shown in Figure 5.



Figure 5. Percentage Increase in Student Learning Outcomes at pre-cycle, cycle I and cycle II stages

Figure 5 shows that the percentage of completeness of student learning outcomes in the pre-cycle was 46.67%, in cycle I it reached 70%, and in cycle II increased to 93.33%. The percentage of completeness in cycle II is higher than in cycle I, this can occur due to several factors. Factors that can affect student learning outcomes include the utilization of learning resources, school environment, and school culture (Yandi et al., 2023). In addition, Intelligence Quotient (IQ), learning models, and student motivation together have a significant effect on learning outcomes (Gunawan & Hariani, 2018).

During the learning process in cycle I, students' understanding of the implementation of the VAK learning model was still lacking so the learning outcomes of students on the daily assessment were not maximized. In cycle II, the learning outcomes of students became better, namely, there were only 2 students who had not met the KKM. Thus, this VAK learning model can improve student learning outcomes. This is in line with research which states that there are differences before and after the application of the VAK learning model in improving social studies learning outcomes in students (Arsyad & Nuryati, 2019). The application of the VAK learning model can be relied upon as a good learning technique to improve student learning outcomes (Lestari, 2018).

The VAK method encourages variety in teaching approaches. Integrating visual, auditory, and kinesthetic elements in a lesson can make the material more interesting for learners. Recognizing variations in learning styles and providing diverse learning approaches can be an effective approach for teachers in conducting the learning process.

4. Conclusion

Motivation, creativity, and learning outcomes of social studies students can be improved by using visual auditory and kinesthetic (VAK) learning models. This can be seen from the data from the questionnaire results of learning motivation at the time of the pre-cycle the level of learning motivation was only 43.34% of students with high and very high categories, increasing in cycle I to 70% of students with high and very high motivation categories, then increasing again in cycle II to 100% of students with high and very high motivation categories. The data from the learning creativity questionnaire at the time of the pre-cycle creativity level was only 20% of students with good and very good categories, increasing in cycle I to 66.7% of students with good and very good categories, then increasing again in cycle II to 96.67% of students with good and very good creativity categories. Data on learning outcomes at the pre-cycle stage as many as 16 students or 46.67% reached the KKM. In cycle I it increased to 21 students or 70% reached the KKM. In cycle II, it increased to 28 students or 93.33% reached the KKM.

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