THE EFFECT OF SELF-REGULATED LEARNING ON CRITICAL THINKING SKILLS AND LEARNING OUTCOMES

AB. Dimas Ghimby¹
¹ Prodi Magister Pendidikan IPS, Fakultas Keguruan dan Ilmu Pendidikan, Universitas Jember
E-mail: ghimbydimas@gmail.com

ABSTRACT
This study aims to determine the effect of self-regulated learning on critical thinking skills and sociological learning outcomes for students of class XI majoring in Social Studies at Senior High School in Paiton District. The design of this research is ex post facto with an associative research type. The data obtained were analyzed by descriptive analysis techniques. The results of high school research in Paiton District show that: (1) critical thinking skills are classified as very high with an average of 41.63; (2) student learning completeness is 90.05%; (3) self-regulated learning has a positive effect on students' critical thinking skills (count = 5.22; α = 0.00), with a coefficient of determination of 28.1%; (4) self-regulated learning has a positive effect on sociological learning outcomes (count = 2.36; α = 0.02), with a coefficient of determination of 21.2%; and (5) self-regulated learning has a positive effect on critical thinking skills and student learning outcomes (Fcount = 47.21; α = 0.00), with a coefficient of determination of 29.6%.

Keywords: self-regulated learning, critical thinking skills, learning outcomes

INTRODUCTION
Education is a human effort to grow and develop self-bearing potentials, both physical and spiritual following values and norms in society and culture. Education plays a very important role in producing human resources in the right amount and quality. In Law Number 20 of 2003 concerning the National Education System article 1 paragraph 1 that education is interpreted as a conscious and planned effort to create a learning atmosphere and learning process so that students actively develop their potential to have religious spiritual strength, self-control, personality,
intelligence, noble character, and skills needed by themselves, the people of the nation and the State. (Depdiknas, 2003)

The purpose of education determines the style and content of national education. The content of education is described in the curriculum, where education seeks to guide students to their effective and efficient educational goals. Learning activities include planning, implementation, and evaluation. Planning involves creating curriculum and lesson plans (RPP). Through planning, it is expected that learning activities are by the objectives that have been set. Learning practices consist of activities that document the use of specific strategies and/or methods for effective learning. Evaluation of learning activities is carried out to monitor the effectiveness of the learning methods used. Assessment is also very helpful in confirming student abilities and learning outcomes after completing the learning process.

Article 3 of Law Number 20 of 2003 concerning the National Education System also states the functions of national education as follows: developing the ability and shaping the character and civilization of a dignified nation to educate the nation's life, aims to develop the potential of students to become human beings who believe and trust God Almighty, have a noble character, healthy, knowledgeable, capable, creative, independent, and a democratic and responsible citizen. (Depdiknas, 2003)

Regarding learning outcomes, (Sudjana, 1995) stated that the learning outcomes achieved by students are influenced by two main factors, namely internal and external factors or the environment. Factors that come from within, especially the skills possessed. Competency factors have a significant influence on the success of learning achieved. 70% of school learning outcomes are influenced by ability and 30% are influenced by external, or environmental factors. Sociology is one of the subjects of the Education Unit Level Curriculum (KTSP).

Sociology is taught in secondary schools and madrasahs through a separate, non-integrated approach. Permendikbud Number 59 of 2014 Curriculum 2013 concerning Content Standards for Primary and Secondary Education Units states that Sociology at the Senior High School education level aims to make students have the following abilities: (1) Strengthening the acquisition of sociological knowledge among students aimed at problem-solving and social empowerment. (2) Develop sociological knowledge or practice sociological knowledge in practice to improve students' social skills in solving social problems. (3) Fostering high religious attitudes and social ethics among students to have sensitivity, interest, and responsibility to solve social problems. (Permendikbud, 2014)

This ability enables students to solve social problems in social life reasonably and responsibly and take decisions based on positive values in a multidimensional society. Student empowerment in sociology subjects can be achieved through a learning process that provides freedom for students to express and express opinions. Learning that pays attention to student
characteristics so that it can achieve the expected learning outcomes. The real reality shows that the learning outcomes of students in sociology classes are still inadequate. Based on the results of the 2019 National Examination, the average score in the High School Sociology subject in Probolinggo Regency was 45.45 with the lowest score of 14.0 and the highest of 92.0. (Depdiknas, 2019)

This gives a clue that students' scores in Sociology subjects are relatively low. One of the causes of low learning outcomes in sociology subjects is an ineffective learning process. The learning process is still too focused on mastering theory and memorization, thus hampering students' learning ability. In addition, the learning process is not optimal because the learning method is teacher-oriented and ignores the rights and development of students. Based on initial observations made at one of the High Schools of Probolinggo Regency on May 12, 2022, problems related to poor student learning performance were identified. Students also have low critical thinking skills. The low critical thinking ability of students is shown by the presence of students who are embarrassed to ask questions when the material is difficult to understand. Students are passive in education and learning. Some students cheated on semester exams. Therefore, this study seeks to determine the effect of self-regulated learning on critical thinking skills and sociology learning outcomes of grade XI students majoring in Social Studies at a High School in Paiton District.

THEORETICAL FOUNDATION
Self Regulated Learning

(Zimmerman, 2002) defines SRL as "individuals who are metacognitively, motivationally, and behaviorally active participants in their learning process". In line with this, (Jordan & Porath, 2006) explain "self-regulated learning includes effective strategies for learning, reflection on one's thinking and learning (metacognition), and motivation and engagement with school tasks" For (Bandura, 1986) defines SRL as "self-regulation as an individual's control over his/her emotions, thoughts, and behaviors during learning". While the definition of SRL according to (Pintrich et al., 1993) is "an active, constructive process whereby learners set goals for their learning and then attempt to monitor, regulate, and control their cognition, motivation, and behavior, guided and constrained by their goals and the contextual features in the environment".

With self-regulated learning, students will become self-aware of the functional relationship between their thought patterns and actions. Self-regulated learning is also able to change students' views of learning as a skill and will be used to analyze learning tasks, set goals, and plan procedures for carrying out those tasks, applying skills, and in particular making decisions about how learning will be carried out. According to (Hall & Goetz, 2013), SRL consists of three main elements, namely: self, regulation, and learning.

Self means the personal efforts of individuals to set and achieve personal goals, regulation
means the process by which individuals compare the current status of targets with the status of their main targets and motivate themselves to reduce perceived controversy among them, and learning means deliberate activities initiated by individuals to acquire knowledge and skills.

There are many SRL models in the literature. Among them, (Zimmerman, 2002) SRL model based on Social Cognitive Learning Theory seems to be more widely used, and thus, also applied in this study. This model consists of three main phases, namely forethought, performance, and self-reflection.

In the forethought phase, the individual sets goals and makes relevant plans. The individual also examines his beliefs as to whether he may or may not be able to complete the task, questions why he wants to do it and identifies expectations on the outcome of the task. During the performance phase, the individual executes strategies on desired tasks and monitors the learning process. In the self-reflection phase, individuals assess learning outcomes or performance and regulate behavior accordingly. In the process of self-study, various strategies, grouped in several ways, are used. According to (Pintrich, 1999), individuals apply three types of SRL strategies, namely: Cognitive strategies, Metacognitive strategies, Resource management strategies

First, is cognitive strategies. Cognitive strategies include repetition, meaning, and organizational strategies for academic performance in the classroom. Second, metacognitive strategies. Metacognitive strategies are divided into three stages, namely planning, monitoring, and regulation. Planning is when individuals decide what to do to achieve their goals, monitoring is when individuals decide whether a strategy is effective or not, and regulation is when individuals determine whether goals are achieved and rearrange strategies according to results, comparing required standards with results. Third, resource management strategies. Resource management strategies are matters related to controlling and managing the time and efforts of students (e.g. controlling and managing time and efforts). (Zimmerman, 2002) self-learning strategy model was assessed in 14 aspects. (Zimmerman & Martinez-Pons, 1990) state that SRL strategies consist of organization, transformation, repetition, rote learning, goal setting, and planning strategies focused on optimizing personal self-regulation; self-assessment and self-finalization in developing behavioral functionality; and information collection, recording, and monitoring, structuring the environment, seeking social support, and reviewing the strategy of records focus on improving the environment.

While teaching SRL strategies, it was found that direct or indirect teaching approaches were adopted (Kistner et al., 2010). In terms of a hands-on approach, the teacher conveys information about strategies, creates awareness, and allows the practice of theoretical knowledge. In indirect cases, the teacher incorporates the effective use of strategies into the learning process without offering any information about the strategies at all.
Critical Thinking

Critical thinking is perceived as a high-level cognitive ability, which is vital for individuals to make decisions in their careers and life (Hale, 2012). The ability to think critically is almost always listed as one of the desired outcomes of education (Halpern, 1993);(Moore, 2013). Nurturing critical thinking requires focusing on the learning process, rather than on learning outcomes, from learning to thinking (Perkins & Murphy, 2006).

According to Bloom's taxonomy thinking abilities can be categorized from the real to the abstract i.e. knowledge, understanding, application, analysis, synthesis, and evaluation. The last three categories include higher-order thinking skills. According to Cotton in (Winarni, 2006), critical thinking is a process to decide the truth, accuracy, or value of something characterized by the ability to find reasons and choices, observe the situation thoroughly, and change one's opinion based on evidence.

Furthermore, (Ennis, 1996) maintains a conception of critical thinking that is mainly based on certain skills, such as observing, inferring, generalizing, reasoning, evaluating reasoning, and the like. For him, critical thinking is "the correct assessing of statements", but he also defines it more generally as "reasonable reflective thinking". (Ennis, 1992) states that "the skills associated with critical thinking can be learned independently of specific disciplines, and can be transferred from one domain to another. He does, however, acknowledge that a certain minimum competence in a particular discipline is essential before one can apply the skills of critical thought to that domain". He, however, recognizes that a certain minimum competence in a particular discipline is essential before one can apply critical thinking skills to that domain.

For him, the process of critical thinking is deductive: it involves the application of principles and critical thinking skills to specific disciplines. In response to criticism that his conception of critical thinking focuses only on skills, Ennis has recently included in his definition the idea of a tendency to think critically. Like (Paul, 1994) emphasizes the skills and processes associated with critical thinking. He distinguishes critical thinking in the weak sense from critical thinking in the strong sense. "In the weak sense it implies the ability to think critically about positions other than one's own; and in the strong sense, the ability to think critically about one's position, arguments, assumptions, and worldview as well".

For Paul, critical thinking includes "a deep knowledge of oneself, which takes both intellectual courage and humility. A strong critical thinker can understand the bigger picture holistically, to see different worldviews in perspective, rather than just to critique the individual steps in a particular argument". For him, dialogue with different people, who have different worldviews and cultural backgrounds, is an important feature of critical thinking. Thus we learn to see things from a different perspective, to contextualize our worldview in the bigger picture. The positive consequence is the tolerance we can learn as a result. For Paul then, critical thinking is
thinking that aims to overcome "egocentric and sociocentric thinking".

While (McPeck, 1981) argues that "critical thinking is specific to a particular discipline, and that it depends on a thorough knowledge and understanding of the content and epistemology of the discipline". For him, critical thinking cannot be taught independently of a particular subject domain. What this means is that it is difficult to be a critical thinker in the domain of nuclear physics if people know very little about it. No matter what critical thinking skills and dispositions a person may have, a broad and in-depth knowledge of a discipline is essential for critical thinking in that domain. This means that critical thinking implies a thorough knowledge of the discipline in which one works, its content, and its epistemology: what constitutes the truth of the premises and the validity of arguments in that discipline, how one will apply them, what the criteria are, for the use of technical language in the field in argumentation, and the like. For McPeck, the critical thinking process is inductive: it involves encouraging the principles of critical thinking with generalizations of the content and structure of the discipline.

Learning Outcomes

For someone who has done learning activities, in him, there will be changes in behavior called learning outcomes. (Sudjana, 2012) explained that learning outcomes are essentially changes in behavior in students after following the learning process. In addition, (Abdurrahman, 2003) defines learning outcomes as abilities obtained by students after going through learning activities.

According to (Watson, 2002), Learning outcomes are defined as "being something that students can do now that they could not do before". Learning outcomes should be clear, derived from observable demonstrations in student learning that occur after a series of significant learning experiences. Typically, these demonstrations or performances reflect three things: (1) what the student knows; (2) what the student can do with what he or she knows; and (3) students' confidence and motivation in demonstrating what they know" (Bouslama et al., 2003);(Guskey, 1994);(Kirk & Welborn, 1992);(McNeir, 1993);

In line with this, (Donnelly & Fitzmaurice, 2005) explain learning outcomes are "a statement of what the learner is expected to know, understand and/or be able to do at the end of a period of learning". Furthermore, (Wang & Chen, 2015) defines learning outcomes as "an important indicator for educators in evaluating curriculum design". The understanding of learning outcomes is emphasized by (Susanto, 2013) which states that learning outcomes can be interpreted as the level of student success in learning subject matter at school which is expressed in scores obtained from test results regarding a certain number of subject matter.

According to (Mudjiono, 2009), learning outcomes are students' cognitive processes consisting of verbal information, intellectual skills, skills, motor, attitudes, and cognitive strategies. Based on this opinion, it can be concluded that learning outcomes are competencies obtained by a student, which are characterized by changes in behavior after going through the learning process.
Changes in individual behavior are relatively permanent due to interactions with the environment. In other words, a person is said to have achieved a learning outcome if certain changes occur in him during the learning process.

The division of learning outcomes includes several domains commonly referred to as Bloom's taxonomy. The learning taxonomy is a framework for classifying statements used to predict and measure students' abilities after undergoing the learning process. (Bloom et al., 1956) classifies learning outcomes into three domains: cognitive domain, affective domain, and psychomotor domain.

The cognitive domain is part of learning outcomes that include behaviors in intellectual aspects such as knowledge, understanding, and thinking skills. (Bloom et al., 1956) divided learning outcomes in the cognitive domain into six levels: knowledge, understanding, application, analysis, synthesis, and evaluation.

Knowledge according to (Bloom et al., 1956) includes "includes those behaviors and test situations which emphasize the remembering, either by recognition or recall, of ideas, material, or phenomena". Knowledge stored in memory can be retrieved when needed through recollection or re-recognition.

Comprehension includes the ability to grasp the meaning and significance of the material being studied. This ability can be expressed by deciphering the main content of the reading, changing the data presented in other forms with the same meaning, and making estimates about the trends that appear in certain data, for example in the form of graphs or charts.

The application includes the ability to apply a rule or theory in a concrete and new case or problem. In other words, the application is the ability to use concepts, principles, procedures, or theories in certain situations. A person masters this ability if he can example, use, classify, complete, and identify something that has been learned.

(Bloom et al., 1956) analysis included "the ability to break down a whole into its smallest parts so that the structure of the whole can be understood comprehensively. Ability is expressed by analyzing the parts accompanied by relationships that have relevance to those parts. It may also be directed at the techniques and devices used to convey the meaning or to establish the conclusion of a communication".

(Bloom et al., 1956) synthesis included "the ability to integrate separate parts into a unified whole, or combine parts so that they form a logically related pattern, or draw conclusions from related events to form a pattern or structure not clearly there before. Generally, this would involve a recombination of parts of previous experience with new material, reconstructed into a new and more or less well-integrated whole".

Evaluation includes the ability to provide an assessment of solutions, ideas, and methodologies using suitable criteria or existing standards to ascertain the value of their
effectiveness or benefits. Regarding evaluation, (Bloom et al., 1956) explained "Evaluation is defined as the making of judgments about the value, for some purpose, of ideas, works, solutions, methods, material, etc". Evaluation is divided into two categories, namely: (a) evaluation based on internal evidence, namely evaluation of communication provisions based on logic, consistency, and other internal criteria, for example, showing logical errors in an argument; and (b) evaluation based on external evidence, i.e. evaluation of material based on established or remembered criteria, such as comparing theories, generalizations, and basic facts about a particular culture.

The affective domain contains behaviors that emphasize emotional and emotional aspects, such as interests, attitudes, appreciation, and ways of adjustment. According to (Jacobsen et al., 2009), affective domains consist of several levels. First, accept. Acceptance is a person's sensitivity in receiving external stimuli that come to him in the form of problems, situations, symptoms and others, including in this level for example is awareness and desire to receive stimuli, control and select symptoms or stimuli that come from outside.

Second, respond. Responding means active participation in an activity. The ability to respond includes the ability possessed by a person to actively involve himself in a particular phenomenon and make a reaction to it in one way. Third, appreciate. Respect includes the ability to provide value or appreciation to an activity or object. In the teaching and learning process, students are not only willing to accept the value taught, but they have been able to assess concepts or phenomena, namely good or bad. That value has begun to be kept in mind in him. The ability to appreciate can be expressed in the form of words or deeds. Respectful learning outcomes include consistent and fairly stable behavior with students' inner attitudes, for example, expressing positively about painting exhibitions.

Fourth, organize. To govern is to bring together differences in values so that new universal values are formed, which leads to general improvement. Organizing or organizing is the development of values into an organizational system, including the relationship of one value to another, and the strengthening and prioritization of values that it already has. Organizing and organizing is a higher level of attitude or value than receiving, responding, and valuing.

Fifth, characterization is based on a value or value complex. Characterization with a value or value complex is the integration of all value systems that a person already has that affect his personality and behavior patterns. Here the process of internalizing values has occupied the highest place in a hierarchy of values. That value has been consistently ingrained in his system and has affected him emotionally. This is the highest effective level because the student's mental attitude has been completely wise. He already has an established philosophy of life. So, at this level, students have a value system that controls their behavior for a long time, to form the characteristics of the "life pattern" of their behavior is sedentary, consistent, and predictable.

The psychomotor domain includes behaviors that emphasize aspects of motor skills such as
handwriting, typing, swimming, and computer operation. (Harrow, 1972) classifies the psychomotor realm into several levels. First, reflex movements. Reflex movements are responses to some stimulus without a conscious will in the learner. The movement is not based on deliberate intention but is considered to be of fundamental importance in an activity. For example, the eyes blink unconsciously when something falls over the eyes. Second, basic-fundamental movements. Basic-fundamental movements include visually tracking objects, reaching, grasping, manipulating targets by hand, and continuing to develop characterized by crawling, creeping, walking and ultimately running.

Third, perceptual abilities. This ability can help students interpret the stimulus they receive, and make it easier for them to adjust to the needs demanded by the environment. Fourth, physical abilities. These abilities include stamina, strength, flexibility, and agility, such as the long jump and playing soccer as well as other types of sports that require muscle contractions. By utilizing these physical abilities, students can meet the demands of their environment and are an important part of developing skillful movement.

Fifth, skill movements. Skill movements can be interpreted as the ability to do a task or it can also mean the efficiency of effort shown by students to perfect complex movements, such as making map drawings effectively. Sixth, nondiscursive communication. At the non-discursive communication level, each student communicates feelings and emotions through body movements, such as performing pantomime or dancing in communicating a musical work.

METHOD
Types of Research
This research design is exposed facto with associative research type. This study is classified as ex post facto because the data is taken as it is without any treatment. This research is associative because it seeks to find the effect of self-regulated learning on learning independence and learning outcomes.

Time and Place of Research
This research was conducted at a Senior High School located in Paiton District, Probolinggo Regency. The research took place from September 2021 to April 2022.

Population and Research Sample
The population of this study was all grade XI students majoring in Social Studies Senior High School in the sub-district totaling 600 students. In the sampling process using simple random sampling techniques. The sample size in this study amounted to 221 students. Research Variables The variables in this study consist of independent and dependent variables. The independent variable is Self-regulated learning. While there are two dependent variables, namely the ability to think critically and the learning outcomes of sociology.

Research Techniques and Instruments
Data collection in this study used questionnaires and documentation. Questionnaire techniques are used to collect data related to the application of self-regulated learning to students and documentation techniques are used to collect data on critical thinking skills and learning outcomes. The instruments used are questionnaire instruments. The questionnaire in this study is a questionnaire on the variable of critical thinking ability. The scale of the instrument used is the Likert scale. Each item of the questionnaire statement has four alternative answers, namely always (score 4), often (score 3), sometimes (score 2), and never (score 1).

Data Analysis Techniques
Data analysis techniques use descriptive and inferential statistics. The descriptive analysis used in this study is minimum score, maximum score, mean, median, mode, standard deviation, and percentage. Data is presented in the form of tables and histograms. This descriptive analysis is used to explain the characteristics of data, critical thinking skills, and research results to answer descriptive problems.

Inferential analysis in this study used a t-test to determine the effect of self-regulated learning on critical thinking skills and the influence of self-regulated learning on learning outcomes. Another test used is the F test to determine the effect of self-regulated learning on students' critical thinking skills and learning outcomes.

RESULTS AND DISCUSSION
The results of the study include the spread of data which includes the average score or mean, median, mode, standard deviation, minimum score, and maximum score accompanied by histograms of the two variables. First, the ability to think critically. Based on the results of the descriptive analysis shows that the highest score is 89; the lowest score reached 27; and the average score of students' critical thinking ability reached 73.33. Data on students' critical thinking skills collected were then grouped into four categories as follows:
Table 1. Categories of students' critical thinking skills

<table>
<thead>
<tr>
<th>Value Score</th>
<th>Category</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>≥ 73</td>
<td>Very High</td>
<td>92</td>
</tr>
<tr>
<td>56-72</td>
<td>High</td>
<td>53</td>
</tr>
<tr>
<td>38-55</td>
<td>Low</td>
<td>32</td>
</tr>
<tr>
<td>&lt;38</td>
<td>Very Low</td>
<td>44</td>
</tr>
</tbody>
</table>

Based on table 1 above shows that critical thinking skills with very low criteria 44; low criteria numbered 32; high criteria of 53; and a very high criterion of 92. The categories of critical thinking skills of senior high school students in Paiton District, Probolinggo Regency can also be drawn in the form of a histogram, as follows:

Picture 1. Percentage of Students' Critical Thinking Ability

Based on figure 1 above, shows that students' critical thinking skills in the category are very low at 19.91%; low category at 14.48%; high category at 23.98%; and the very high category reached 41.63% which means that the self-regulated learning model is following students in improving critical thinking skills, but some students experience difficulties in critical thinking skills due to lack of facilities in the form of LKS or learning books, this can be used by teachers and parties involved to improve and add to the lacking facilities.

Second, learning outcomes. Based on the results of descriptive analysis, it is known that the average score of 221 students in sociology subjects is 80.33; the highest value reached 95; and the lowest value reached 70. Data on student learning outcomes in sociology subjects that have been collected are then grouped based on minimum completeness criteria (KKM) of 75. If the student gets a score of 75 or more, then the student is classified as complete in his learning and if the student gets a score below 75 it is classified as incomplete. Based on the calculation results, the categorization of student learning outcomes can be seen in the following table:
Table 2. Categories of student learning outcomes in Sociology Subjects based on KKM

<table>
<thead>
<tr>
<th>Student Grades</th>
<th>Category</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>≥ 75</td>
<td>Complete</td>
<td>199</td>
<td>90.05%</td>
</tr>
<tr>
<td>&lt; 75</td>
<td>Incomplete</td>
<td>22</td>
<td>9.95%</td>
</tr>
</tbody>
</table>

Table 2 above shows that as many as 199 students are included in the complete learning category and as many as 22 students are included in the learning outcomes with the incomplete category. The completeness of learning from 221 students in sociology subjects of Senior High School in Paiton District, Probolinggo Regency can also be drawn in the form of a histogram, as follows:

![Percentage of Student Learning Completeness in Sociology Subjects](image)

**Picture 2. Percentage of Student Learning Completeness in Sociology Subjects**

Figure 2 above shows that students who are classified as incomplete in learning by 9.95% and students who are complete in learning by 90.5%. This shows that student learning completeness reaches more than 75%, which means students have mastered the learning objectives of Self-regulated learning following the teacher's target.

**The Effect of Self-regulated Learning on Critical Thinking Skills**

Self-regulated learning has a positive effect on the Critical Thinking Ability of grade XI students majoring in Senior High School Social Studies in Paiton District, Probolinggo Regency. This is indicated by a calculated value of 5.217 at a significance level of 0.000. These results provide clues that the higher the self-regulated learning of students, the higher the ability to think...
critically. The coefficient of determination of self-regulated learning on critical thinking skills is 0.281. This means that 28.1% of critical thinking skills are influenced by self-regulated learning.

The Effect of Self-regulated Learning on Learning Outcomes

Self-regulated learning has a positive effect on the learning outcomes of Sociology students of grade XI majoring in Social Studies at Senior High School in Paiton District, Probolinggo Regency. This is indicated based on a calculated value of 2.361 at a significance level of 0.019. These results provide clues that the higher the student's self-regulated learning, the higher the student's sociology learning outcomes. The coefficient of determination or contribution of self-regulated learning to student learning outcomes is 0.212. This means that 21.2% of learning outcomes are influenced by self-regulated learning.

The Effect of Self-regulated Learning on Critical Thinking Skills and Learning Outcomes

The results of the analysis show that self-regulated learning is an important factor to obtain optimal learning outcomes. With high self-regulated learning, critical thinking skills and high learning outcomes will be obtained, and vice versa. This is shown from the results of simultaneous tests by obtaining $F_{\text{calculate}} = 47.211$ at a significance level of 0.000 smaller than the error degree of 0.05. This means that there is a positive influence of self-regulated learning on students' critical thinking skills and learning outcomes in class XI sociology subjects majoring in Social Studies at Senior High School in Paiton District, Probolinggo Regency. The amount of simultaneous contribution of self-regulated learning to students' critical thinking skills and learning outcomes in sociology subjects as contained in the adjusted $R^2$ column is 0.296. This means that 14.2% of critical thinking ability variables and 15.4% of learning outcome variables are influenced by self-regulated learning variables, while 70.4% are influenced by other variables not discussed in this study.

ACKNOWLEDGMENTS

AB. Dimas Ghimby would like to express his sincere gratitude to Dr. Nurul Umamah, M.Pd. for taking the time to provide guidance and provide patient advice for the completion of this journal. For this reason, the author also expressed his deepest gratitude to friends who have encouraged them to complete this lesson.

CONCLUSION AND ADVICE

Self-regulated learning is a concept of how a person becomes a manager of himself in his learning activities and can activate and encourage thinking (cognition), feelings (affection), and actions (actions) that have been planned systematically and repeatedly oriented to achieve a goal in learning. Thinking is one of the things that distinguishes one human being from another in
producing new mental representations through information transformation that involves complex interactions including reasoning, imagination, and problem-solving activities.

Learning outcomes are abilities acquired by students through learning activities. In another sense, learning outcomes are patterns of action, values, understandings, attitudes, appreciation, and sustainability. Learning itself is a process of a person trying to obtain a relatively sedentary form of behavioral change. Related to the findings in this study found that: (1) Critical thinking skills are very high with an average of 41.63; (2) Student learning completeness of 90.05%; (3) Self-regulated learning positively affects students’ critical thinking skills ($t_{hitung}$=5.22; $\alpha$=0.00), with a coefficient of determination of 28.1%; (4) Self-regulated learning has a positive effect on sociology learning outcomes ($t_{hitung}$= 2.36; $\alpha$=0.02), with a coefficient of determination of 21.2%; and (5) self-regulated learning positively affects students’ critical thinking skills and learning outcomes ($F_{hitung}$=47.21; $\alpha$=0.00), with a coefficient of determination of 29.6%.

BIBLIOGRAPHY
AISHE.


Group.


