Effect of Assessment as learning on Creative Critical Thinking Ability and Self-Regulating Ability

Titik Harsiati
Malang State University
titik.harsiati.fs@um.ac.id

Abstract. Assessment as a learning tool related to the activities of reflection, monitoring and accurate adjustment by students. In this assessment, student involvement is needed in considering and questioning their own thoughts. In a simple assessment as a learning tool is the process of recording students towards their learning processes and results. The research was conducted using experimental development research methods to test whether there was an effect of as learning assessment on critical-creative thinking skills and self-regulation ability. The results showed that assessment of learning did not affect the ability of critical-creative thinking. As learning assessment influences self-regulation ability. The effect of as learning assessment on self-regulation ability is caused by assessment as learning function to provide descriptive and accurate feedback for each student so that it will help develop learning habits independently. In addition, assessment functions to encourage students to focus on the learning process they are going through (not on the ability to answer correctly). Students are given the opportunity to reflect on ideas to adjust, rethink, and articulate their learning processes and outcomes (Black, 2004). As learning assessment does not affect creative critical thinking skills because as learning assessment focuses more on the affective aspects. On the other hand the ability to think critically is related to aspects of the content / topic, form and use of language. Students' awareness of their learning behavior has not directly influenced their ability to think critically-creatively.

Keywords: assessment as learning, creative critical thinking ability, and self-regulating ability

INTRODUCTION

Assessment and learning are two interrelated things (Brown, 2005). Assessment has an important role to create the 21st century generation. The 21st-century generation is expected to own special skills as to adapt to the digital era. According to the International Society for Technology in Education (2007) there are six 21st century skills, namely (a) creativity and innovation, (b) communication and collaboration, (c) smoothness of research and information, (d) critical thinking, problem-solving, and decision-making, (e) digital citizenship, and (f) technology concepts and operations. The range and form of the preexisting information changes due to the occurrence of digital skills, but one thing that will not change is the skill itself. In order to prepare the 21st century generation, it is necessary to revitalize the assessment strategy. The assessment required is an assessment that can provide constructive feedback and serves as a learning tool. The assessment of such characteristics is necessary to prepare students to be lifelong learners and to be reflective. This explanation aims to (1) describe the pattern of feedback in the writing assessments in junior high school (2) describe the use of self-regulation in writing assessments, (3) analyze feedback according to the principles of feedback, and (4) analyze self-regulation in the assessment perspective as learning tools (assessment as learning)

The nature of the Assessment for Learning and Assessment as Learning

Assessment in learning is categorized into three types; they are an assessment for learning, assessment as a learning tool, and assessment after completion of learning. Assessment as a learning tool is an assessment to guide and provide opportunities for students to monitor and reflect critically on their learning processes and outcomes. Assessment as a learning tool also helps students identify the steps they need to take next to improves their learning quality. Assessment as a mean of learning explores what students think about their learning processes and outcomes, the learning strategies that are used, things that support or hamper their learning, and how they make adjustments and improve their learning quality. Assessment as a learning tool is related to the reflection of activities, accurate and consistent monitoring and adjustment activities by students. This assessment requires the involvement of students in considering and questioning their own
thinking. Assessment as learning is simply the process of students recording their own learning processes and the outcomes of it.

The function of assessment as a learning tool is to provide a descriptive and accurate feedback for each student so that it will help develop independent learning habits. In addition, the assessment works to encourage students to focus on the learning process they are undergoing (not on the ability to answer correctly). Students are given the opportunity to reflect on ideas to adjust, rethink, and articulate their learning processes and results.

The Effectiveness of Self-Regulation in the Writing Learning Assessment

The results of the study found that self-regulation in writing assessment is done by reflection of competencies that have been mastered have not been mastered. The main thing developed in the assessment activities as a means of learning is the growth of self-regulation ability or metacognitive ability in students. Self-regulation and metacognitive are the key skills needed in the 21st century (Susan, 2008).

Self-regulation is closely related to metacognitive. Susan (2008) explains that metacognitive is the ability to control the domain or cognitive aspect. Metacognitive is basically a person's ability to learn, which includes how best to learn to do, what is and is not yet known, what strategy will be done to improve learning. Metacognitive consists of three stages: planning on what should be learned, to where the attainment of how to learn, when to learn, what steps are being taken to study, and monitoring of the learning process being done. Metacognitive is a high-level thinking activity. Metacognitive ability allows students to control the thinking process that is going on for them.

Metacognitive includes two components, metacognitive knowledge, metacognitive experience or regulation. In other words it can be concluded that there are two important components to metacognitive, that is (a) what we know and what we do not know, and (b) the regulation of how we learn. The two metacognitive components, metacognitive knowledge and metacognitive regulation, each have sub-components. Metacognitive knowledge consists of declarative knowledge, procedural knowledge, and conditional knowledge. Metacognitive regulation consists of sub-capabilities, planning strategies, information management strategies, monitoring comprehension, effectiveness strategies, and evaluation.

The first component of metacognitive knowledge is the knowledge of oneself as the learner, the strategy used, the skills, and the learning resources he needs for learning. The second component of metacognitive knowledge is the knowledge of how to use what is already known in the declarative knowledge in its learning activities. The third component is the knowledge of when to use a procedure, skill, or strategy and when such things are not used, why a procedure proceeds and under what conditions it takes, and why a procedure is better than other procedures.

Cognitive regulation consists of three sub-components. The first is planning component that demands students' ability in planning their learning activities. Second, the strategy to manage information, namely the ability to manage information related to the learning process undertaken. Third is the ability to monitor the learning process and matters relating to the process. Fourth is the ability to debug strategies is a strategy used to correct wrong actions in learning. And fifth is the ability to evaluate the effectiveness of their learning strategy, whether they will change their strategy, give up on the situation or end the activity.

As stated in the previous description that metacognitive is essentially the ability to learn how learning should be done in which the activities are considered and carried out (1) developing a learning activity plan, (2) identifying its advantages and disadvantages with regard to learning activities, (3) a learning program for new concepts, skills and ideas, (4) identifying and using their daily experiences as a source of learning, (5) utilizing modern technology as a source of learning, (6) leading and participating in discussions and solutions (7) learning from and benefiting from the experiences of certain people who have succeeded in a particular field, (8) learning from and taking advantage of the experiences of certain people who have succeeded in a particular field, (9) understanding the factors supporters of learning success. Based on the exposure it appears that one's success in learning is influenced by his metacognitive ability. If each learning activity is conducted with reference to the indicators of learning how to learn as mentioned above, optimal results will undoubtedly be achieved easily.

Based on the explanation above, it can be concluded that effective self-regulation in writing assessment should include product reflection, personal / feeling response, and follow-up. The implementation of a writing assessment needs to be developed by self-regulation focused on reflecting on the writing process, feelings, strategies used, and follow-up to improve learning. So, the feedback of the research in learning writing in junior secondary is less relevant from the perspective of assessment as learning.
SELF-REGULATION AND CRITICAL THINKING ABILITY

The instrument employed in this research, self-regulation instrument includes (1) ability to create a learning activities plan for each meeting of the lesson, (2) understanding learning objectives in each meeting of lesson, (3) understanding accomplishment criteria of learning outcome, (4) identifying parts of learning which have not been acquired, (5) rationalizing and identifying reasons which hinder the accomplishment of learning objectives, (6) identifying individual’s strength or progress on each course topic, (7) rationalizing and identifying reasons which supports individual’s accomplishment, (8) assessing and evaluating individual’s ability by using existing criteria, (9) understanding behaviour and attitude which hinder individual’s progress, (10) understanding and reflecting behaviour and attitude which support individual’s progress, (11) attempting to decrease or eliminate behaviour which hinders learning process, (12) attempting to enhancing or improving behaviour which supports individual’s progress, (13) figuring out the way to solve existing problem experienced by individual, and (14) attempting to figuring out what approach can be made to improve the individual’s strength and ability.

Regrettably, this present research confirms no correlation between students’ self-regulation and information literacy comprehension. The results of this research are in line with the opinion of Zimmerman, stating that learners can be considered to have self-regulation in learning when in the learning process the learner involves the use of specific strategies to achieve their academic goals [6]. Learners have high self-regulation when they have an active role in mobilizing metacognitive processes, motivations, and behaviour while learning. Learners who have self-regulation in learning will be able to direct themselves, make plans, organize material, instruct themselves, and evaluate themselves in the learning process. From this opinion, it can be seen that self-regulation is closely related to the aspects of emotions, motivation, and behaviour.

On the other hand, information literacy comprehension is closely related with thinking ability of the individual. In other words, information literacy comprehension predominantly deals with the aspect of cognitive. Meanwhile, self-regulation predominantly deals with the aspect of affective. Therefore, it is understandable when this research affirms that there is no correlation between information literacy comprehension and self-regulation among prospective engineers.

ASSESSMENT AS LEARNING AND CREATIVE CRITICAL THINKING WITHIN LEARNING PROCESS

From the results of research, it obtained that information assessment as learning didn’t affect on creative critical thinking ability. Therefore, appropriate learning and assessment are needed to improve the ability of creative critical thinking. Creative thinking is detected in four forms, namely sensitivity, fluency, flexibility, and originality. Regarding sensitivity, originality, flexibility, and fluency in the thought process that generates an idea (creative), it is deemed necessary to have further action to fix and organize well or regularly and in detail what has been produced. This needs to be performed so that the individual does not lose momentum in the learning atmosphere, particularly before the good ideas that arise is forgotten. This regular and detailed organization enable the opportunity for prospective engineers to be able to repeat or read at any time and review what they produce.

In relation to learning that can improve critical-creative thinking skills, there are several studies that affirm the improvement of creative thinking ability. Kirmizi reveals a study of the influence of creative reading and creative writing to improve creative-critical thinking ability [7]. Learning that focuses on creative reading can enhance creative thinking ability.

In line with the aforementioned argument, Facione develops critical thinking learning with an emphasis on developing skills: (1) interpreting, (2) analyzing, (3) influencing, (4) evaluating, (5) explaining, and (6) regulating themselves [3]. The Facione taxonomy was developed based on the agreement of experts and the six levels of thinking were synthesized from the best dimensions of critical thinking. The six levels in the Facione taxonomy are presented below.

The skill of interpreting empowers individual to understand and express the broad meanings or context of various situations, data, and events. This interpreting skill has three sub-skills, namely: (1) categorizing, (2) explaining meaning, (2) classifying.

Analytical skill enables the individual to identify and correlate statements, questions, concepts, or descriptions to express or expose beliefs, judgments, reasons, or descriptions to express beliefs, judgments, or opinions. Analysis skill consists of sub-skills: (1) ideas assessment, (2) arguments identification, and (3) arguments analysis.

Within inferring skill, the individual is empowered to be able to identify the elements needed to draw reasonable conclusions, make predictions, and hypotheses, and consider relevant information. Inferring skill shall consist of three
sub-skills, they are (1) challenging the evidence, (2) proposing alternatives, and (3) making conclusions.

Evaluating skill belongs to one skill that performs an assessment on the credibility that entails within certain statement based on perceptions, situations, beliefs, or opinions. Within the skill of evaluating, individual shall deal with two sub-skills which are (1) assessing claims and (2) assessing arguments. While, explanatory skill is a skill which enforces prospective engineers to state, argue, and explain information, data, evidence-based ideas, concepts, methods, and criteria. This skill shall consist of three sub-skills: (1) declaring results, (2) justifying procedures, and (3) presenting arguments.

PISA (2012) develops its own interpreting taxonomic thinking skills to compile problem-based problem solving namely: (1) exploring and understanding, (2) representing and formulating, (3) designing and implementing, and (4) monitoring and reflecting. The taxonomy of exploring and understanding involves the ability to explore problems by observing, interacting, tracing information, finding constraints and showing understanding and findings. The taxonomy of representing and formulating involves the ability to use graphs, symbols, or words to describe problems, form hypotheses or interim conclusions which are related to factors relevant to the problem or situation solved. The taxonomy of designing and implementing involves the ability to find a draft strategy for solving problems and implementing them. This includes clarifying objectives and designing sub-goals. The taxonomy of monitoring and reflecting involves the ability to monitor progress, reactions, feedback, and reflect on solutions that are suitable for the chosen problem or strategy.

Creative thinking is a thinking ability that begins from being sensitive to the ‘challenging’ problem that is being faced. Furthermore, there are elements of originality of ideas that arise in an individual’s mind related to what is identified. The results raised from creative thinking are actually a new thing for the individual concerned and is something different from what they usually perform. Creative thinking also appears in the form of the ability to find new relationships and to look at things from different perspectives.

Akin (2017) reveals the results of experimental research regarding critical thinking skills. The expert found that critical thinking learning through scientific texts influences academic achievement, critical thinking ability, and critical reading ability.

**SELF REGULATION AND ASSESSMENT AS LEARNING**

Self regulation is an important aspect of the assessment as learning. In particular, self-regulation is related to students' ability to reflect on their own critical learning activities in order to determine the next learning step. Self regulation is closely related to the assessment characteristics as a means of learning (assessment as learning). The assessment has several characteristics, namely (a) integrating with the daily learning process, (b) carried out continuously during the implementation and after the learning takes place, (c) the students learn to think critically of their learning activities and learn their friends, (d) the teachers get information about the process and the learning outcomes of the students from the perspective of the students themselves, (e) the students identify the weaknesses and the advantages of learning, (f) the students determine the learning strategy according to their learning style, (g) the students reflect on their own learning (self-assessment), (h) the teacher gives students the opportunity to express their own learning difficulties, (i) the students learn to provide peer assessment, (j) the students learn from their peer's critical assessment (peer assessment), (k) students provide feedback and assessment to their friends according to the capacity they have with the peer assessment, and (l) assessment as the learning activities as peer and self-assessment at the secondary school level become part of formative assessment for improvement of learning process (Black).
dealt with two sub-skills, they are (1) self-assessment and (2) self-correction.

In the assessment as learning, the teacher provides an opportunity for students to reflect on the activities and learning outcomes. In addition, students learn to provide constructive assessments and feedback on the processes and work of their friends. It is based on the belief that students are seen as subjects able to assess themselves and each other (peers). Assessment as a learning tool is necessary based on the following things.

- Students need to understand how to learn with the right strategy.
- Students have different perspectives (perspectives) from the teacher's perspective
- Some students prefer to learn from their friends
- Students need to be involved in reflecting on their learning and providing feedback to their friends

Assessments for learning have a guiding function and provide an opportunity for each student to monitor and reflect on their own critical learning activities and determine the next step or learning strategy. According to Susan (2008), the metacognitive formation can be done by giving students the opportunity to critically reflect the steps and learning strategies. By having good metacognitive abilities, students get descriptive and accurate feedback that can help or develop self-learning habits

The benefits of self-regulation in the writing assessment include (a) directing students to focus on the task and learning (rather than providing the correct answer), (b) giving students ideas for assessing, rethinking, and demonstrating their learning activities, (c) encouraging students to think (d) encourage students to learn from each other (from peers), (e) creating conditions so that teachers and students can discuss alternative solutions, and (f) encouraging students to learn from each other (from peers) teachers get reports of learning activities in the perspective of students.

In implementing the assessment as a means of learning teachers need to design an instrument that can provide data related to the learning steps undertaken by students, things that have been understood by students, things that students have not understood, the feelings of students in achieving goals, the process of the most preferred, which students must do to improve their learning. Assessment activities as a means of learning are conducted in the following ways.

In particular, self-regulation is closely related to the metacognitive abilities consisting of the following activities.

1) Goal setting: to organize to know what to expect when reading or learning.

2) Planning: organize them in using the time and resources they have to do the learning task.
3) Controlling attention
4) Organizing in order to focus on the subject matter and clear the mind of the things that have the potential
5) Disturbing concentration and emotion. Application of learning strategies
6) Organize in order to choose a learning strategy that fits the specific objectives to be achieved.
7) A self-motivated strategy of self-regulation in order to maintain motivation with various strategies, such as finding ways to make a tedious activity more interesting and challenging, or imagining yourself succeeding in completing a burden or a difficult task.
8) Request for help
9) Sometimes the self is unable to do everything without help. There are tasks that are done independently and sometimes there are tasks that need the help of others. Students will specifically seek help from someone who can help to become more independent in the future or the future.
10) Self-regulation to self-regulate in order to always monitor progress or development toward the goal to be achieved, and sometimes change the learning strategy or modify the goal if necessary.

Schunk and Zimmerman (2004) explained that metacognition is the ability of individuals to plan, organize or organize, instruct themselves, monitor and evaluate in learning activities. In addition, self-regulation is also related to motivation. Zimmerman and Schunk said that motivation is a driver (drive) that exists in the individual self that includes perceptions of self-efficacy, autonomy competencies possessed in learning activities. Motivation is a function of the basic need to control and relate to the sense of competence that each individual has. Behavior is an individual effort to organize, select, and utilize the environment and create an environment that supports learning activities.

The factors that affect the self-regulation include external and internal factors. External factors affect self-regulation in at least two ways. First, they provide a standard for evaluating our behavior. Environmental factors interact with personal influences, forming individual standards for evaluation. For example, through observation of others, we form standards to evaluate self-performance. From these examples, personal factors influence what standards we will learn, but the drive from the environment also has a role to play. Second, external factors affect self-regulation by providing a way to gain reinforcement. Intrinsic
rewards are not always enough, we also need incentives from external factors. For example, a writer needs more reinforcement than self-satisfaction in order to accomplish a writing. Support from the environment in a material form or praise and support from others is also necessary. Thus, external factors affect self-regulation in two ways: standard and reinforcement.

There are three internal needs in the process of self-regulation, namely self-observation, assessment process, and self-reactions. Self-observation is done based on the quality factor of appearance, the quantity of appearance, the originality of self-behavior, and so on. Self-observation of the performance has been done. Humans are able to monitor his performance even if it is incomplete or accurate. We selectively choose a number of aspects of behavior and ignore other aspects that are maintained usually in accordance with self-concept. The Assessment Process depends on four things: personal standards, reference performance, activity values, and performance improvements. Most activities should be assessed by comparing with external measures, may be standard norms of social comparison, comparison with others, or collective comparisons. Of most activities, we evaluate performance by comparing it to reference standards. Humans respond positively or negatively to their behavior depending on how these behaviors are measured and what are their personal standards. Bandura believes that humans use a reactive and proactive strategy to regulate themselves. That is, humans attempt to reactively reduce the conflict between achievement and purpose, and after successfully eliminating it, they proactively set new goals higher. Self-reinforcement depends not only on the fact that it can directly follow a response: in fact, largely depends on the use of our cognitive ability to mediate the consequences of behavior. Humans prepare a standard for performance, which, when fulfilled, tend to regulate behavior with self-generated rewards, such as pride and self-satisfaction. When humans fail to meet these standards, their behavior will then be followed by self-dissatisfaction or self-criticism.

The findings of this study show the success of students with the role of many self-regulations in learning to support the results of previous research in line with the results of this study. Haatie (2007) found that students with self-regulation in learning are higher than students who do not perform other social roles. Mezel's research (in Haatie: 2007) also reveals that a learner in adulthood despite having worked still does self-regulation in learning to aid in their understanding. Motivation to master the material, the absence of forced feelings in learning as well as a relevant subject matter for application in work life make self-regulation in learning can be done.

The factors that affect the self-regulation include external and internal factors. External factors affect self-regulation in at least two ways. First, they provide a standard for evaluating our behavior. Environmental factors interact with personal influences, forming individual standards for evaluation. For example, through observation of others, we form standards to evaluate self-performance. From these examples, personal factors influence what standards we will learn, but the drive from the environment also has a role to play. Second, external factors affect self-regulation by providing a way to gain reinforcement. Intrinsic rewards are not always enough, we also need incentives from external factors. For example, a writer needs more reinforcement than self-satisfaction in order to accomplish a writing. Support from the environment in a material form or praise and support from others is also necessary. Thus, external factors affect self-regulation in two ways: standard and reinforcement.

There are three internal needs in the process of self-regulation, namely self-observation, assessment process, and self-reactions. Self-observation is done based on the quality factor of appearance, the quantity of appearance, the originality of self-behavior, and so on. Self-observation of the performance has been done. Humans are able to monitor his performance even if it is incomplete or accurate. We selectively choose a number of aspects of behavior and ignore other aspects that are maintained usually in accordance with self-concept. The Assessment Process depends on four things: personal standards, reference performance, activity values, and performance improvements. Most activities should be assessed by comparing with external measures, may be standard norms of social comparison, comparison with others, or collective comparisons. Of most activities, we evaluate performance by comparing it to reference standards. Humans respond positively or negatively to their behavior depending on how these behaviors are measured and what are their personal standards. Bandura believes that humans use a reactive and proactive strategy to regulate themselves. That is, humans attempt to reactively reduce the conflict between achievement and purpose, and after successfully eliminating it, they proactively set new goals higher. Self-reinforcement depends not only on the fact that it can directly follow a response: in fact, largely depends on the use of our cognitive ability to mediate the consequences of behavior. Humans prepare a standard for performance, which, when fulfilled, tend to regulate behavior with self-generated rewards, such as pride and self-satisfaction. When humans fail to meet these standards, their behavior...
will then be followed by self-dissatisfaction or self-criticism.

The findings of this study show the success of students with the role of many self-regulations in learning to support the results of previous research in line with the results of this study. Heaatie (2007) found that students with self-regulation in learning are higher than students who do not perform other social roles. Mezei's research (in Haatie: 2007) also reveals that a learner in adulthood despite having worked still does self-regulation in learning to aid in their understanding. Motivation to master the material, the absence of forced feelings in learning as well as a relevant subject matter for application in work life make self-regulation in learning can be done.

Within self-regulation, self-management during the learning process is predominantly influenced by the interaction between individual and domain. Zimmerman (2004) states that self-regulation is the foundation of lifelong learning processes that teach to control thoughts, attitudes, and actions to achieve learning goals [6]. Self-regulation is a type of metacognitive knowledge and awareness of personal cognitive processes or appropriate strategies and is chosen to assist learners as individuals and organizations to reflect on the experience of actions, and decisions made.

Self-regulation is employed during the learning process. It is the learning process which is regulated by metacognitive, individual's progress strategic approaches (planning, monitoring, and evaluating) compare to a certain standard which has been governed, and motivation in learning. A learner who is able to perform self-regulation is indicated by several characteristics such as understanding their weakness and strength in terms of academic, possessing several strategies to be employed in facing academic issues, and possessing several strategies to be employed in facing daily life issues.

Learners who regulate themselves in learning maintain the belief that their intelligence and failure and their success are very dependent on their efforts in completing tasks based on the use of their chosen strategy. Subsequently, learners who regulate themselves in learning believe that opportunities in facing challenges in doing assignments, their way of learning, developing an understanding of subject matter, are efforts to achieve their academic success.

Self-regulating skill is constructive and active processes. Learners set some of their learning goals, then attempt to monitor, regulate and control awareness, motivation, and their behaviour that is directed and limited by some of their learning goals related to their learning environment [8].

According to the above-mentioned explanation, it can be concluded that self-regulation is the individual’s ability to have a control upon behaviour in which the individual will be able to identify weakness and strengths they might have. Learning characteristics that accommodate the ability of individual self-regulation are: (a) expanding knowledge and maintaining motivation and being aware of emotional states and having strategies to overcome them, (b) periodically monitoring progress, and (c) adjusting strategies based on monitor results.

Self-regulation is an important aspect of assessment activities. In particular, self-regulation is related to the learner's ability to reflect critically on their learning activities in order to determine the next learning step. Self-regulation is closely related to the characteristics of assessment as a learning instrument. The assessment has several characteristics, namely (a) integrating with the daily learning process, (b) being carried out continuously during the implementation and after the learning takes place, (c) the learner learns to think critically regarding their learning activities and their peers’ learning, (d) teachers obtain information regarding the process and learning outcomes of learners from the perspective of the learners themselves, (e) the learner identifies weaknesses and strengths of their learning, (f) the learner defines learning strategies according to the learning style (self-assessment), (g) the learner reflects on what and how to learn (self-assessment), (h) the teacher provides an opportunity for learners to express their learning difficulties (self-assessment), (i) learners learn to provide constructive feedback (peer assessment), (j) learners learn from the critical assessment of their friends (peer assessment), (k) the learner provides feedback and judgment to their friend based on the capacity possessed and guided by teachers (peer assessment), and (l) assessment activities as a learning instrument in the form of peer and self-assessment at the secondary school level to form part of formative assessment to improve the learning process.

CONCLUSION

The effect of as learning assessment on self-regulation ability is caused by assessment as learning function to provide descriptive and accurate feedback for each student so that it will help develop learning habits independently. In addition, assessment functions to encourage students to focus on the learning process they are going through (not on the ability to answer correctly). Students are given the opportunity to reflect on ideas to adjust, rethink, and articulate their learning processes and outcomes. As learning assessment does not affect creative critical thinking skills because as learning assessment focuses more on the affective aspects. On the other hand the ability to think critically is related to aspects of the
content / topic, form and use of language. Students’ awareness of their learning behavior has not directly influenced their ability to think critically-creatively.

*****

REFERENCES

Based on the research, it can be concluded that effective assessment as learning should include product reflection, personal / feeling response, and follow-up. The implementation of a assessment as learning needs to be developed by self-regulation focused on reflecting on the reading skill, reading process, feelings, strategies used, and follow-up to improve learning.


Pintrich, P. R. , & De Groot, 82, no. 1, 33 40,1990).hal.33

