

Analysis of The Level of Self Learning Awareness of Senior High School Students on The Reaction Rate Topic

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Abstract:

Self learning awareness is self-awareness possessed by students in the learning process. The reaction rate material is one of the materials that students do not understand the concept of. This reaction rate material consists of factual, procedural and conceptual knowledge. The low awareness of students in learning has an impact on student learning outcomes. The purpose of this study was to analyze the level of students' self-learning awareness on the reaction rate material. The research subjects were XI grade senior high school students of MAN 2 Padang, with a sample size of 61 students who were randomly selected. Data collection techniques using student self-learning awareness questionnaires distributed via Microsoft Forms with 6 questionnaire indicators, namely know one's own behavior and feelings, know one's own strengths and weaknesses, have an independent attitude, are able to make their own decisions appropriately, are skilled at expressing their own opinions/feelings/thoughts/beliefs, can evaluate themselves. Based on the indicators of students' self-learning awareness, the results obtained are 1) be familiar with one's own behavior and feelings with a category of 78% with a good enough category, 2) familiar with his own strengths and weaknesses by 57% in a good enough category, 3) having an independent attitude of 56% with a good enough category, 4) able to make their own decisions correctly by 65% in the high category, 5) skilled at expressing their own opinions/feelings/thoughts/beliefs by 86% in the very high category, 6) being able to evaluate themselves by 70% in the high category.

Keywords — Reaction rate, Self Learning Awareness, Senior High School Students.

I. INTRODUCTION

Self-awareness is insight into the reasons for understanding oneself and one's own behavior [2]. Self-awareness is a very important concept owned by a person, because with self-awareness a person will know the tasks and behaviors he does to achieve the expected goals, in other words, a person has been able to recognize and pay attention to himself and his environment well. Self-awareness is

also a condition in which a person is able to recognize and understand himself correctly, both in terms of the emotions he feels and in terms of the behavior he does [6]. The self-awareness possessed by a student towards the behavior or attitude he does when studying a science is also known as self-learning awareness or one's self-awareness in the learning process.

A student, especially a senior high school student, must build self-learning awareness in order to recognize his feelings and the behavior they must do when studying a science. Self learning awareness is centered on the situation within a student so that he can know his existence in the learning environment [5]. Self-awareness in learning is a very important thing to pay attention because students' self-awareness in learning has a big impact on student learning outcomes, such as the research conducted by Alidya Mei Rini, et al in 2018 entitled "Hubungan Kesadaran Diri Dengan Hasil Belajar Sejarah Peserta Didik SMA Negeri 1 Pagelaran", based on the results of this research it was concluded that, there is a relationship between self-awareness and the History Learning Outcomes of Class XI Social Sciences at SMAN 1 Performances for the 2017/2018 Academic Year. Where the higher the value of self-awareness, the higher the value of history learning outcomes obtained by students.

According to Daliana in 2016 the indicators of self awareness are:

1. Know your own behavior and feelings. In other words, students can understand the feelings they feel and understand the behavior that must be done during the learning process.
2. Know your own strengths and weaknesses. In other words, students can understand their strengths and weaknesses.
3. Have an independent attitude. In other words, students can do things by themselves without having to ask for help from others.
4. Able to make their own decisions appropriately. Or in other words, students can make and consider appropriate steps to the problems encountered during the learning process.
5. Skilled at expressing opinions, feelings, thoughts and beliefs. In other words, students are able to express opinions based on what is in

their minds, feelings and according to their own beliefs.

6. Can self-evaluate. In other words, students are able to check and re-correct the work they have done.

Meanwhile, according to Solso et al (2007) self awareness has functions, namely:

1. Context-setting function
The context-setting function is a function of a system that works in interpreting the context and students' knowledge of stimuli that will enter memory.
2. Adaptation and learning function
The function of adaptation and learning is an awareness that students need when processing new information or knowledge.
3. Prioritization function and access function
Prioritization function and access function are a self-awareness of students needed in accessing the amount of knowledge that has been obtained by students.
4. Control and recruitment function (control and recruitment)
This function is an awareness that enters the student's motor system so that students can carry out their actions consciously.
5. Executive function and decision-making function (making a decision), this function serves to bring information or knowledge that can assist students in making decisions while in a learning atmosphere.
6. The error detection and editing function (error detection and editing) functions as a detector and editor of errors that arise in students.
7. Self-monitoring function (self-monitoring)
Self-monitoring serves to assist students in controlling themselves when learning takes place.

8. Organization and flexibility function (organization and flexibility), this function is a function that is used for automatic functions or student reflexes when learning in unexpected circumstances.

XI grade senior high school student who studies various subjects at school, one of which is chemistry. In chemistry subjects there are various kinds of topic studied by students, including the topic for reaction rates. The reaction rate topic is one of the topics that students do not understand the concept of. This reaction rate topic consists of factual, procedural and conceptual knowledge [4].

Reaction rate is a topic that studies microscopic things, such as collision theory and the factors that affect reaction rates. This reaction rate material consists of factual, procedural and conceptual knowledge. The low awareness of students in learning has an impact on student learning outcomes [4]. Based on the explanation above, the researcher is interested in conducting research on reveal the level of self-learning awareness of XI grade SMA/MA students on the reaction rate topic.

II. METHODOLOGY

This research is a descriptive qualitative research with survey method. The purpose of this research is (theory). Data collection was carried out in May 2021 at MAN 2 field. The population of this study were students of class XI with a sample of 61 people who were randomly selected.

Data collection techniques with questionnaires (theory). Questionnaire via microsoft forms. Questionnaires were used to obtain data on student responses regarding their self-learning awareness when studying the reaction rate material in class XI SMA/MA. The research data were analyzed descriptively and qualitatively.

III. RESULT AND DISCUSSION

A. Result

Based on the results of observations made, the level of self learning awareness by distributing questionnaires is obtained as listed in table I.

TABLE I
 DATA OF QUESTIONNAIRE RESULTS ON THE LEVEL OF SELF-LEARNING

No	Indicator	Percentage (%)	Category
1	know your own behavior and feelings	78%	Good
2	know your own strengths and weaknesses	57%	Good
3	have an independent attitude	56%	Good
4	able to make their own decisions correctly	65%	High
5	skilled at expressing their own opinions/feelings/thoughts/beliefs	86%	Very high
6	can self-evaluate	70%	High
Average		69%	High

AWARENESS XI GRADE SENIOR HIGH SCHOOL STUDENT ON THE RATE REACTION TOPIC

B. Discussion

Based on the data in Table 1, it shows that the average self-learning awareness of class XI grade students of MAN 2 Padang on the reaction rate topic is 69% with a high category, thus it can be said that the level of self-learning awareness of class XI students who learn the material on reaction rates topic in MAN 2 Padang is good. Based on the indicators of students' self-learning awareness, the results obtained are 1) be familiar with one's own behavior and feelings with a category of 78% with a good enough category, 2) familiar with his own strengths and weaknesses by 57% in a good enough category, 3) having an independent attitude of 56%

with a good enough category , 4) able to make their own decisions correctly by 65% in the high category, 5) skilled at expressing their own opinions/feelings/thoughts/beliefs by 86% in the very high category, 6) being able to evaluate themselves by 70% in the high category .

1. Be aware of your own behavior and feelings.

Based on this indicator, it can be said that XI grade students who study the reaction rate topic at MAN 2 Padang are considered good enough to recognize their own behavior and feelings. They tend to be able to understand the feelings they feel and understand the behavior that must be done during the learning process. The level of self learning awareness student’s based on this indicator be seen in Fig. 1.

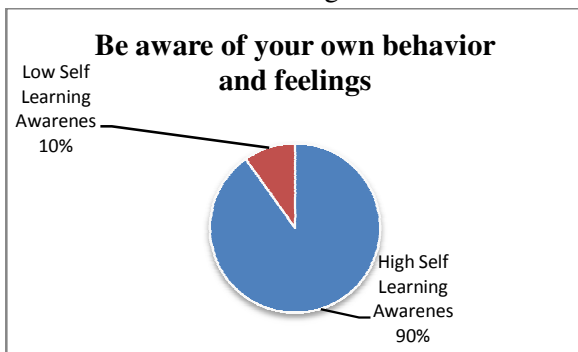


Fig. 1.The level of self learning awareness student’s based on first indicator

2. Know your own strengths and weaknesses.

Based on this indicator, it can be said that XI grade students who study the topic on reaction rates at MAN 2 Padang are considered good enough to recognize their own strengths and weaknesses. They tend to be able to understand their strengths that can be utilized by the students themselves, and by the nature of knowing the weaknesses contained in the students themselves so that students can find solutions to their shortcomings. The level of

self learning awareness student’s based on this indicator be seen in Fig. 2.

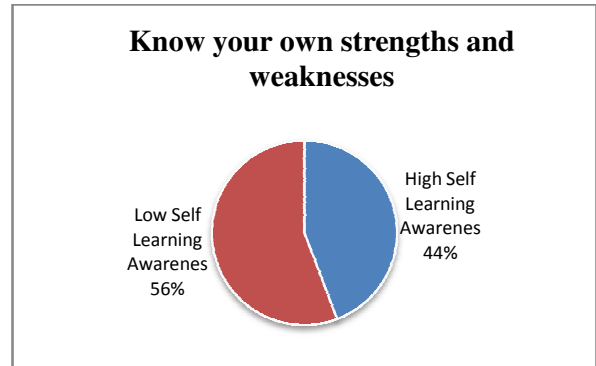


Fig. 2.The level of self learning awareness student’s based on second indicator

3. Have an independent attitude

Based on this indicator, it can be said that class XI students who study the reaction rate material at MAN 2 Padang are considered good enough in terms of independence, they tend to do their work by themselves without help from others in the learning process. The level of self learning awareness student’s based on this indicator be seen in Fig. 3.

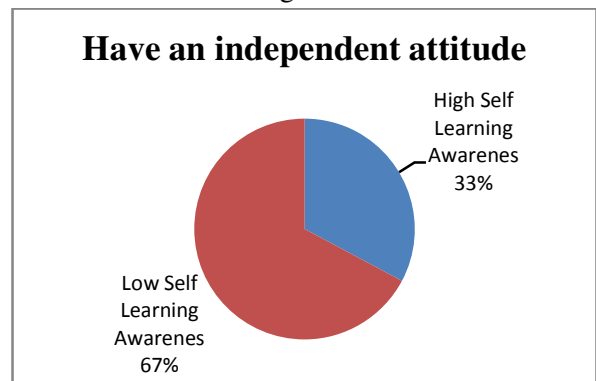


Fig. 3.The level of self learning awareness student’s based on third indicator

4. Able to make decisions on their own

Based on this indicator, it can be said that class XI students who study the reaction rate material at MAN 2 Padang are considered high in terms of making decisions, they can

make/make decisions in the learning process appropriately. The level of self learning awareness student's based on this indicator be seen in Fig. 4.

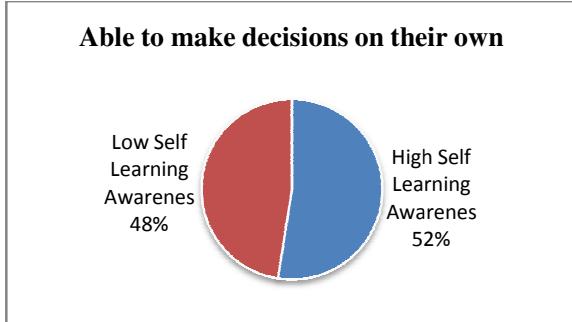


Fig. 4. The level of self learning awareness student's based on fourth indicator

5. Skilled at expressing own opinions/feelings/thoughts/beliefs

Based on this indicator, it can be said that XI grade students who study the reaction rate topic at MAN 2 Padang are considered very high in expressing their opinions, so that this will make it easier for students to get responses to their opinions that will help them in the learning process. The level of self learning awareness student's based on this indicator be seen in Fig. 5.

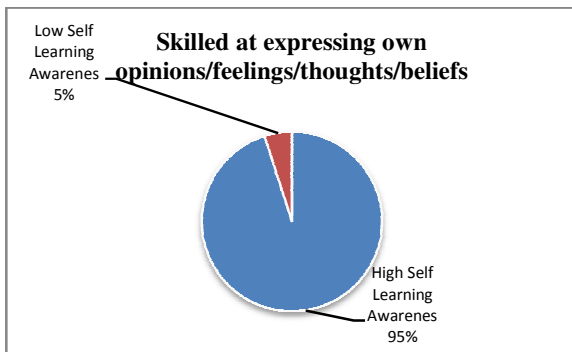


Fig. 5. The level of self learning awareness student's based on fifth indicator

6. Can self-evaluate

Based on this indicator, it can be said that XI grade students who study the reaction rate topic at MAN 2 Padang are considered high in evaluating themselves, with this indicator students will be able to assess the extent of their understanding of the material they get in the learning process.

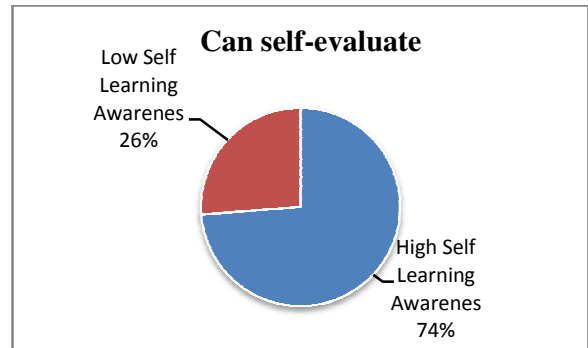


Fig. 6. The level of self learning awareness student's based on sixth indicator

Overall average rate self learning awareness XI grade students of MAN 2 Padang on the topic of the reaction rate is 69% in the high category, with high category of self learning awareness the students of MAN 2 Padang have able to recognize and understand oneself appropriately, both in terms of the emotions they feel and in terms of their behavior. The level of self learning awareness student's based on this indicator be seen in Fig. 6.

IV. CONCLUSION

The results of this study indicate that the average self-learning awareness of class XI MAN 2 Padang students on the material reaction rate is 69% with a high category, so the self learning awareness of class XI students at MAN 2 Padang is good. Based on the indicators of students' self-learning awareness, the results obtained are 1) be familiar with one's own behavior and feelings with a category of 78% with a good enough category, 2) familiar with his own strengths and weaknesses by 57% in a good enough category, 3) having an independent attitude of 56% with a good enough category, 4) able to make their own decisions correctly by 65% in the high category, 5) skilled at

expressing their own opinions/feelings/thoughts/beliefs by 86% in the very high category, 6) being able to evaluate themselves by 70% in the high category.

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