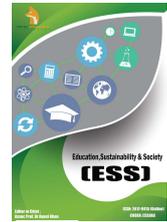


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RESEARCH ARTICLE

PROGRAMME FOR INTERNATIONAL STUDENT ASSESMENT (PISA) AS READING LITERACY STANDARD: CRITICAL THINKING SKILL IS PRIORITY

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ABSTRACT

Reading literacy is an understanding applying, reflecting and engaging process with written texts to achieve goals, develop the knowledge and participate of society. The ability to think critically is an important ability for students because it can connect the gap between the problems taught at school and learning process. The ability to think critically can help in solving problems properly and appropriately. The research aims to analyze PISA as reading literacy standards can improve critical thinking. This research's a quantitative descriptive research. So, the process of data analysis it can be valid and can be described precisely and completely qualitatively. Data collected through observation and questionnaires. This study was carried out by taking a sample of the ability of class XI children in SMA N Semarang. The population is 16 SMA N Semarang. The sample of this research is taken by random, each school consists of two classes. The type of data collected is in the form of quantitative data which are described qualitatively. Data was collected through interviews and questionnaires to see the extent of the student's critical thinking skills. Data were analyzed through the critical thinking skills aspects, those are collecting information, conceptualizing, applying, analyzing, synthesizing, and evaluating information, experience, reflection, reasoning, and communication, and also PISA indicators are locating information, understand, evaluate and reflect. The research results indicate that the critical thinking skill is still weak when it was analyzed using the PISA indicators. The ways to increase the critical thinking skills is applied the PISA indicators. PISA indicators more effective to separate the information and detail to collect the information. Because of it, the critical thinking skills student is optimally increased.

KEYWORDS

PISA, Reading Literacy, Critical Thinking.

1. INTRODUCTION

The low level of literacy in Indonesia is due to many things. One of them is the use of technology that is not wise. Many Indonesian people are complacent about today's technological sophistication. In fact, reading activities can also be carried out through gadgets with e-book technology. It can be seen that people tend to enjoy other things such as games, social media, music, or photography compared to reading. But it is different in remote areas. The lack of access to books is still a polemic. The lack of adequate library access is the problem. Literacy will have an impact on economic capabilities in the future Indonesia is still classified in a country that has not been able to create the ability of children to think critically and analytically as adults should do in the face of increasingly severe demands (PISA, 2016). It has an impact on Indonesia's economic activities on the international scene. If Indonesia cannot compete, it will make Indonesia's economy worse and it is certain that the welfare of citizens will decline.

The digital era actually makes it easier for teachers to improve their literacy reading abilities. That is because students in this era are Z generation, where the brand is easier and is always in contact with the digital world. Teachers only need to update about the progress of this era

to invite students to read anywhere. Don't blame children today who prefer to access the internet rather than reading books in the library. Teachers and parents cannot forbid them from accessing the internet at all and force them to be quiet in reading books in the library. Z generation is more interested in learning something through YouTube, rather than having to read a thick book that spends a lot of time. They prefer something practical and concrete, not just in the form of patronizing theory.

Unfortunately, many older generations do not understand this kind of change in mindset from Z generation. The older generation still uses "old ways" in educating Z generation, such as prohibiting them from accessing the internet, requiring them to read books in the library, learning to be in front of the blackboard, and many more. So when Z generation does not like to read printed books, they will be labeled as generations who are indifferent to literacy. Whereas, the Z generation can be said to be the generation that consumes the most literacy, only in a different form (Dinda, 2017).

The teacher also needs to give direction to students to be wise in reading digital literacy circulating on the internet. Teach you how to analyze the validity of digital literacy from the titles, photos and sources within them.

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Thus, the younger generation will not be so aggravated by the already chaotic situation with the hoax news rife. They will be a generation that wisely reads digital literacy, it is not easy to press the share button on certain content whose source is unclear (Dinda, 2017). It is needing more attention in increasing literacy skills. Applying the PISA as a standard in reading literacy learning is an appropriate ways to improve the student critical thinking skill.

2. LITERATURE REVIEW

PISA is a comprehensive international survey program that basically assesses students' reasoning abilities which also includes critical thinking skills (Rahayu, 2016). We should be thankful for the existence of PISA, which is one of the indices of Indonesia's literacy level measurement compared to other countries. It is hoped that with the existence of PISA, we can improve the method of education because through education can contribute to increasing interest in reading and making Indonesian citizens smart so that they can improve the economy and prosperity later. The questions on PISA hone critical thinking skills on students because the questions on PISA use High Order Thinking skills. PISA questions are very demanding of reasoning and problem-solving skills. A student is said to be able to solve problems if he can apply previously acquired knowledge to new situations that are not yet known (Barthes, 2005).

PISA aims to measure the literacy achievements of reading, mathematics, and science 15-year-old school students in participating countries. The PISA indicators to measure the reading literacy achievement evaluation are understands, using, and reflecting in written form. Specifically, for reading competence, the subscale used is the ability of students to obtain information (retrieving information), interpret text (interpreting text), and reflect text (reflecting text). Emphasis on various types of texts as a consequence in the era of hypermarkets is responded positively by some linguists such as Phillips and Jorgenson because PISA provides an opportunity for the creation of interdiscursivity which is the theme of discussion about the power of language (Stack, 2006).

Critical thinking skills need to be developed and taught as something that is very important to develop in schools so that students are able and accustomed to facing various problems around them (Husnidar, 2014). Students should have good critical thinking skills that will improve the reading culture of students, this is the impact of the curiosity of students who are high so that the motivation to find out various solutions to the problems they face through reading culture. Directed and clear process is the kinds of critical thinking skill that used in mental activities, those are solving problems, making decisions, persuading, analyzing assumptions, and conducting scientific research (Cahyana et al., 2017). Critical thinking is the ability to argue in an organizing manner, the ability is systematically evaluate the personal opinions and others. Critical thinking in learning is carried out by students who are able to answer questions about how (why) and why (why) by using principles and concepts.

The efforts to improve critical thinking skills through 1) reading ability, 2) listening ability, 3) ability to observe, 4) ability to analyze. Improving the ability to read critically is carried out by (a) underlining the main ideas that are read, (b) learning together and matching whether the main ideas are made together with other group members, (c) writing what is the main idea in a reading in words own words. The ability to listen critically is carried out by (a) making important points, (b) focusing on what the speaker is saying and hearing the main or key points (Schafersman, 1991). Critical thinking is the ability of person to solving a problem effectively with arguments can help a person to analyze, evaluate, and make decisions about what is believed or done (Irawan, 2014). It can be concluded that the aspects of critical thinking are actively to gathering information, conceptualizing, applying, analyzing, synthesizing, and / or evaluating information obtained or generated from observations, experiences, reflections, reasoning, or communication, as a guide for beliefs and actions in completing a problem.

3. METHODOLOGY

This is a quantitative descriptive research. It is important to increase the critical thinking skill. This method makes the research easily to describe the research result. It valid data, so the process of data analysis it can be valid and can be described precisely and completely qualitatively. Data collected through observation and questionnaire. This study was carried out by taking a sample of the ability of XI class in SMA N Semarang. The population is 16 SMA N Semarang. The sample of this research is taken by random, each school consists of two classes. The aspects used to measure critical thinking skills are 1) gathering information; 2) conceptualizing; 3) applying; 4) analyze; 5) synthesize; 6) experience; 7) reflection; 8) reasoning; and 9) communication. The PISA indicators are locate information; understand, evaluate and reflect. Measurement appraisal is 0-25% the category is very low; 26-50% low category; 51- 75 good categories; 76-100% very good category.

4. RESULT AND DISCUSSION

PISA indicators are locating information, understand, evaluate and reflect. The result of research shows that from 9 aspects of critical thinking skills presented, there are still 7 skills that are still low in value. Two aspects of critical thinking skills is good category. Those are gathering information and conceptualizing. Both are basic abilities in the reading process. While the other 7 aspects are skills that require more skills and concentration, sharpen and require critical thinking processes on reading. Some developed countries have developed educational systems that can hone and train students' critical thinking skills so that they develop well (OECD, 2013). It shows the table 1.

Table 1: Result of thinking skills tests and application of PISA standards

No	Critical thinking aspects	PISA indicators	Sub-indicators	Percentage	Category
1	Compile information		1. Read in detail 2. Sorting out information that is used or discarded 3. Matching the suitability of the information accordingly	70%	Good
2	Conceptualizing		1. Look for definitions 2. Understanding the best definitions 3. Summing up from several definitions	68%	Good
3	Applying		1. Find information about its application 2. Understand how to apply the information obtained 3. Evaluate the suitability of information	47%	Weak
4	Analyzing		1. Suitability of information obtained with the theme 2. Retrieve important information 3. Using the most appropriate information	45%	Weak
5	Synthesizing		1. Compile the information that is interrelated 2. Combining some of the same information 3. Draw conclusions from some information	50%	Weak
6	Experience	1. Locate information 2. Understand 3. Evaluate and reflect	1. Look for information that is appropriate 2. Linking information with real events 3. Draw conclusions about the suitability of information with real events	50%	Weak
7	Reflection		1. Adjust information with conclusions 2. Summing up information 3. Analyzing the information obtained with real experience	49%	Weak
8	Reasoning		1. Look for relevant information 2. Linking information with real examples 3. Draw conclusions	47%	Weak
9	Communication		1. Sorting out information 2. Good information is good in the form of written and oral 3. Give a real example	46%	Weak

In this case, it is the same as experience, reasoning and communication skills. Finding's is appropriates of information, linking information with real events, drawing conclusions about the suitability of information with real events. Reasoning ability, namely finding relevant information, linking information with real examples, drawing conclusions, and supported by the ability to communicate by sorting information, expressing information both in written and oral form, giving concrete examples. Critical thinking is an important ability for students because it can easily to solve the problems. Some developed countries have developed educational systems that are able to hone and train students' critical thinking skills so that they develop well (OECD, 2013).

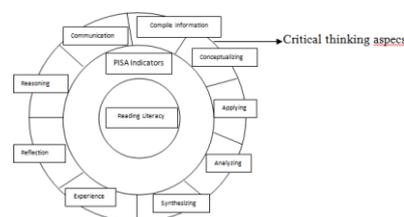


Figure 1: Critical thinking learning process

Critical thinking skills in the aspect of reflection are done by adjusting information to conclusions, concluding information and analyzing information obtained with real experience. Critical thinking is a cognitive ability in making conclusions based on logical reasons and empirical evidence (Yaumi, 2012). The understanding of critical thinking is supplemented again because critical thinking does not only occur in the scientific world but also in everyday life experiences (Molan, 2012). In everyday life when faced with decision making requires the ability to reason, understand state, analyze, and previously evaluate information. Critical thinking's the tools used in everyday life to survive (Chukwuyenum, 2013). Critical thinking skill is one of the higher orders thinking abilities that invite students to become active students because students do the ability to analyze, evaluate, and create (Conklin, 2012). Critical thinking is needed to know the truth of information, so that it can decide information worth rejecting or accepting (Kalelioglu, 2013). Practicing critical thinking skills can be done by refracting in-depth reading. Reading Literacy is the key to get success in our society. The reading skill is highly valued and important for social and economic advancement. Reading skills are essential to the academic achievement of middle and high school students (Holloway, 1999). He claims that in today's society though that the reading literacy is introduces the knowledge because it provides advantages to those who acquire the necessary skills (Olson, 1977). In the schools, literacy provides access to literate institutions and has an impact on cognition or thinking processes (Kern, 2008). It also shapes the way in which we think. Reading literacy achievement is not only a foundation for achievement in other subject areas within the educational system, but also a prerequisite for successful participation is the most areas of adult life (Cunningham, 1998). It shows that modern literary science and semiotics offer readers, contrary to the established ways of the reception text schemes, more freedom in text interpretation (Barthes, 2005). Reading is not only the source of new knowledge about reality or a matter of aesthetic satisfaction. Reading is often regarded as a source of pleasure originating from the joy of breaking laws and the norms of society.

5. CONCLUSION

The critical thinking aspects are gathering information, conceptualizing, applying, analyzing, synthesizing, and evaluating information, experience, reflection, reasoning, and communication. The result of the study is indicate that the critical thinking is still in the low category and needs to be further innovated. PISA indicators should be applied in reading literacy learning process in order to improve the critical thinking skill the students. Critical thinking is a priority skills should student have. The ways to increase the critical thinking skills is applied the PISA indicators. Those are locating information, understand, evaluate and reflect. PISA indicators more effective to separate the information and detail to collect the information, because of it, the critical thinking skills the student is optimally increased. Critical thinking skill is important for the student's future, because it makes the students having many alternative answers and creativity ideas. Critical thinking will train you to have the ability to think clearly and rationally. Easy to understand the perspective of others, be a good colleague, more independent, often find new opportunities, minimize the misperception, not easy to be cheated.

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