

The Supporting of Schemata as Integrated Strategy in Reading Literacy: A Qualitative Study

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Abstract

The schemata are conceptual frameworks that are in the form of design process for translating the particular idea, where the reading activities require the proper scheme in understanding the information. The students read with traditional technique that has not yet to build the perspective information. There should be an evaluation of the strategy for integrating information, so the purpose of this research provides an overview of how the schemata role integrating the students reading literacy. The population of this research is the student in eighth grade at SMPN 1 Lebakwangi. This method of research is qualitative descriptive with case study design. The results show the potential schemata providing the significance in students' reading literacy, where students can identify the information, synthesize information and facilitate information. Three stages use for generating information based on the perspective built through the schemata stages. The implications of this study provide an insight into concept mapping information in reading literacy. There are schemata as strategy to divide information based on the questions and make summarization. It takes the students to convey information becoming a critical reader by eliminating inappropriate information.

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INTRODUCTION

The development of education is not in a phase or a position that is always same. There is always a process of change that occurs as a development in improving the quality of education. This challenges must be prepared with maturity, so it is necessary to increase the competency of students in the education process. The competencies are the positive values, the importance of the characters and the abilities of the students obtain to learn each subject (Zhong & Cui, 2018; in Wang, 2019). The expectations of increasing competence are achievement of the students that become indicators in achieving competency.

One of the indicator competency is responding the information which develops the students as literate through the cognitive and the emotional process. Those are instrumental in the process of receiving information, where the language serves as a transformation of grammatical structure that can be understood. It makes language as a way of communicating in delivering information. For communicating emphasizes the meaning rather than coding, starting from composing words and sentences (Oxenham, 2008). The words are compiled to be meaningful to reflect the use of language and grammatical structures (Amsel and Byrnes, 2002). Word and sentence become construction of information in reading activity that make the reader understand every information that the author has submitted.

Based on the results of survey of Badan Pusat Statistik (Statistics Indonesia) in 2015 about Indonesian Society initiated by the Directorate of Education and Social Welfare, showed the results that Watching Television received percentage of 91.47%, Listen to the Radio with percentage of 7.54%, and compared to Reading which obtained only about 13.11%. This survey shows that Indonesian society is more than fond for Watching Television compared to Reading which obtains the lower percentage.

Another survey by PISA (Programme for International Student Assessment) in 2015 states

that reading position for Indonesia was 64 from 72 participating countries. While the result of another survey from WENR (World Education News & Reviews) in 2019, stated that Indonesia's literacy was in a bad position. The World Bank's analysis results were reviewed by WENR, Indonesia indicating 55% were illiterate position compared to Vietnam, which was only 14% and other ASEAN countries have an average percentage of 20%.

Seeing Badan Pusat Statistik, PISA and WENR results, the level of reading culture in Indonesia is still low in order to make Indonesian society less aware of the importance of information. The reading habit becomes an effort for building ways of thinking. How the reading activities become a daily need to be fulfilled. In cultivating the reading literacy, the family environment can familiarize the children to read as well. Parents have roles in literacy, which know the children needed for thinking (Pancarrani et al., 2017). Leseman and De Jong (1998) cited in Denhas and Bharati (2017), interaction with parents, family members, and related parties are the main points in preparing students for the formal education level. Those foster the student's habit to read, so they can increase their literacy. The roles are not taken by the school only, but the roles of school and home have the same frequency to enhance the reading literacy abilities. In other words, they have the same responsibilities for enhancing the students' reading literacy abilities.

The students are not easy to enhance their reading ability. They face the process of understanding the information, Dorn and Soffos (2005:14) express that understanding is a complicated process that is governed by cognitive, emotional, perception, and social experience. The abilities of the student reading do not separate from the influence in determining and developing information, where the students' knowledge is supported in the thought process of understanding information. It is also a part of the critical thinking process that relates to abilities and characters (Aloqaili, 2012), which is close to the centrality of thought (Beyer, 1987). The process develops on the ability to parse and to

choose the information that is useful or not for itself. This reality occurs when information such as circulating news is not properly interpreted, so it can lead to other meanings that lead to interpretations in the information.

Asean Economic Community is integrated the economic regional among ASEAN countries. The demand for cooperation is encouraged to free trading in Asean. The competitiveness of each country must be increased. Language serves as one of the instruments to deliver the information. English as one of the international language requires to support cooperation, it uses to communicate and to interact each person. Foreign language encourages to exchange the information where social interaction occurs with differences in language and culture, but it can pour information with each other. The ability of English reading literacy provides the benefits to understand the information and to enhance the knowledge in interpreting the meaning.

Many problems occur in English reading literacy. One of the problem, the students do not interest any reading activity because they get the complicated in reading, especially in English. English is difficult to learn and weak motivation to learn reading (Phantharakphong and Pothitha, 2013). The education level of junior high school in Indonesia is the first level of students to learn English. Too much information they get, it becomes the students' confused and lowers the motivation. It happens when they cannot able to understand the information each paragraph and sentence. Every presentation of information requires a way to generate the information, Duke (2003) cited in Gilakjani (2016), with the process of understanding which the readers understand the interaction of text through knowledge and experience.

In addition, the issues occur in reading literacy that the students feel lazy to develop the idea what they read. The research by Farboy (2013) reveals that lack of reading abilities are included mastering vocabulary, interpreting information, and capturing the ideas. The students are more passive in reading activities, where they await the information. The role of strategy needs to identify the information as

facilitate the students to enhance reading and understanding of the text (Harsono et al., 2012). In other hands, the implementation of the 2013 curriculum enables the students active in the learning process. It becomes a problem that is faced in the learning process, especially for improving students' reading literacy. It needs an in-depth analysis to obtain the solutions for this problem.

The use of schemata for integrated reading literacy become an analytical material to see its influence in the learning process. This research observes the students integrating the information through schemata on activities, namely before reading, while reading and after reading. It becomes a mapping concept in the presentation of information, so that information can be easily received and understood by students. Therefore, the analysis in this research becomes an evaluation in responding to problems that occur regarding the reading literacy.

METHODS

This research uses a qualitative method of descriptive for explaining the case. According to Cohen et al. (2007), a case study can determine cause and effect, one of the strengths is to observe the cause and the effect in the real context. They add that it gives the reader to understand the idea more clearly than merely by presenting an abstract theory or principle.

The research is conducted at SMPN 1 Lebakwangi with nine students and English teacher. The students' reading literacy uses three domains from PISA 2015, namely access and retrieve, integrate and interpret, dan reflect and evaluate. The design of case study research is to find and to be symptomatic occurring the activity. The use of instruments are to analyse research objects, namely observations, interviews, questionnaires and student test results. The analysis in this research referes to Miles and Huberman (1994). The researcher analyzes three phases: reduction data, data presentation, and conclusion or verification.

RESULTS AND DISCUSSION

Access and Retrieve

The student reading activities consider the ability to retrieve the information, where the readers must observe, find and choose the relevant information. The students must detect or identify one or more of the main elements, either in questions such as characters, places nor times. They must match the words being found the synonymous with existing information. The ability of the students can able to choose the necessary information.

The students' ability to determine the relevant information requires an analysis of thinking on their reading materials. It makes a basis for analyzing the students' reading abilities. The researcher used domain access and retrieve to assess students' reading literacy abilities as follows.

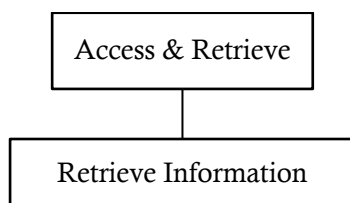


Figure 1. The Framework of Access and Retrieve from PISA 2015 Domains

The students identified the questions by considering the information contained in the text. The use of schemata in the learning process helped the students to classify the information based on the type of information. The results of student reading ability test showed that the schemata helped to locate the specific information needed. The students were given five questions based on access and retrieve domain in the test about laboratory. They must have to identify the main discussion about three topics, namely obligation, prohibition, and suggestion.

Five questions were given, the students must identify the relevant information. The first question, students identified the information about the necessity performed at the time in the laboratory. The second question, students should find information about prohibitions that should not be done in the laboratory. The third question,

students identified the necessity to obtain a laboratory entry permit. The fourth question, students identified information from the text and give reasons something that should be prepared to enter the laboratory. The fifth question, students identified information from the text and reasons regarding the necessity of cleaning hands after working in the laboratory.

The questions above analyzed to determine the students' ability to identify the relevant information. The results of analysis showed that students could identify the information. In identifying, the student analyzed the process of selecting the required information. The students could know where the information located with eliminating inappropriate information. Vaughn & Klingner (1999) cited in Karabuga & Kaya (2013), this strategy as a student's learning was able to identify the main idea and remove the information that was not appropriate. It made the students could determine the importance of information (Karabuga & Kaya, 2013).

Finally, the identifying each question was the key for understanding information. The schemata consists of variety of questions that helped the students to sort the required information. Aryanta et al. (2014) stated that a chart of 5W1H in critical reading would be increasingly effective with the application of discussions, where students could exchange ideas and thoughts. The students were using the schemata to find the information by dividing into some parts of the question.

Integrate and Interpret

Integrating focuses on demonstrating understanding of the harmony of information from the text. The information is obtained among several adjacent sentences or has the same meaning, so for comprehending is connected each paragraph. The integrating involves connecting a variety of information to make meaning, whether it is identifying the similarities and differences, making comparisons, or understanding cause and effect relationships.

Whereas the process of interpreting refers to interpret of something that is not mentioned.

The process is involving or identifying the relationship that is not explicit or unclear, so it requires the disclosure of information. When interpreting, students will identify assumptions or implications underlying part or all of the text.

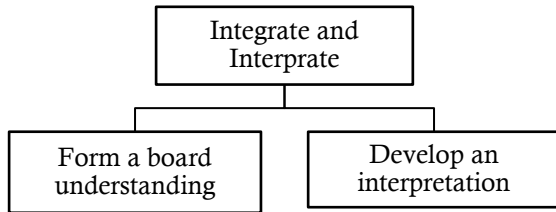


Figure 2. The Framework of Integrate and Interpret from PISA 2015 Domains

The student reading activity in this research was built perspective information. In the previous domain about the retrieve information element, it could determine the relevant information. That was not enough, it required the understanding the form of information and the development of ideas. In this domain, the researcher gave a test, namely true or false statements.

The test was simple to check the appropriate information, but it needed to determine the range information that students could develop. Overall the students had understood the information submitted. The students could understand the different types of text, which could classify the types of model. The difference was underlying the students' reading literacy to find out the appropriate definitions. The students could explain the topics such as obligation, prohibition and suggestion. Demonstrating the difference needed by students for understanding the context of information. The students could define the main ideas, main sentences, even keywords and points of mind (Iswani, 2016).

Schemata as stimulus gave the significant impact. The students could develop ideas through the summary of information from the words and sentences that had been understood. The schemata were structured to represent the relationship among the parts of the component (Anderson and Pearson, 1984), then the students combined the information in a text to elaborate in

his own words about the text (Gilakjani, 2016). The students become proficient investigating, interpreting and evaluating what they read (Gani et al., 2016). The process summarization, it was a step in developing information briefly, so that the students could easily understand. In addition, the students could give the ideas as developing the perspective based on they had read.

Reflect and Evaluate

Reflect and evaluate domains involve an overview of the knowledges, ideas or attitudes for associating the information contained in the text as conceptually and the experience. The reflecting and evaluating domains link information in the text with the previous reader's knowledge or reference. The students learn to articulate and to maintain by developing information in a text.

This aspect, the students must seek the evidences to support information in the text, and to seek information from other sources.

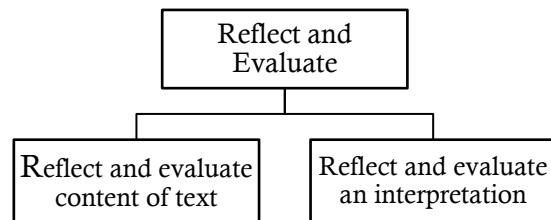


Figure 3. The Framework of Reflect and Evaluate from PISA 2015 Domains

Students could not only choose and determine the information, but the students should be able to reflect the information. The researcher, in this case, provided a test by analyzing the vocabulary with definitions based on contents and ideas. The students determined the suitability vocabularies with the meaning of being referenced in understanding the information.

The results showed that the students could answer the questions as reflecting information. The reflection of the idea as a tool was not only enhancing the effective ability but students' academic (Cavilla, 2017). The students were assigned to make logical reasoning and to develop a perspective or opinion sourced from

his/her experience. The task of reflecting was given for the students to assess and to improve their achievement (Wong, 2016). The understanding of words must be attributed definitions and encouraging the students to read more critically about the meaning of words. The students were given learning materials about obligation, prohibition and suggestion as information for their daily life. It was a point of view regarding literacy abilities, according to Bartlett (2008) stated that the vision of literacy programs were affected to the pedagogic students in the classroom and related to the guidance of literacy outside the classroom. The researcher found that the students did not all understand the meaning of the vocabularies, but they could identify the definition and delving the information in the text that helped the students in translating and understanding the vocabularies. Therefore, the schemata have roles for helping the students to enhance English literacy abilities, which was a way in the translation or transformation of information for students. That was not only the conceptual material in learning, but the information was part of the student's life.

Information Processing through Schemata

After identifying the domains assessment, further analyses were the role of schemata that affected the students' reading literacy. The schemata were developed through GIST strategy by Cunningham. Dividing into several schemata, the students could understand the information in the form of brief information divided into six questions, namely *who*, *what*, *where*, *when*, *why* and *how*. From classifying information divided words and sentences, then it was summarized as an opinion that the students had read.

The learning activity using schemata of the GIST strategy encouraged the students to be active in responding to the meaning of interactions contained in the text. That was a reinforcement through the process of visualization given in the strategy. Giving of *lead-in* as a strengthening of early student information, so it could call the existing information in the students' memory. They could make an opinion among the materials with daily life. The

statement was supported by the research results of Mansyur et al. (2013) revealed that students could improve their abilities by using knowledge previously possessed in learning new knowledge. There was a visualization as a stimulus for students, Budiman's research (2016) stated that it could stimulate attentions, interests, thoughts, and feelings of learners in the learning activities.

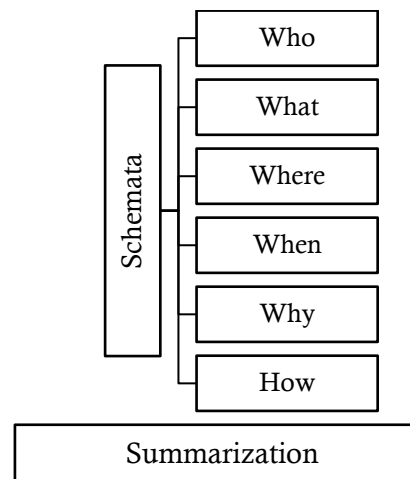


Figure 4. The Framework of Integration Literacy Using Schemata

The questions in the schemata were open-ended, where students could explore information with the six schemata. The group discussions were supported to work together in analyzing the information in the text. While the results of analyzing and summarizing the information presented in the learning activities giving the students opportunity to develop their opinions and to build the students confidence. Those were ways for the students to be optimistic about his ability by delivering information analysis results, such as the research results by Fitri et al. (2018) stated that students who had an optimistic attitude having the confidence to do anything and would strive to achieve the goals he wanted.

The stages of getting information could be received and remembered. The use of schemata affected the students in understanding information to divide into parts of the scheme. It was underlying that the understanding of information had been formed and stored in memory. Where, Anderson (1982) cited in Shunk (2012), to get information the students

remembered the important reading components, compared to the less important reading components. It became a processing of information received by individuals in obtaining, changing and remembering information (Gredler, 2013). In other words, the students could easily remember the question components in the schemata, because it was easily interested in the memory by using visualization. Saepudin et al. (2019) stated that visualizations in learning could improve the students the cognitive ability and motivation the students in literacy.

Teachers using the strategy stated that the schemata strategy were helped in learning, especially in English reading literacy. The schemata could be divided into three stages of thinking, namely LOTS (low order thinking skill), MOTS (middle order thinking skill), and HOTS (high order thinking skill). The stages were based on the questions in the schemata. The role of literacy made the students having self-learning ability, and helped to solve their task (Mashuri, 2011). In addition, literacy-based learning could make the students becoming literate, which could develop the potential of learners (Suragangga, 2017).

Finally, the schemata had been implemented in this research. The students' literacy ability was influenced by the schemata guideline to understand the text. According to Anderson and Pearson (1984) cited in Zhang (2018), a scheme of understanding came from information interaction with prior knowledge. As information that was possessed by the students, then they got the new information to increase their knowledge. The characteristics of the schemata used to (a) identify and synthesize information, (b) facilitate the understanding. Therefore, it was integration in students' reading literacy. They could understand the information systematically from each question scheme, and have a perspective its own words based on the information in the text.

CONCLUSION

The students reading ability is one of the main factors in the learning process. The students

should be guided to become readers who think critically of information. The use of three domains from PISA 2015 become parameter in the assessment of the reading literacy ability. In the translation of information, students face with vocabularies, sentences and grammatical structures in the reading activities. The students reach out to all three things in supporting the understanding of information in reading activities.

The use of schemata in this research are linking information in the reading process. The students need a strategy to transform information from their readings. The schemata divide the information in each scheme. It makes the information simple, so the students can understand information based on questions. It helps students in identifying, synthesizing information and facilitating understanding in reading activities. It also becomes the schemata as alternative strategy for teachers to integrate in students' reading literacy.

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