CHAPTER 2
LITERATURE REVIEW

This chapter provides a brief overview of several theories that underpin the research. The theories concern reading skills and the jigsaw technique.

2.1 Reading Skill

2.1.1 The Nature of Reading

Reading is the process of knowing the meaning of the information that has been read. Nunan (2003) also stated that reading is a fluent process in which readers use information from a text and their own prior knowledge to construct meaning. Moreover, reading is a set of skills that involves making sense and getting meaning from the printed word. It needs the capacity to decode printed words as well as comprehend the text (Linse, 2005). Therefore, successful reading involves synthesis of constructing meaning with the help of readers' prior knowledge, making sense and getting meaning from the words, and decoding it to construct a comprehensive understanding of the text.

2.1.2 Reading Comprehension

Reading comprehension is a complicated skill. Reading comprehension is characterized as the complex process of constructing meaning through word reading, word world knowledge, and fluency (Klinger et al., 2015). This multifaceted process encompasses making sense of words, sentences, linked text, drawing upon readers' knowledge, vocabulary, grammatical competence, familiarity with the text, and other relevant factors that may aid readers in comprehending the written text (Pang et al., 2003). Building upon these ideas, Anderson (1999, as cited in Nunan, 2003) also added that "reading comprehension can be significantly enhanced if background knowledge can be activated by setting goals, asking questions, making predictions, teaching text structure, and so on" (p. 74).

From the explanation above, reading comprehension is a complex process between text and a reader. There is a process of constructing meaning in written words that requires the abilities of a reader and the familiarity of the text.

2.1.3 Micro and Macro Skills for Reading

There are skills needed to understand reading text whether by focusing on smaller pieces of language or larger elements. According to Brown (2003), there are micro and macro skills in reading that represent the spectrum of possibilities for objectives in the assessment of reading comprehension.

2.1.3.1 Micro skills

1) Discriminate among the distinctive graphemes and orthographic patterns of English
2) Retain chunks of language of different lengths in short-term memory
3) Process writing at an efficient rate of speed to suit the purpose
4) Recognize a core of words, and interpret word order patterns and their significance
5) Recognize grammatical word classes (nouns, verbs, etc.), systems (e.g., tense, agreement, pluralization), patterns, rules, and elliptical forms
6) Recognize that a particular meaning may be expressed in different grammatical forms
7) Recognize cohesive devices in written discourse and their role in signalling the relationship between and among clauses.

2.1.3.2 Macro skills

1) Recognize the theoretical forms of written discourse and their significance for interpretation
2) Recognize the communicative functions of written texts, according to form and purpose
3) Infer context is not explicit by using background knowledge
4) From described events, ideas, etc., infer links and connections between events, deduce causes and effects, and detect such relations as main idea, supporting idea, new information, given information, generalization, and exemplification
5) Distinguish between literal and implied meanings
6) Detect culturally specific references and interpret them in the context of the appropriate cultural schemata

7) Develop and use a battery of reading strategies, such as scanning and skimming, detecting discourse markers, guessing the meaning of words from context, and activating schemata for the interpretation of texts (p. 187-188).

The explanation above clearly differentiates between micro and macro skills in reading skills. Micro skills are particular abilities required to decode and comprehend individual words and phrases. Meanwhile, macro skills refer to the broader abilities needed to absorb larger amounts of text. It also necessitates a greater level of comprehension and interpretation of the text, especially in this study.

2.1.4 The Processes of Reading Comprehension

In comprehending reading, there are processes required by readers as a conscious strategy. Nuttall (1996) explained that there are three processes of reading comprehension.

1) Bottom-up processing

The bottom-up processing involves the reader constructing a meaning from the black markings on the page, identifying letters and words, and determining sentence structure.

2) Top-down processing

The top-down processing is used when the reader interprets assumptions and draws inferences. It provides a perspective and prompts the reader to use his prior knowledge, common sense, and so on.

3) Interactive reading

Interactive reading is a combination of top-down and bottom-up processing.

From the explanations above, the readers may use the three processes in comprehending the text. The readers are allowed to use one or more processes, there is no exception, which is useful in this study.

2.1.5 Approaches to Reading Comprehension

Reading requires approaches to make readers comprehend the reading text. Here are some approaches:

1) Activating or building background knowledge

Background knowledge is needed in reading activity. Background knowledge is what the reader brings to the reading event (Moreillon, 2007). To activate this, teachers can support it in the three phases. They can focus on making connections before, during, and after reading (Moreillon, 2007). Apart from that, the connections can be in the form of text-to-self, in which there is a relationship between the reader's background and literature; text-to-text, in which there are similarities between one text and another; and text-to-world, in which the text is linked to life (Keene & Zimmermann, 1997). Thus, the reader's background knowledge is needed in the reading activity. It can be activated before, during, and after reading activity.

2) Questioning

Questioning is one of the important aspects of reading comprehension. It is an important aspect of building critical thinking and keeping readers engaged (Moreillon, 2007). This questioning can be carried out three times, namely before, during, and after reading (Moreillon, 2007). Hence, it is conducted to help readers engage with the text that they read.

3) Making predictions and drawing inference

Predicting and inferring occur in understanding the text. Predictions relate to the ability to guess what will happen next in the text. Meanwhile, inference is related to the results of the interpretation of the text (Moreillon, 2007). These two things happen before, during, and after reading.

4) Skimming

Skimming is reading text at a glance. It is in line with Nuttall (1996) who defined skimming as quickly glancing through a text to identify its core. It is a type of fast reading that allows readers to swiftly get to the core of a large amount of content. Furthermore, skimming provides the benefit of being able to predict the purpose of the passage,

the main topic, or message, and possibly some of the supporting ideas (Hizriani, 2017). Therefore, skimming is reading the text quickly to find important points in a text.

5) Scanning

Scanning is a reading technique used to locate the specific information within a text. It is in line with Nuttall (1996) who defined it as a quick glance through a text aimed at identifying particular information (e.g. a name, a date) or forming an initial impression of whether the text is appropriate for a given purpose.

Both skimming and scanning are crucial. They do not eliminate the need for careful reading, but they allow the readers to choose whether texts or parts of texts are worth spending time on (Nuttall, 1996).

On the other hand, Brown (2001) perceived approaches for reading comprehension, as follows:

1) Identify the purpose of reading
2) Use graphemic rules and patterns to aid in bottom-up decoding
3) Use an efficient silent reading technique to improve fluency
4) Skim the text for the main ideas
5) Scan the text for specific information
6) Use semantic mapping or clustering
7) Guess when you aren't certain
8) Analyse vocabulary
9) Distinguishing between literal and implied meanings (p. 306-310)

Those approaches help readers comprehend the reading text more easily.

2.1.6 Teaching Reading Skills

2.1.6.1 Principles of Teaching Reading

Teaching reading is not as simple as teaching students how to read texts, but there are principles that teachers need to be considered. According to Harmer (2001), there are six principles behind teaching reading.

1) Reading is not a passive skill
2) Students need to be engaged with what they read

3) Students should be encouraged to respond to the content of the reading text, not just to the language

4) Prediction is a major factor in reading

5) Match the task to the topic

6) Good teachers exploit reading texts to the full (p. 70).

To gain broader knowledge of the principles of teaching reading, Anderson (1999, as cited in Nunan, 2003) stated that there are eight principles of teaching reading.

1) Exploit the reader's background knowledge

Background knowledge refers to all of the experiences that a reader brings to a text, including life experiences, educational experiences, knowledge of the rhetorical organisation of the texts, knowledge of how one's first language functions, knowledge of how one's second language functions, and knowledge of one's cultural background and knowledge.

2) Build a strong vocabulary base

Basic vocabulary should be explicitly taught and L2 readers should be taught to use context to effectively guess the meanings of less frequent vocabulary.

3) Teach for comprehension

Monitoring comprehension is essential to successful reading. Part of that monitoring process includes verifying that the predictions being made are correct and checking that the reader is making necessary adjustments when meaning is not obtained. To teach for comprehension, the readers must monitor their comprehension processes and be able to discuss with the teacher and/or fellow readers what strategies they use to comprehend. Therefore, the readers use both cognitive and metacognitive skills.

4) Work on increasing the reading rate

The teacher must work towards finding a balance between assisting students to improve their reading rate and developing reading

comprehension skills. It is not to develop speed readers, but fluent readers.

Furthermore, to teach readers to reduce their dependence on the dictionary, the teacher may introduce ways to approach reading such as scanning, skimming, predicting, and identifying main ideas. Therefore, readers should spend more time analysing and synthesizing the content of the reading, and not focusing on moving through the passage one word at a time.

5) Teach reading strategies

A good technique to sensitize students to the strategies they use is to get them to verbalize (or talk about) their thought processes as they read.

6) Encourage readers to transform strategies into skills

Strategies can be defined as conscious actions that learners take to achieve desired goals or objectives, while a skill is a strategy that has become automatic. As learners consciously learn and practice specific reading strategies, the strategies move from conscious to unconscious; from strategy to skill.

7) Build assessment and evaluation into your teaching

Assessing growth and development in reading skills from both a formal and an informal perspective requires time and training. Both quantitative and qualitative assessment activities should be included in the reading classroom.

8) Strive for continuous improvement as a reading teacher

Reading teachers need to be passionate about their work. They should view themselves as facilitators, helping each reader discover what works best. Integrating the key principles can lead to more effective reading instruction in the second language classroom. A good reading teacher actively teaches students what to do. To succeed, teachers need more than classroom tips and techniques, they need to understand the nature of the reading process (p. 74-77).

However, Nuttall (1996) also added the criteria for choosing reading texts for students.

1) Suitability of content: material that students will find interesting, enjoyable, challenging, and appropriate for their goals in learning English.

2) Exploitability: a text that facilitates the achievement of certain language and content goals, that is exploitable for instructional tasks and techniques, and that can be integrated with other skills (listening, speaking, writing).

3) Readability*:* a text with lexical and structural difficulty that will challenge students without overwhelming them (p. 411).

The criteria for choosing reading texts for students that have been mentioned above may help the teacher select the appropriate reading texts to be given to students in reading activities.

2.1.7 Assessment of Reading

Assessment is one of the important aspects of teaching and learning to know students' abilities. Assessment is a systematic way of gathering information and making inferences about students' competence or the quality or performance of the teaching course based on numerous sources of evidence (Richards & Schmidt, 2010). Brown (2003) outlined types of assessments for assessing perceptive reading (e.g. reading aloud, written response, multiple-choice, picture-cued items), selective reading (e.g. multiple-choice, matching tasks, editing tasks, picture-cued tasks, gap-filling tasks), interactive reading (e.g. cloze tasks, impromptu reading plus comprehension questions, short-answer tasks, editing, scanning, ordering tasks, impromptu transfer), and extensive reading (e.g. skimming, summarizing and responding, note-taking and outlining). Related to the specifications of reading comprehension, this study assesses students' reading comprehension with the two types of assessment tasks applied as follows:

1) Discrete point test

A discrete point test is a type of assessment. Discrete point test frequently assesses a single feature of a construct at a time (Cheng & Fox,

2017). It may be only one grammar point at a time and others. Every element in grammar is contained in every test item (Oller, 1979). Furthermore, in the discrete point test, there are right and wrong answers (Cheng & Fox, 2017). Therefore, there is a definite answer to discrete point items.

Discrete point test has various types, such as the fill-in-the-blank type (Oller, 1979), multiple choice, true/false, and matching, etc. (Cheng & Fox, 2017). These types can be implemented in assessing language, especially in assessing reading comprehension.

2) Impromptu reading plus comprehension

Impromptu reading plus comprehension is a type of assessment where the test takers read the passage first and continue by answering several questions. This technique is assuredly the most commonly used (Brown, 2003). The questions in the impromptu reading plus comprehension followed features (Brown, 2003):

a) Main idea (topic)

b) Expressions/idioms/phrases in context

c) Inference (implied detail)

d) Grammatical features

e) Detail (scanning for a specifically stated detail)

f) Excluding facts not written (unstated details)

g) Supporting idea(s)

h) Vocabulary in context (p. 206).

Those types of assessments are implemented as assessments for learning and assessment of learning.

2.2 Jigsaw Technique

2.2.1 The Concept of Jigsaw

The jigsaw is one of the cooperative learning techniques. Jigsaw was first developed by Elliot Aronson (Azizah & Putri, 2020). The jigsaw technique is a unique type of information gap where each group member is provided with a specific piece of knowledge with the intention of combining all of the information

to accomplish certain goals (Brown, 2001). Jigsaw requires students to work in small groups in which each member becomes "specialized" in a certain text and therewith, has important information to share with group mates to achieve certain objectives (Dhull & Verma, 2019; Yuhananik, 2018). To succeed, the students must take the responsibility for one another (Mutaqin & Haryudin, 2020).

Hence, the jigsaw is a small group's work to complete the information gap from each group member who has the responsibility for one another and became specialized in certain parts.

2.2.2 Jigsaw Procedure in Reading Comprehension

The use of jigsaw in reading comprehension must go through a separate procedure to be implemented appropriately. Slavin (1980) demonstrated the following steps in the type of jigsaw cooperative learning as follows:

1) Dividing students into small heterogeneous jigsaw group
2) All groups read the same material
3) Each student in the group focuses on a separate topic
4) The students with the same topic meet to discuss their topics in the "expert group"
5) After that, they return to teach their jigsaw group
6) Each student takes a quiz and the scores of the quiz are used to form team scores.

In this research, the researcher modified the procedures as follows:

1) Dividing students into small heterogeneous jigsaw groups which consist of 4 to 5 members

2) Each group read the same material (reading text)

3) Each student as a member of a group focuses on a separate topic in comprehending the reading text. Each student becomes an expert 1, 2, 3, 4 or A, B, C, D

4) The members with the same focus meet to discuss the topics in the "expert group"

5) After that, they returned to teach their topics to the other members of their jigsaw groups

6) Each student takes a quiz of the work's results before. The scores of the quiz are used to form team scores.
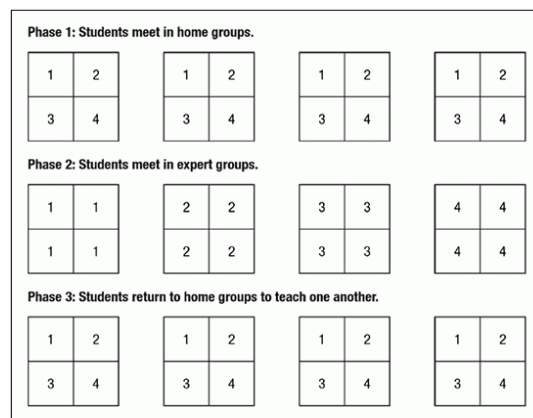

Figure 2.1 Steps of Jigsaw Technique

The use of a jigsaw can be used in teaching reading comprehension. The teacher may follow the procedures above while implementing the jigsaw in teaching students reading comprehension.

2.2.3 Advantages of Jigsaw

The jigsaw technique has advantages. The advantages of jigsaw are 1) the students experience a broader range of content than would be conceivable if each person alone reads all accessible sources, 2) the students may choose to learn from content more relevant to their skills and interests, 3) the students obtain encouragement from teammates in learning from their reading, 4) the students

practice synthesizing significant information regarding the texts they read as they carry on the teaching role with group members (Slavin, 2005, as cited in Refai, 2022). Furthermore, the jigsaw technique demonstrates how the use of this technique enhances the learning process by boosting social interaction in the classroom, fostering collaboration among students, and improving reading abilities (Namaziandost et al., 2020; Yuhananik, 2018). Therefore, it is proven that the use of jigsaw is appropriate since it assists students in the reading-learning process by allowing them to easily understand the material and also promotes effective group collaboration while learning.

2.3 Study of the Relevant Research

Many researchers researched jigsaw techniques and reading comprehension. The prior studies will be discussed in the following order:

The study conducted by Mulyani et al. (2020) regarding the use of jigsaw that can increase the students' reading comprehension (finding the main idea, identifying the explicit and implicit information, grasping the meaning of words, and determining inference) and students' attitudes toward the use of jigsaw in reading class. The study's findings mentioned that the students' reading comprehension skills improved after the implementation of the jigsaw technique. In addition, the students can be enjoyable and actively involved in the learning process.

In addition, the study conducted by Tarigan et al. (2021) regarding the effect of applying the jigsaw technique on students' reading comprehension, especially in finding the implicit meaning of the text and lack of vocabulary. The study's findings indicated that the application of jigsaw in teaching reading comprehension was effective. The study's findings mentioned that jigsaw can increase students' reading comprehension, make students enjoy and be actively involved in the learning process, discipline, and respect others.

Furthermore, the study conducted by Ayu et al. (2021) regarding the use of jigsaw techniques for improving reading skills in senior high school. The study's findings indicated that students' reading skill in five indicators was improved. In

addition, their cooperation was getting better because they liked to discuss with their friends and got a better understanding of reading texts.

This study will also investigate the use of jigsaw in reading comprehension. This was based on classroom concerns identified through pre-observation, pre-interview, and pre-test, as well as recommendation from an English teacher which included demonstrating difficulty in reading comprehension and a dislike of group work while comprehending the text due to students' characteristics of being quiet, less interaction with each other, competitive, less collaborative, and unresponsive. Therefore, the researcher believes that this technique will improve students' reading comprehension skills as previous research has proven.

While a number of studies have been done on jigsaw used in the classroom, this study will use two different cycles of classroom action research to close the gap by concentrating on eight indicators of students' reading comprehension problems. This study provides new insight on how jigsaw, particularly for students at junior high school level, can improve reading comprehension.