CHAPTER 2

LITERATURE REVIEW

This chapter presents some relevant literature about reading. It includes seven sections. The first section describes the concept of reading. Then, the second section presents the categories of the reading strategies. The third section explains the reading strategies instruction. In the fourth section, we explain the reasons for using the selected reading strategies. The fifth section reviews the related studies of reading strategies instruction. The sixth section states the research questions of this study. Finally, the seventh section declares the hypotheses of this study.

2.1 Reading as an Important Skill

Reading is an important skill to help people learn from human knowledge and experience. Through reading, knowledge has greatly contributed to the growth of mankind. Reading is the fastest and simplest way to raise people's educational level (Hung & Tzeng, 2001). Reading is like opening the door of understanding to human's past, where it can serve as a looking glass for our present. Reading also stimulates the development of brain cells, reinforces language skills, enhances organizational abilities, improves one's temperament and poise, and provides strength to endure frustration. In short, reading is the best and only way of enabling humans to absorb new experience and replace old views.

2.1.1 The Perspectives of Reading

To help students derive meanings from a text, a teacher has to understand the process of reading. Reading can easily be defined as the process in which a person receives and interprets a message from printed materials. Reading is a process of how information is processed from the text into meanings, starting with the information

from the text, and ending with what the reader gains. Goodman (1976) and Smith (1973) indicated that reading is a language process, not merely the sum of various decoding and comprehension subskills. In short, reading is the process of reconstructing the author's ideas and information.

Reading was traditionally viewed as a passive process in which the readers simply decode the written symbols without bringing their own knowledge to interact with the text (Clarke & Silberstein, 1977; Ruddell, 1976). Alderson (2000) called these readers passive decoders of sequential graphic-phonemic-syntactic-semantic systems. But after the emergence of the psycholinguistic model of reading (Goodman, 1976; Smith, 1971; 1973), research on reading showed that reading is actually an active process, in which the reader creates meaning from the printed words. As Goodman (1976) described, reading is a psycholinguistic guessing game, in which the reader actively interacts with the text to construct meaning. Goodman (1973) and Smith (1973) both elaborated the "psycholinguistic method" of reading and argued that it had provided new insights into the reading process as well as the process of learning to read. To sum up, reading is the act of constructing meaning while transacting with text. Just as we use information stored in background knowledge to understand and interact with the world around us, so do we use this knowledge to make sense of print.

2.1.2 Models of Reading

There are three theories or models of reading, i.e., schema theory, an interactive view of reading and views of metacognition in reading.

Schema theory was the most prominent representational theory for reading researchers and educators during the late 1970s and early 1980s. Schema points to the reader's background knowledge structures. Schema theory refers to the role of

background knowledge in language comprehension. It refers to the knowledge, background, and conceptual framework that a reader brings to a text. Schema theory is viewed as a psychological framework that covers both top-down and bottom-up processing. Carrell and Eisterhold (1988) proposed that “text itself does not carry meaning”; the text only offers guidance to readers to find out meanings. Comprehension occurs when readers’ background knowledge interacts with texts. Schema theory stresses much more on top-down processing than on bottom-up one in the comprehension process.

According to Anderson (2003a), top-down processing is an approach for processing a text in which the reader uses background knowledge, makes predictions, and searches the text to confirm or reject the predictions that are made. On the other hand, bottom-up processing is an approach for processing a text in which the reader builds up a meaning from the black marks on the page: recognizing letters and words, working out sentence structure (Nuttall, 1996). Letters, letter clusters, word, phrases, sentences, longer text, and finally meaning is the order of bottom-up model for achieving comprehension (Anderson, 2003a).

Beginning with Rumelhart, researchers have proposed an interactive review of reading which argues that lower-level and high-level processes work together interactively as parts of the reading process (Grabe, 1988). An interactive view of reading holds that reading is both “top-down” and “bottom-up”. Rumelhart (1985) indicated that part of the reading process involves interpreting graphic information from the page (bottom-up), and part of it entails using knowledge already present in the mind (top-down). According to Rumelhart (1985), both top-down and bottom-up models were linear models which passed information along in one direction only without the interaction of information contained in a higher stage with that of a lower stage to make up for the deficiency. Nuttall (1996) elaborated on the interactive model

of reading, stressing that the reader continually shifts from one focus to another in the process of reading: adopt a top-down approach to predict the probable meaning, and then move to the bottom up approach to verify whether the prediction is what the writer means.

According to Carrell, Pharis and Liberto (1989), they explained the term *metacognition* refers to a reader's understanding of any cognitive process. Metacognition in the context of reading consists of (1) a reader's knowledge of strategies for learning from texts, and (2) the control readers have of their own actions while reading for different purposes. In brief, metacognition refers to awareness of one's own reading processes (Brown, 1980). It means awareness of one's own understanding and non-understanding of reading strategies, and of monitoring comprehension during reading. Nuttal (1996) proposed that learners needed to understand how texts worked and what they did while reading. Meanwhile, they must be able to monitor their own comprehension. For example, students are able to recognize that they don't understand a text, and then adopt a strategy that will improve matters.

2.2 Reading Strategies

Literature on reading strategies has been abundant in recent years though different people have addressed the issue from different perspectives. Some researchers attempted to identify reading strategies available to various groups of readers (Anderson, 1991; Block, 1986, 1992; Young & Oxford 1997). Others, based on their theoretical and empirical research, recommended strategies and techniques that can be used to facilitate reading comprehension. Still others have investigated the effects of various reading strategies on improving comprehension (Afflerbach, 1990; Nolan, 1991).

Reading strategy which is defined varies from researcher to researcher. According to Cohen (1986), *reading strategies* refer to those mental processes that readers consciously choose to use in accomplishing reading tasks. As Block (1986) defined, reading strategies are techniques and methods readers use to make their reading successful. These methods include how to conceive a task, what textual cues they attend to, how readers makes senses of what they read, and what they do when they do not understand. Just as Anderson (2003a) explained, to achieve success, readers should take the active role in strategic reading, learning how to use a range of reading strategies that serve their purposes.

2.2.1 The Role of Reading Strategies

Often the term *skill* and *strategy* are used interchangeably, but there is still difference between both of them. An important distinction can be made between strategies and skills (McDonough, 1995). Strategies can be defined as conscious actions that learner takes to achieve desired objectives, but a skill is a strategy that has become automatic. This characterization underscores the active role that readers play in strategic reading. Anderson (2003a) emphasized that as learners consciously learn and practice specific reading strategies, the strategies move from conscious to unconscious, also from strategy to skill. The goal for explicit strategy instruction is to move readers from conscious control of reading strategies to unconscious use of reading skills.

As Oxford (1990) explained, strategies are the tools for active, self-directed involvement that is necessary for developing communicating ability. Strategies are not a single event, but rather a creative sequence of events that learners use actively. Anderson (1991) indicated that there is no single set of processing strategies that significantly contributes to success in second language tasks. Besides, he also noted

that strategic reading means not only knowing what strategy to use, but knowing how to use and integrate a range of strategies. Pressley et al. (1989) described that reading strategies were conscious, instantiated, and flexible plans readers applied and adapted to a variety of texts and tasks. In short, reading strategies are tools which allow readers to be more actively involved in reading.

2.2.2 Categories of Reading Strategies

The categories of reading strategies vary from different researchers. Global reading strategies and local reading strategies are generally accepted (Block, 1986). Barnett (1988) suggested that global strategies are top-down strategies and local strategies, bottom-up strategies. Mokhtari and Reichard (2002) defined three broad categories of reading strategies in terms of metacognition: global reading strategies, cognitive strategies and supportive strategies.

Different researchers have established the classification schemes of language learning strategies. O'Mally, Chamot and their colleagues identified twenty-six strategies and classified them into three types: metacognitive strategies, cognitive strategies, and socio-affective strategies. Based on Chamot and O'Malley's classification scheme, Oxford (1990) developed the Strategy Inventory for Language Learning (SILL), and listed over 200 specific strategies that may be applied to second language learning. In the Oxford model, strategies can be classified into two broad categories: (1) direct strategies, which can be further divided into memory strategies, cognitive strategies, and compensation strategies; and (2) indirect strategies, which include metacognitive strategies, affective strategies, and social strategies.

Chamot and O'Malley (1994a) proposed an instructional method for limited English proficiency students at intermediate and advanced ESL levels, known as the Cognitive Academic Language Learning Approach (CALLA). In a CALLA model,

learning strategy instruction is embedded in daily lessons as an integral part of the regular class routine. The CALLA lessons are divided into five phases: Preparation, Presentation, Practice, Evaluation, and Follow-Up Expansion.

ESL/EFL learners usually employ a number of language learning strategies during their reading process. Those strategies involve cognitive, metacognitive, compensation, memory, affective, and social strategies (Chamot and O'Malley 1994b; Crandall et al. 2002; O'Malley and Chamot 1990; Oxford 1990). Reading strategies have much in common with learning strategies, but readers deliberately use them to better understand and remember what they read. According to Baker and Boonkit's (2004) research, the result showed cognitive strategies, metacognitive strategies and compensation strategies as the most frequently used strategies overall. Similarly, based on these three categories, Anderson (1999) made a reading strategy checklist, which contains common reading strategies we might want to consider in teaching.

2.3 Reading Strategies Instruction

Reading is regarded as a complex process and the prime objective of reading is comprehension. A dozen of studies have proved that reading strategies are effective in promoting comprehension (Anderson, 1991; Carrell et al., 1989; Paris, Lipson & Wixson, 1983). Besides, considerable research documents that good readers are strategic readers who use more strategies than poor readers as they read (Dole et al., 1991; Irwin & Baker, 1989; O'Malley et al., 1985). Therefore, teaching readers how to use specific reading strategies should be a prime consideration in the reading classroom (Anderson, 1999; Oxford, 1990). In addition, reading teachers should be aware of the need for students to become effective strategy users through explicit teacher modeling in reading instruction (Richards & Renandya, 2002).

2.3.1 Transaction Reading Strategies Across L1 and L2

ESL/EFL reading theory has been influenced greatly by the theories of first language reading. The psycholinguistic perspectives of reading have directed the development of ESL/EFL reading to a large extent, and have dramatically changed the theory of ESL/EFL reading from a bottom-up model to “reading as an interactive process” (Eskey & Grabe, 1988; Grabe, 1991). Besides, Carrell and Eisterhold (1988) argued that the schema theory model also provides insights to second language reading that efficient comprehension requires not only one’s linguistic knowledge but the ability to relate the textual material to one’s own knowledge. What is more, the interactive model of reading has led many researchers to emphasize that efficient and effective second language reading requires both top-down and bottom-up strategies operating interactively (Carrell & Eisterhold, 1988; Eskey, 1988; van Dijk & Kintsch, 1983). Therefore, ESL/EFL reading is a combination of both top-down and bottom-up information processing.

Clarke and Silberstein (1977) emphasized that ESL/EFL reading teachers should train students to apply strategies to their reading, and provided them with practice in using a minimum number of syntactic and semantic clues to achieve the maximum amount of information. Most importantly, in their views, students should be encouraged to take risks, to guess, and to ignore their impulses to be always correct. This shows that ESL/EFL students need to receive strategies training, especially that of top-down strategies, to improve their integration of both bottom-up and top-down strategies for better comprehension.

Grabe (1991) emphasized that a primary goal for ESL/EFL reading theory and instruction was to understand what fluent L1 readers did, and moved ESL/EFL students in that developmental direction. However, second language reading may be even more complex than first language reading. The obvious reason is that the

language skills used by the second language learner for information processing are still in developmental stages and they are not firmly established in the learner's mind (Phillips, 1984). Therefore, it takes more instruction and training to help ESL/EFL students achieve effective and efficient reading as L1 readers do.

2.3.2 Explicit Strategy Instruction

It refers to the instruction of reading strategies in an explicit way which involves (1) describing the strategy and its purpose — why it is important, when it can be used, and how to use it, (2) modeling its use and explaining to the students how to perform it, (3) providing ample assisted practice time — monitoring, providing cues, and giving feedback, (4) promoting students' self-monitoring and evaluation of their strategy use, and (5) encouraging continued use and generalization of the strategy in other independent learning situations (Beckman, 2002).

According to Tierney, Readence & Dishner (1995), the explicit strategy instruction aims to help students develop reading comprehension skills and strategies that can be applied to other reading situations without teacher support. Throughout the 1970s and early 1980s, several studies began to explore whether students could be made aware of reading strategies or be taught skill that would transfer to independent reading situations through explicit strategy instruction. From then on, "Explicit Teaching" was recommended as effective reading instruction for teaching selected reading strategies and skills.

Pearson & Gallaghder (1983) indicated that much of the research about metacognitive awareness and comprehension monitoring could not be separated from research in explicit strategy instruction. Explicit strategy instruction emphasizes that students should be trained to perform a strategy before being asked to monitor its application. In other words, in explicit strategy instruction, teachers do not merely

mention what the skill or strategy is, but model or provide direct explanation of what, how, why, and when a strategy ought to be used. Besides, they provide guided practice in which they gradually and slowly release responsibility for task completion to students until students are able to complete the task on their own. Finally, teachers ask students to apply their strategies to new and different reading situations (Pearson & Dole, 1987). To sum up, in explicit instruction, teachers direct the whole process of comprehension and students practice.

To be more specific, the features of explicit strategy instruction teaching are: (1) relevance: students are made aware of the why, when, how, and where of the strategy, (2) definition: students are informed as to how to apply the skills through teachers' modeling, (3) guided practice: students are given feedback on their own use of the strategy or skill, (4) self-regulation: students try out the strategy for themselves and monitor their own use of the strategy or skill, (5) gradual release of responsibility: after modeling and directing, the teacher gradually gives more responsibility to the student, and (6) application: students try their skills and strategies in independent learning situation (Tierney, Readence & Dishner, 1995). Through these steps, reading strategies are explicitly taught to students.

Teacher's explanation is an integral part of success in learning how to select strategy use. It is proved effective in Hansen and Pearson's (1983) study on making inference training. Winograd and Hare (1988) suggested five elements that could be included in teacher's explanation about strategy use: (1) what the strategy is, (2) why the strategy should be learned, (3) how to use the strategy, (4) when and where the strategy is to be learned, and (5) how to evaluate the use of the strategy. As Hansen and Pearson (1983) found, poor readers benefited most from teacher's explanation.

As mentioned above, we see that in the explicit instruction, the strategy is modeled, practiced, and applied to the whole comprehension task. Besides, the

strategy is modeled in a variety of ways and with different tasks, and the adaptability and flexibility of strategies are emphasized (Pearson & Dole, 1987). Pearson and Gallagher (1983) commented on the studies on explicit strategy instruction (Palincsar & Brown, 1983; Raphael & Pearson, 1985) and suggested that, through explicit strategies instruction, students could be taught to acquire and independently apply reading strategies which would enhance reading comprehension. Besides, they argued that comprehension skills could be taught to students if teachers could define them carefully, model them for students with methods they could use to complete comprehension tasks, offer plenty of guided practice and feedback, and then allow students to practice the skills on their own. In addition, Kern (1989) pointed out that the method widely recommended for improving learners' ability to comprehend L2 texts was explicit instruction in reading comprehension strategies.

2.4 Selected Reading Strategies

Taiwan students have learned English for two years when they entered junior high school, but the English classes in elementary schools emphasize the speaking and listening ability based on the Grade 1-9 Curriculum Guidelines prescribed by the Minister of Education. Therefore, junior high school students' English reading ability is at the beginning level. Based on the proficiency level of JHS students and the learning condition of reading in Taiwan, six reading strategies are adapted from Oxford's learning strategies (1990) and Anderson's reading strategy checklist (1991).

In addition to the six reading strategies selected for instructions, there were many other reading strategies proposed by Oxford (1990) and Anderson (1991). The reasons why the researcher did not include them in strategy training were as follows. First, the total time spent on strategy training was not long enough to teach all reading strategies and make participants familiar with each of them. Each new strategy should

be reinforced through a lot of practice. Furthermore, the training effects of those six reading strategies would be more significantly seen on the types of questions of the pretest and posttest.

Predicting: It is a general technique used in the reading process (Grellet, 1981). Smith (1988) also argues that prediction was viewed as the core and the basis of reading comprehension. Nuttall (1996) explained that if a reader understands a text, he could predict with a fair chance of success what is likely to come next and what is not. It requires the readers to use schemata about the way stories work; the way texts are constructed, and the way people tend to think. Therefore, making prediction is effective to promoting readers' activation of their background knowledge, which is an important part in the process of reading.

Skimming: By skimming, readers go through the reading material quickly in order to get the gist of it, to know how it is organized, or to get an idea of the tone or the intention of the writer (Grellet, 1981). As EFL/ESL readers tend to process texts in a "bottom-up" manner (Kern, 1989), learning to skim for the main idea is a good way to improve their top-down reading, which is beneficial to enhancing their comprehension of difficult texts. This is a practical strategy for EFL/ESL readers.

Scanning: Scanning is a skill that requires glancing or reading quickly through a text to search for specific information. Scanning means when we read to find information, we move our eyes quickly across the text. We don't read every word or stop reading when we see a word we don't understand. We look for the information we want to find. Generally, scanning is a technique that is helpful when we are looking for the answer to a known question. This is helpful when people take a test. In most cases, we

know what we are looking for, so we are concentrating on finding a particular answer. Scanning involves moving our eyes quickly down the page seeking specific words and phrases.

Guessing the meaning of unfamiliar words from context: Smith (1971) argued that the best way to identify an unfamiliar word in a text was to draw inferences from the rest of the text rather than looking it up in a dictionary. This view differentiates top-down processing from bottom-up processing to deal with unknown words, emphasizing the reader depends on the context to interpret words.

Making Inference: It is the process of creating a *personal* meaning from text. It involves a mental process of combining what is read with relevant prior knowledge (schema). The reader's unique interpretation of text is the product of this blending. Vonk and Noordman (1990) stated that the writer would leave implicit the information that was supposed to be derived from the text by the reader. Therefore, we see that the reader has to draw upon his prior knowledge or his understanding of the context to deduce the implicitly-stated information embedded in the text.

Self-monitoring: In order to check the student's awareness of reading strategies, an approach known as metacognitive theory was developed in the 1970s. Metacognition is knowledge about cognition (Flavell, 1977). Metacognition in reading refers to readers' background knowledge of the text, their awareness of using strategies and of the importance of particular strategies. Researchers in second language education (Barnett, 1988; Kern, 1988) also pointed out that proficient ESL readers showed more awareness of their use of strategies in reading English than less proficient ESL readers. According to Oxford (1990), metacognitive strategies include three strategy sets: (1)

centering your learning, (2) arranging and planning your learning, (3) evaluating your learning. In “evaluating your learning” set are two related strategies: self-monitoring and self-evaluating, both aiding learners in checking their language performance. One strategy involves noticing and learning from errors, and the other concerns evaluating overall process. The research adapted the definition of self-monitoring due to JHS students’ psychology and intelligent development.

2.5 Research on Reading Strategies

In this section, the research on ESL/EFL reading strategies instruction will be reviewed first. Then we discuss the research on EFL reading strategies in Taiwan.

2.5.1 Research on ESL/EFL Reading Strategies Instruction

Much research indicates that all students can benefit from strategy instruction. For instance, to aim at investigating the effects of teaching reading strategies on reading comprehension for ESL learners, Zhang (1992) conducted a study to incorporate four reading strategies into reading instruction. The four strategies are cognitive, memory, compensation, and test-taking strategies. The result indicates that the reading strategies instruction really help the students in the experimental group make more improvement in reading comprehension than the control group. However, there was no interactive effect between the reading levels of the reader and the teaching method used.

Song (1998) modified Palincsar and Brown’s reading strategies to teach in an ongoing EFL university reading classroom. The finding showed that the reading strategy training improved EFL college students’ reading proficiency. It revealed that less able readers might benefit more from the training than more able readers.

In order to take advantage of the potentials of collaboration for language

development in content classroom, Klingner and Vaughn (2000) researched the helping behavior of fifth-grade students while using Collaborative Strategic Reading (CSR) in ESL content classes. With CSR, students work in groups, and each student in a group performed a different role, such as a leader, clunk expert, announcer, encourager and timekeeper. Students assisted one another in applying four Collaborative Strategic Reading Strategies: preview, click and clunk, get the gist, and wrap-up to facilitate their comprehension of content-area text. The result revealed that students' helping behavior was facilitated by the provision of specific instruction in when and how to help their peers. It is worth stressing that readers especially with lower level language proficiency might benefit from the strategy instruction.

2.5.2 Research on EFL Reading Strategies in Taiwan

There have been a lot of studies examining the use of reading strategies among EFL students in Taiwan. (Chang, 1998; Chen, 2005; Cheng 2000; Hsu, 2000; Lin, 2004; Yi, 1994).

Through the questionnaire of 200 college students, Yi (1994) intended to find out whether good foreign language comprehenders would differ from poor ones in the frequency of their use of certain "effective" strategies. Her findings indicated that the majority of strategies were underused by Chinese EFL students of all levels. While this may imply that there was still enormous room for the practice of strategic instruction, it is imperative to keep it in mind what most of the EFL readers in Taiwan need may be simply a revival of their dormant skills or a promotion of their old skills to higher level rather than an instruction on brand new tricks.

Based on the academic records of 218 students, Chang (1998) chose the top ten and bottom ten percent of college students for her study. Subjects in that study were 20 college-level students who were studying English as their major in Taiwan. Her

finding indicated that high achievers were different from low achievers in the quantity and quality of their strategy use.

Cheng (2000) conducted a study to investigate the relationships between four metacognitive factors (subjects' perceptions about their reading abilities, about repair strategies, about effective strategies, and about what causes them difficulty) and reading ability in L1 and L2. He collected 233 college students' questionnaires to measure their metacognitive awareness of their reading processes in Chinese and English. The results indicated that for reading in Chinese, these subjects' metacognitive conceptualization tended to be more global or top-down; in addition, this top-down approach contributed positively to their reading performance in Chinese. Similarly, for reading in English, global strategies were also related positively to subjects' reading ability. However, when reading in English, these subjects also relied on some local reading strategies.

Hsu (2000) collected 315 students' questionnaires to examine the reading comprehension difficulties encountered by junior high school students in Taiwan, to investigate their reading strategies and to compare the differences between good and poor readers. This investigation focused on reading comprehension difficulties they encountered and reading strategies they used at the three stages — pre-reading, while-reading and post-reading. She gave three suggestions from her finding: (1) JHS English teachers should put more emphasis on the teaching of reading comprehension and offer students with systematical and sequential training in reading comprehension, such as instructing the use of reading strategies, and doing more English comprehension practices. (2) Teachers should provide students, especially those who can not use reading strategies effectively, with practical guidance in how to learn reading comprehension effectively from English reading programs at school. Then they may be able to read independently at home. (3) English teachers should provide

various types of reading comprehension practices and related reading materials to help students extend their interest in reading comprehension.

Lin (2004) modified Palincsar and Brown's reading strategies to teach 43 ninth-grade junior high school students. Those students were instructed to learn five selected strategies, i.e., prediction, clarifying, questioning, story mapping, and summarizing for three months. The finding showed that the reading strategy instruction made students become more strategic and active in reading. Among these reading strategies, students claimed that clarification and story mapping were the most helpful strategies. Because the teaching material in the study was the novel, Anne of Green Gable, it may be a heavy burden for students.

Chen (2005) conducted a study incorporating five reading strategies into reading instruction to teach third-grade senior high school students. The five strategies were skimming for the main idea, identifying topics and main ideas, making predictions, making inferences, and guessing the meanings of unfamiliar words from context. The result indicated that the reading strategies instruction helped the students make more improvement in reading comprehension. However, it was dogmatic to conclude that the improvement attributes to the reading strategies instruction since there was no control group to contrast.

Most of the studies explored the reading problems at college and senior high school. Although junior high school students' reading proficiency was low, it didn't mean that it was not necessary to teach junior high school students some basic and practical reading strategies. The researcher wondered whether the effect of reading strategies instruction will improve JHS students' reading comprehension. However, relatively little research has been conducted on the effects of strategy instruction on EFL junior high school (JHS) students' reading comprehension. Besides, we lacked empirical reading strategy training for junior high school students in Taiwan. It is

hoped that through the explicit strategy instruction, students can become strategic readers.

According to Hsu (2000), a systematic reading strategy instruction was necessary for Taiwan junior high school students. And the explicit instruction of reading strategies was the effective way to teach learning strategy (Beckman, 2002; Chamot & O'Malley, 1994a; Chen, 2005). As Chen (2005) suggested, students' reading comprehension performance may depend on different types of comprehension questions. For example, senior high school students can do well in inference questions, but it may not be easy for junior high school students with their reading proficiency at the elementary level. Besides, based on the teaching experience of the researcher, the frequency of the use of these reading strategies and students' feedback should also be examined for the benefit of reading comprehension instruction.

2.6 Research Questions

Based on the purpose of the study and implications from the previous studies, the research questions are stated as follows:

1. Does strategy instruction improve reading comprehension of EFL junior high school students in Taiwan?
2. Which types of reading comprehension questions (main idea questions, detail questions, inference questions, and word-guessing questions) will JHS students perform best from the strategies instruction?
3. In what frequency do students use the instructed strategies?
4. What are junior high school students' responses to the explicit instruction of reading strategies?

2.7 Research Hypotheses

It is hoped that the findings can lead to a clearer understanding of students' use of reading strategies in reading comprehension. Simply put, we will know the effects of reading strategies instruction on reading comprehension.

To investigate if the reading strategy instruction is helpful to students, the researcher would like to testify four research hypotheses.

1. The reading strategy instruction will improve reading comprehension of EFL junior high school students in Taiwan.
2. Junior high school students perform best in the types of main idea questions, detail questions and word-guessing questions from the strategies instruction, but they can not do well in the inference questions.
3. The strategies of skimming, scanning, guessing word meanings are most frequently used by JHS students; while self-monitoring is the least used strategy.
4. Junior high school students have positive responses toward the explicit instruction of reading strategies.