MODIFYING SELF-REGULATED STRATEGY DEVELOPMENT (SRSD) TO ENHANCE THE SECOND YEAR STUDENTS' SELF-REGULATION AND VOCABULARY SIZE AT SMAN 1 PURBOLINGGO

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MASTER IN ENGLISH LANGUAGE TEACHING STUDY PROGRAM LANGUAGE AND ARTS EDUCATION DEPARTMENT TEACHER TRAINING AND EDUCATION FACULTY LAMPUNG UNIVERSITY BANDAR LAMPUNG 2018

ABSTRACT

MODIFYING SELF-REGULATED STRATEGY DEVELOPMENT (SRSD) TO ENHANCE THE SECOND YEAR STUDENTS' SELF-REGULATION AND VOCABULARY SIZE AT SMAN 1 PURBOLINGGO

BY

ISKADINA EKA PUTRI

Even though vocabulary is crucial in conveying meaning, many students might not get enough exposure to it due to time limitation in the class. Modifying SRSD which provides a framework for teaching instructional strategies and selfregulation strategies in vocabulary learning becomes interesting to discuss. This study is aimed at finding out: 1) the difference of students' self-regulation before and after the treatments of modified SRSD in vocabulary learning, 2) the difference of students' vocabulary size before and after the treatments of modified SRSD in vocabulary learning, and 3) Students' perception toward learning activities presented through modified SRSD in vocabulary learning.

The sample of the study was a class of SMAN 1 Purbolinggo in the academic year 2016-2017 consisting of 34 students. The sample was taught by using modified SRSD in three meetings. The pretest and the posttest data of vocabulary size and self-regulation test were gathered to see whether the modified SRSD in vocabulary learning differentiated the students' vocabulary size and self-regulation achievement before and after the treatments. Besides, the students' perception questionnaire was handed out to see student's perception toward the modified SRSD.

The result shows that the difference of the mean score of the self-regulation pretest (2.7691) and the self-regulation posttest (5.1221) was 2.353. It appeared that the t-value was higher than the t-table (42.745>2.042) and the two-tailed significance was lower than .05 (.00<.05). Specifically, SRSD increased the students' self-regulation in all aspects, ranging from the most to the lowest: 1) emotion control (2.47 average gain), 2) metacognitive control (2.46 average gain), 3) environment control (2.37 average gain), 4) commitment control (2.27 average gain), and 5) satiation control (2.24 average gain). The difference of the mean score of the vocabulary size's pretest (7441 word families) and the vocabulary size's posttest (9182 word families) was 1741 word families. It appeared that the t-value was higher than the t-table (5.106>2.042) and the two-tailed significance was lower than .05 (.00<.05). Also, the students agreed the implementation of the modified SRSD which provides instructions for self-regulation and vocabulary learning strategies could help them become more autonomous in vocabulary learning. Therefore, modified SRSD can be applied and recommended as a reference to help students enhancing their vocabulary learning.

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By Iskadina Eka Putri

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CURRICULUM VITAE

The writer's name is Iskadina Eka Putri. She was born in Jakarta, September 18th 1991. She is the first child and the only daughter of Ir. Sulaiman Hakim and Ir. Prapti Iswari. She has two supportive younger brothers, Satia Darma Hakim and Teguh Wijaya Hakim.

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DEDICATION

This thesis is fully dedicated to:

My Family

My Best Friends

My almamater, Lampung University

ΜΟΤΤΟ

"Indeed what is to come will be better for you than what has gone by."

(Al-Quran, 93:4)

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Bandar Lampung, April 2018 Writer

Iskadina Eka Putri NPM. 1523042043

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I. INTRODUCTION

This chapter introduces the basic problems of the research. It comprises the background of the problems, formulation of the problems, objectives, uses, scope, and definition of terms.

1.1. Background of the Problems

Vocabulary is considered to be an important part of language acquisition and learning together with other linguistic competences. Wilkins (1987, p.135) cited in Pan and Xu (2011) states "Out of grammar very little can be conveyed, without vocabulary nothing can be conveyed". From the statement above, it is clear that vocabulary has a crucial role for language learners to convey meaning in both spoken and written.

Unfortunately, the students might not get enough exposure to vocabulary due to time limitation. Sokmen (1997) cited in Kalajahi and Pourshahian (2012) notes that it is impossible for students to learn all the vocabulary they need in the classroom since there are so many words in which teachers can not spend time within the class time limit. Thus, the process of expanding vocabulary requires higher level of autonomy and more responsibility from the students themselves. In order to solve the problem, VLS were introduced. Scharle and Szabo (2000) and Nation (2001) cited in Namaghi and Malekpur (2015) state that Vocabulary Learning Strategies (VLS) enable learners become more responsible for their studies by controlling their own learning. Therefore, the strategies improve learners' autonomy, independence, and self-direction (Oxford & Nyikos, 1989, p.291, cited in Namaghi and Malekpur, 2015). The statements lead the students to employ VLS in mastering the vocabulary by their own learning.

There are various kinds of strategies which can be applied to overcome vocabulary problems. According to Baharudin and Ismail (2015) generally, Schmitt has classified the vocabulary learning strategies into two primary groups which are a) discovery strategies, and b) consolidation strategies. The discovery strategies involved the early stage of learning towards the meaning of new words found whereas the consolidation strategies involved the learning activity and remembering the word meanings which are already known. Numbers of studies have been conducted to discuss VLS used in EFL context (Amirian & Heshmatifar, 2013., Lip, 2009., Saengpakdeejit, 2014) and specifically investigated the most and the least VLS used by the students.

However, Riding and Rayner (1998) cited in Tseng et al (2006) stated that the learning strategies conceptualized in this vein can only be defined relative to a particular agent, because a specific learning activity may be strategic for one and non-strategic for another. Tseng et al (2006) agreed with this statement. They

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stated "It is not what learners do that makes them strategic learners, but the fact that they put creative effort into trying to improve their own learning."

Further, Tseng et al (2006) state that the issues make an important shift from focusing on the product to the self-regulatory process itself and the specific learner capacity that highlighted and personalized their strategic training. It is in line with what Zimmerman (1998) state that self-regulation can be defined as self-generated thoughts, feelings, and actions for attaining academic goals.

A number of studies investigated self-regulation in language learning (Zumbrun et.al., 2015; Nodoushan 2012; Ranali, 2012). An approach has been developed in recent years under the notion of Self-Regulated Strategy Development (SRSD) by Karen Harris and Steve Graham from Arizona State University. It provides a framework for teaching instructional strategies and self-regulation strategies. The instruction begins as teacher-directed but with a goal of empowering students to be self-directed. It encompasses six stages (1) Develop background knowledge, (2) Discuss it, (3) Model it, (4) Memorize it, (5) Support it, and (6) Independent performance.

SRSD has been applied primarily on writing. The findings of previous studies on SRSD have indicated that integrating SRSD model of writing instruction with certain teaching strategies positively affects students' writing performance (Fahim and Rajabi, 2015 and Bakry and Alsamadani, 2015). Further, Fahim and Rajabi (2015) suggest future studies to examine the efficacy of implementing the model to teach other skills by considering the idea that some stages of the model may require serious revision and/or modification.

Modifying SRSD which provides a framework for teaching instructional strategies and self-regulation strategies in vocabulary learning becomes an interesting thing to study. It seems important for the students not only learn vocabulary from the teacher in the class, but also use their instructional strategies together with their self–regulation to overcome their vocabulary problems. In this research, the self regulation strategies propounded by Dornyei (2001) (commitment control, metacognitive control, satiation control, emotion control, environmental control) will be combined with a vocabulary learning strategies, that is, vocabulary notebook because it is believed that the vocabulary notebook enhances independent vocabulary study (Schmitt and Schmitt 1995) and provides opportunities for developing self-management strategies (Fowle, 2002).

Regarding to the background mentioned above, thus, the researcher will make an attempt to carry out the modified Self-Regulated Strategy Development (SRSD) to enhance students' self-regulation and their vocabulary size in vocabulary learning.

1.2. Formulation of the Problems

Related to the background of the problem mention above, the formulation of the problems are cited as follows:

- 1. Is there any significant difference of students' self-regulation before and after the treatments of modified SRSD in vocabulary learning?
- 2. Is there any significant difference of students' vocabulary size before and after the treatments of modified SRSD in vocabulary learning?
- 3. What are the students' perceptions toward learning activities presented through modified SRSD in vocabulary learning?

1.3. Objectives

The objectives of this study are:

- 1. To find out the difference of students' self-regulation before and after the treatments of modified SRSD in vocabulary learning.
- 2. To find out the difference of students' vocabulary size before and after the treatments of modified SRSD in vocabulary learning.
- 3. To find out students' perceptions toward learning activities presented through modified SRSD in vocabulary learning.

1.4. Uses

The significances of this study are:

- Theoretically, the findings of this research are expected to support the existing theory about the modified SRSD in vocabulary learning of Senior High School students.
- Practically, the findings are expected to be beneficial as references for further research of the modified SRSD in vocabulary learning and as information for English teacher in modifying SRSD in the class.

This research conducted on the second grade of Senior High School students in EFL context. It focuses on finding out the difference of students' self-regulation before and after the treatments of modified SRSD, the difference of students' vocabulary size before and after the treatments of modified SRSD, and the students' perceptions toward learning activities presented through modified SRSD in vocabulary learning.

1.6. Definition of Terms

The following are the definitions of the key terms covered in this research. These definitions are presented to avoid ambiguity concerning the terms.

- 1. *Modifying* is changing some parts of (something) while not changing other parts
- 2. *Difference* is a way in which something has changed.
- 3. *Self-Regulation* is a concept that refers to students' self-generated ideas, actions, and feeling to engage students' activate their active participations in learning.
- 4. Self-Regulated Strategic Development (SRSD) is a model of instruction which major function is teaching students strategies together with self-regulation procedures.
- 5. *Vocabulary* is a single unit or lexical phrases that convey one single meaning.
- 6. Vocabulary Learning Strategies (VLS) are tools for acquiring vocabulary.
- 7. Vocabulary Size is the number of words a learner has.
- 8. Perception is response, reaction, or idea toward something

This chapter introduced the basic problems of the research. It comprised the background of the problems, the formulation of the problem, the objectives, the uses, the scope, and the definition of terms.

II. LITERATURE REVIEW

This chapter deals with review of related literatures; vocabulary, vocabulary size, vocabulary learning strategies, self-regulation, Self-regulated Strategy Development (SRSD), teaching SRSD in vocabulary learning, procedure of teaching SRSD in vocabulary learning, theoretical assumption, and hypothesis. Those related literatures will be elaborated in the following sections.

2.1. Vocabulary

Vocabulary is single unit or lexical phrases that convey one single meaning. Hatch and Brown (1995) defines it as a list or set of word for particular language or a list or set of word that individual speakers of language might use. Moreover, Lessard-Clouston (2013) defines it as the words of language, including single items and phrases or chunks of several words which convey a particular meaning, the way individual words do.

Vocabulary is very important in conveying the meaning. Wilkins (1987, p.135) cited in Pan and Xu (2011) states "out grammar very little can be conveyed, without vocabulary nothing can be conveyed."

After all, it can be seen that vocabulary as the centre in language learning is very important to be mastered by the learners as a core for their efficient language learning in order to be able to convey the meaning.

Broadly speaking, there are two classifications of words, namely function and content words(Collier-Macmillan International, 1965).

a. Function Words

The function words are those that often have little meaning in the dictionary sense but which serve important functions in relating other words in the language to each other. They are including auxiliary verbs (do, has, will, is, has been, etc.) used to establish the tense, prepositions (in, at, through, over, between, etc.) which show relationships in time and space, articles (a, an, the) that show something that is specific or one of many, conjunctions (and, but, for, so, since, etc.) which are words to connect sentences and pronouns (I, you, him, us, ours, etc) to refer to other nouns.

b. Content Words

Content words name and describe things, persons, events, and processes that speakers want to talk about. They are classified into nouns, verbs, adjectives and adverbs. The nouns (teacher, school, independence, etc.) tell which object, the verbs (listen, speak, read, write, etc.) indicate the action happening, or the state. The adjectives (smart, big, easy, young, etc.) give us details about objects and people, and the adverbs (thoughtfully, often, sometimes, nearly, etc.) tell us how, when or where something is done. Besides, negatives words (no, not and never), demonstrative pronouns (this, that, these and those), and question words (what, where, when, how and why) are categorized into content words as well.

In other words, content words point out the most important information while function words are used to stitch those words together.

Moreover, Gairns and Redman (1986) divide the vocabulary in two groups: receptive and productive vocabulary.

a. Receptive Vocabulary

Receptive refers to language items which can only be recognized and comprehended in the context of reading and listening. In the perspective of the receptive use, it considers that in the vocabulary knowledge, the students' must be able to recognize a word when they hear it (spoken form) or when they see it (written form).

b. Productive Vocabulary

Productive vocabulary can be defined as language items which the learner can recall and use appropriately in speech and writing. It involves using the right form to express a certain meaning, knowing what items a concept can refer to, and using it accordingly and knowing what other words can. Moreover, it also includes the ability to use it in correct grammatical pattern together with its collocations.

However, the researcher will focus on the content word and the receptive vocabulary to be done in the class. The receptive vocabulary will be measured by a vocabulary size test.

2.2. Vocabulary Size

Vocabulary size refers to the number of words a learner has. According to Nation and Beglar (2007) vocabulary size test has different purposes. It is not a diagnostic measure like the Vocabulary Level Test, but is a proficiency measure to determine how much vocabulary learners know.

Laufer (1997) cited in Kalajahi and Pourshahian (2012) suggests that the vocabulary size essential for reading comprehension is about 3,000 word level. Furthermore, it is necessary to have good knowledge of at least 5,000 words if someone aims to read advanced, authentic, academic texts (Hirsh & Nation, 1992). On the other hand, for ESL and EFL learners, Nation (2005) cited in Crossley et.al. (2008) states that it is likely true that explicit vocabulary instruction concentrating on the first 2,000 to 3,000 words is valuable for the beginning learner. Schmitt (2000) cited in Kalajahi and Pourshahian (2012) states that 5,000 words are needed if someone wants to learn English better.

In measuring the vocabulary size, Nation & Beglar (2007) provide a Vocabulary Size Test. The Vocabulary Size Test was designed to measure both first language and second language learners' written receptive vocabulary size in English. The 14,000 version containing 140 multiple-choice items, with 10 items from each 1000 word family level. Typically, it takes around 40 minutes to sit the test.

Thus, this study used the Vocabulary Size Test provided by Nation and Beglar (2007) to measure students' vocabulary size before and after the treatments.

2.3. Vocabulary Learning Strategies (VLS)

Teacher cannot teach all the words learners may need to know since there is a time limitation for the students to have enough vocabulary exposure in class. Sokmen (1997) cited in Kalajahi and Pourshahian (2012) notes that it is impossible for students to learn all the vocabulary they need in the classroom since there are so many words wherein teachers can not spend time within the class time limit. Thus, vocabulary expanding process requires the higher level of autonomy and more responsibility from learners themselves.

It is in line with Nation (2008) cited in Mizumoto (2013) who argues that in a well-designed vocabulary development program, the teacher's job in order of importance are planning, strategy training, testing and teaching vocabulary. Teaching comes at the end of the list because teaching vocabulary is considered as inefficient because there are too many words to deal with, the rate of teaching words has to be slow, and the amount of learning is low (Nation, 2012 cited in

Mizumoto, 2013). It can be seen that the teacher has tobe more concerned to train strategies rather than teaching vocabulary, since it is the second most important job in the list. Moreover, Schmitt and Schmitt (1995) state that the best vocabulary teaching plan may be to introduce a variety of VLS to students so that they can decide for themselves on the ones they prefer.

Based on the points above, the vocabulary strategy training is obviously needed to be done by the teacher. Scharle and Szabo (2000) and Nation (2001) cited in Namaghi and Malekpur (2015) state that Vocabulary Learning Strategies (VLS) enable learners become more responsible for their studies by controlling their own learning. Therefore, the strategies improve learners' autonomy, independence, and self-direction (Oxford & Nyikos, 1989, p.291) cited in Namaghi and Malekpur (2015). The statements lead the students to employ VLS in mastering the vocabulary by their own learning.

There are many kinds of strategies used to help them resolve the vocabulary problems. According to Baharudin and Ismail (2015) generally, Schmitt has classified the vocabulary learning strategies into two primary groups which are a) discovery strategies, and b) consolidation strategies. The discovery strategies involved the early stage of learning towards the meaning of new words found whereas the consolidation strategies involved the learning activity and remembering the word meanings which are already known. Those five groups are determination, social, memory, cognitive, and metacognitive strategies. It will be explained as follows.

- a. Determination strategies, it is individual learning strategies, which help learners to discover the meaning of words by themselves with no assistance from peers. The examples are consult monolingual dictionary, guessing the meaning from textual context, and analyzing affixes and roots of the new word.
- b. Social strategies, engage learners in interaction with peers and help them to tearn from each other. The examples are asking teacher for an L1 translation, asking classmates for meaning, discovering new meaning through group work activity.
- c. Memory strategies, engage learners in learning words by associating their background knowledge with the new word. For example: studying the sound of a word, saying a new word aloud when studying, and using new word in sentences.
- d. Cognitive strategies, engage learners in more mechanical mental processing than the memory strategies. For example: repeating the word verbally, repeating to write the word, and keeping vocabulary notebook.
- e. Metacognitive strategies, relate to processes involving monitoring, decision making, and evaluation's of one progress. According to Zhang and Seepho (2013) metacognitive strategies are regarded as high order executive skills that make use of knowledge of cognitive processes and constitute an attempt to regulate ones' own learning by means of planning, monitoring, and evaluating. To efficiently acquire an L2, it is important to maximize exposure to it. The examples are using English-language media

(songs, movies, newscasts, etc.), doing word tests, skipping or pass new word, and continuing to study word over time.

There are numbers of studies conducted VLS in EFL context (Amirian & Heshmatifar, 2013., Lip, 2009., Saengpakdeejit, 2014). All of them investigated the most and the least VLS used by the students. The result of Amirian & Heshmatifar's study (2013) revealed the top six of the most frequently used VLS according to university students; guessing from the textual context (DET), consulting a monolingual dictionary (DET), repeating the word verbally (COG), analyzing the part of speech (DET), studying the sound of the word (MEM), and keeping a vocabulary notebook (COG). While, Lip's study (2009), revealed the four most frequently used VLS namely; analyzing by breaking it into segment (DET), repeatedly spelling the word in mind (MEM), remembering word by doing project, and asking classmates for meaning of the word (SOC). The last, Saengpakdeejit (2014) states that using dictionary (DET) and guessing from the textualcontext (DET) as the most common strategies used by students.

However, Riding and Rayner (1998) cited in Tseng et al (2006) state that the learning strategies conceptualized in this vein can only be defined relative to particular agent, because a specific learning activity may be strategic for one and non-strategic for another. Tseng etal (2006) agreed with this statement. They state "It is not what learners do that makes them strategic learners, but the fact that they put creative effort into trying to improve their own learning."

Moreover, Tseng etal (2006) also point out that Schmitt VLS instruments and other VLS instruments provided by Gu and Jhonson (1996) and Stoffer (1995) cited in Tseng et al (2006) can take us only part of the way towards understanding the behaviour students use in learning vocabulary.

These issues make an important shift from focusing on the product-the actual techniques employ to the self-regulatory process itself and the specific learner capacity that highlighted and personalized their strategic training (Tseng et al., 2006). It seems important to know more about the students' self-regulation in the language learning.

2.4. Self-Regulation

Baumeister and Vohs (2008) state that self-regulation is the self 's capacity for altering its behaviors. It greatly increases the flexibility and adaptability of human behavior, enabling people to adjust their actions to a remarkably broad range of social and situational demands. It is an important basis for the popular conception of free will andfor socially desirable behavior. It provides benefits to the individual and to society, and indeed good self-control seems to contribute to a great many desirable outcomes, including task performance, school and work success, popularity, mental health and adjustment, and good interpersonal relationships.

Zimmerman (1998) defines self-regulation processes as a kind of self-directed feelings, thought, and behaviour for achieving academic goals. Futhermore, the

processes organizes into three cyclical phases, namely, forethought phase, performance phase, and self-reflection phase. Forethought phase or proactive phase pertains to beliefs and processes occur before learner attempts to learn; it consists of two level; task analysis (goal setting and strategic planning) and self motivation (students' perception and learning beliefs). The performance phase also consists of two sub-phases; self-control (choosing method during the first phase) and self-observation (self-record of personal event). The last phase, self-reflection, consists of two sub-phase, self-judgment and self-evaluation (Pintrich & Zusho, 2012; Zimmerman, 2000, cited in Zumbrun et al, 2011)

Zarei and Hatami(2012) state that generally, it is believed that self-regulation strategies can be learned, taught, and controlled. In the context of L2 vocabulary learning, word knowledge plays an important role in receptive and productive skills in association with effective communication. This is why insufficient vocabulary knowledge will cause learners to experience communication breakdowns when confronted with unknown words or expressions.

There are four basic self-regulation strategies according to The IRIS Center(2008), they are: Goal setting, Self-monitoring, Self-talk, and self-reinforcement.

a. Goal-setting

The goal-setting strategy helps students to understand what they are attempting for. It can increase student attention, motivation, and effort. This instructional process includes: Setting goals and breaking them into steps as needed, developing plans for meeting goals and monitoring progress, implementing the plans, self-monitoring, and revising the goals when needed.

b. Self-monitoring

It is used to help students determine whether a behavior exists. It consists of two parts, self-assessment and self-recording. Self-monitoring increases or decreases the frequency, intensity, or duration of the existing behavior as many students start out with good intention, but they quit. It can be used to evaluate and monitor student attention, performance, and strategy use.

c. Self-talk/self-instruction/self-statement

In this strategy, the students learn to talk to themselves through a task or activity. It uses language to direct or control behavior. Self-instruction can help students learn to consciously understand or overcome a problem.

d. Self-reinforcement

In this strategy, the students reinforce or reward themselves for reaching or exceeding a criterion. Self-reinforcement creates greater changes than are possible through teacher-led reinforcement. For example, "I'm proud of myself for doing a good job of staying focused on my task."

Tseng et.al (2006) draw on a system of self-regulatory strategies from the area of educational psychology developed by Dornyei (2001) which consists of five facets, they are commitment control, metacognitive control, satiation control, emotion control, and environment control.

a. Commitment control: increasing the students' original goal commitment by reminding students of the possible outcomes, positive or negative, for example a film director imagine about receiving an Oscar award for the film he is working on.

- b. Metacognitive control: managing concentration and reduce procrastination by giving self-reminder to concentrate ('come on, just a little bit more, concentrate'), imagining the lack of concentration, and cutting short any procrastination ('let's not think about it anymore but get down to doing it').
- c. Satiation control: eliminating boredom by performing the action with an artistic sense (taking note by using own preference colors, shapes, pictures, etc)
- d. Emotion control: managing the disruptive emotional states or moods that will undermine the determination by using self-encouragement (having positive-talk), using relaxation and meditation technique (slowing down breathing and making it steadier and deeper), and sharing feelings with someone else.
- e. Environmental control: eliminating negative environmental influences by asking friends or family for help.

Those five facets of self-regulation provided by Dornyei (2001) will be used in a Self-Regulated Strategy Development (SRSD) which provides a framework for teaching instructional strategies and self-regulation strategies and also will be used in a Self-Regulating Capacity in vocabulary learning scale (SRCvoc) instrument provided by Tseng et.al (2006) for eliciting data on learners' self-regulation in vocabulary learning.

2.5. Self-Regulated Strategy Development (SRSD)

A number of studies have investigated self-regulation in language learning (Zumbrunn et.al., 2011; Nodoushan 2012; Ranalli, 2012) and an approach has been developed in recent years under the notion of Self-Regulated Strategy Development (SRSD) developed by Karen Harris and Steve Graham at Arizona State University. It provides a framework for teaching instructional strategies and self-regulation strategies.Instruction begins as teacher-directed but with a goal of empowering students to be self-directed.

The SRSD has been applied primarily on writing performance. The findings of previous studies on SRSD have indicated that using SRSD model of writing instruction together with teaching certain specific strategies positively affects students' writing performance (Fahim and Rajabi, 2015; Bakry and Alsamadani, 2015). According to Graham and Harris (2005b) and Graham and Harris (1996) cited in Santangelo et al (2008), it encompasses six stages: develop background knowledge, discuss it, model it, memorize it, support it, and independent performance. Those six stages were explained in detail as below.

a. Develop Background Knowledge

In this first stage, the primary purpose is to ensure that the students will successfully understand, learn, and apply the strategy. At this point, teacher has to identify the skills students will need to use a particular strategy, assess whether his students possess these skills, and reteach them if skill deficits are identified.

b. Discuss it

The primary purpose of this stage is to ensure the students are motivated and willing to learn the new strategy. This is done by having them examine and discuss their current performance and their perceptions of the writing process, introducing the concept of progress monitoring by having students identify one aspect of writing they hope to improve, and then graphing their performance on this element using previously written paper. At the end of this stage, the actual steps of the strategy are introduced.

c. Model it

In this stage, students are shown exactly how to use the strategy. The teacher highlights the "why" and "how" of each strategy step and shows how to use positive self-statements to maintain motivation and address attributions (e.g., "this is tough, but I can do it if I try!)". After that, the teacher and students discuss the benefit and the challenges of the strategy and how to make it more effective. The students also have time to maintain positive attitude by identifying statements they will use. The last, the concept of goal setting can be introduced by asking them to set their individual targets.

d. Memorize it

The goal of this stage is to have students become familiar enough with the steps of the strategy. It can be done by making memorization fun.

e. Support it

In this stage, students gradually assume responsibility for using the new strategy. It can be done by using cooperative peer groups, providing feedback, and offering positive reinforcement.

f. Independent performance

Learner begins to use the strategy individually while working on different tasks. The teacher, then, has to encourage student's students to recognize how the strategy improves their writing. they can also identify where else it would be beneficial and in what ways it can be modified.

Although SRSD has been applied primarily on writing, Fahim and Rajabi (2015) suggest future studies to examine the efficacy of implementing the model to teach other skills with considering the idea that some stages of the model may require serious revision and/or adaptation.

2.6. Teaching SRSD in Vocabulary Learning

This study tried to modify the instructional model which provides a framework for teaching instructional strategies and self-regulation strategies provided by Dornyei (2001) (commitment control, metacognitive control, satiation control, emotion control, environmental control) explained before to be applied in vocabulary learning. Those SRSD's six stages (develop background knowledge, discuss it, model it, memorize it, support it, and independent performance) that were explained before were used together with Vocabulary Learning Strategies (VLS) as the strategy to be trained.

The VLS was keeping a vocabulary notebook. The strategy belongs to consolidation strategies, i.e. those used to store the new word in long-term memory. There are some benefits to the use of the strategy according to some experts: it enhances independent vocabulary study (Schmitt and Schmitt 1995) and provides opportunities for developing self-management strategies (Fowle, 2002).

Schmitt and Schmitt (1995) suggest how to set up a vocabulary notebook. There are nine important things to consider: Formats, writing word pairs, enriching knowledge, recycling, learner independence, expanding rehearsal, a personal word store, reviewing notebooks, and selecting word.

a. Formats

The notebook arranges in a loose-leaf binder, an index card binder, or on cards. Pages with better-known words can be put further back and lesser-known words can be put toward the front. It can be also organized into groups (topic, parts of speech, themes, speech act, etc). But, it is suggested to avoid placing words which are very similar to each other in these grouping until they are known well enough not to cross-associated. For example the words affect and effect. Moreover, the pages also should be large enough to elaborate information.

b. Writing Word Pairs

Writing word pairs in vocabulary notebook is a good first step to gain initial exposure to a word. It is because after the students have discovered the L1 translation for the L2 target word from many sources (teacher, textbook, or dictionary), they practice the L2 word and try to remember its L1 translation, and they switch to an L1-and L2 word pair order to recall the new word. Moreover, if they know the L2 synonym they can use that instead of the L1 translation.

c. Enriching Knowledge

The page should be divided into section to enrich word knowledge after they learn the word from L1 translation or L2 synonym. They can add information, such as: keyword illustration, part of speech and pronunciation, semantic maps, number of times the word heard, stylistic note, derivative information, collocations, example sentence, etc. The illustration of the word cards can be shown below.

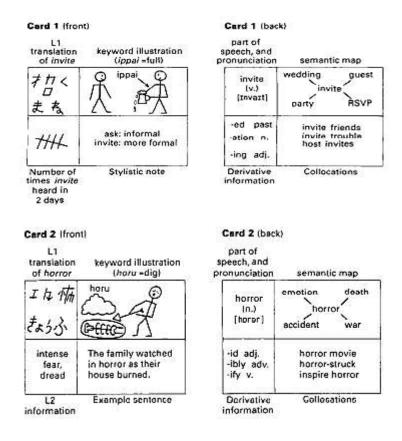


Figure 2.1 Word Cards

(Schmitt and Scmitt, 1995)

d. Recycling

The students should regularly go back to their notebooks and do something with the words. It is important because the new words need to be recycled regularly to be learnt. They can, for example, they can go back and sketch other keyword illustration, list more affixes, draw more semantic map, add more collocation, and etc.

e. Learner Independence

The teacher should consider not to spoon feed so much information to students. They have to use their own effort to discover and develop the meaning of the word by finding information from many resources, such as: dictionary, textbook, internet, and etc. Moreover, they can also work in a group to find and develop the information.

f. Expanding Rehearsal

The principle is the words which are towards the front of the notebook should be given the most attention. When the students satisfy in knowing the word, they can take it out of the expanding rehearsal rotation and be moved to 'a learned section' at the back of the book or store it in alphabetical order in case it is needed again in the future.

g. Personal Word Store

After initial training period, the vocabulary notebook should become the students' personal word store. Teacher should encourage them to find their own words from readings or other activities.

h. Reviewing Notebooks

It is important for the teacher to review the students' notebook in order to check their accuracy and to know their progress and problems.

i. Selecting words

The teacher may choose words from lists, class text, or activities. The number of the words will depend on the goals of the class (20 words/ a week for enriching the word knowledge and a bit larger for increasing vocabulary).

This study tried to modify the instructional model which provides a framework for teaching instructional strategies and self-regulation strategies to be applied in vocabulary learning. The six stages of SRSD's were integrated with keeping vocabulary notebook strategy.

2.7. Procedure of Teaching SRSD in Vocabulary Learning

The procedure of teaching SRSD in vocabulary learning includes theory of SRSD stages by Graham and Harris (2005b) and Graham Harris (1996) cited in Santangelo et al (2008), theory of self-regulation by Dornyei (2001), and theory of vocabulary notebook by Schmitt & Schmitt (1995) can be seen below.

Stage 1 Develop background knowledge

- 1. The teacher identifies students' dictionary skill which is needed for a vocabulary notebook by asking them to perform a task and by assessing what they can and cannot do.
 - a. The teacher asks the students to mention five words related to Ki Hajar
 Dewantara and write them on the board
 - b. The teacher asks them to put the five words on a table in an alphabetically order and complete it by using dictionary.

- 2. The teacher assesses whether the students possess the skill
- 3. The teacher helps them develop the skill by giving them an explanation and a practice on how to use the dictionary and those four kinds of the part of speech.

Stage 2 Discuss it

- 1. The teacher explains the vocabulary notebook strategy
 - a. The teacher explains what the vocabulary notebook strategy is
 - b. The teacher explains why it is important
 - c. The teacher explains how it works by:
 - presenting the examples of the notebook
 - explaining each section of the page (L1 translation, keyword illustration, part of speech and pronunciation, semantic maps, number of times the word heard, stylistic note, derivative information, collocations, example sentence)
 - explaining that they can take a note in the notebook by using dictionary
 - explaining they can make their own vocabulary notebook by considering their own preference
 - telling that they have to regularly go to their notebooks and do something with the words, for example: adding information, making mark on 'number of times the word heard' section.
 - telling that they have to do some exposures, for example by asking and answering questions or making and completing fill in the blank or

making and completing crossword puzzle or making matching exercise in a group or pair.

- explaining to expand their rehearsal by taken out and moved around the notebook pages. (Pages with the better-known words can be put further back in the binder and the lesser one can be put towards the front.
- 2. The teacher explains the self-regulation strategies
 - a. The teacher explains what the self-regulation strategy is.
 - b. The teacher explains why it is important.
 - c. The teacher explains how it works by explaining how to increase goal commitment, how to concentrate, how to eliminate boredom, how to control and relax their body and mind, and how to make a positive environment.

Stage 3 Model it

- 1. The teacher showsthem how to perform the steps in the vocabulary notebook and explains why it is important.
 - a. The teacher reads the text and chooses some words to be taken into vocabulary note.
 - b. The teacher writes 11 translation or 12 synonym as the most important section.
 - c. The teacher makes other sections (keyword illustration, part of speech and pronunciation, semantic maps, number of times the word heard, stylistic

note, derivative information, collocations, example sentence) to enrich the knowledge.

- d. The teacher completes each section by using dictionarybecause dictionary provides complete information about the words.
- e. The teacher models to add information because the words need to be recycled regularly to be learnt or the words will be forgotten.
- f. The teacher does some exposures by showing how to ask and answer questions or make and complete fill in the blank or make and complete crossword puzzle or make matching exercise to make deeper mental processing for the students in order to remember it better.
- g. The teacher expands rehearsal by taking out and moving around the notebook pages (pages with the better-known words can be put further back in the binder and the lesser one can be put towards the front) to make the learning process easier.
- 2. The teacher shows them how to perform self-regulation strategy and explains why it is important.
 - a. The teacher models how to increase the students' original goal commitment by reminding the positive and negative outcomes to reenergize striving for the goal (Commitment control strategy).
 - b. The teacher models how to create a self-reminder to concentrate and imagine the consequences of lack of concentration in order to monitor and control the concentration. The teacher also models to cut short any purposeless procrastination by using 'let's not think about it anymore but get down to doing it' attitude (Metacognitive control strategy).

- c. The teacher shows how to eliminate boredom by using own preference colors, shapes, pictures, in taking notes. (Satiation control strategy).
- d. The teacher shows how to control the physical reactions and relax their body and mind by consciously slowing down their breathing, making it steadily and deeper in stressful situation and doing self-talk, for example 'I can do this if I try, 'Just calm down and think', 'it's important', 'I know I can do this', etc. (Emotion control strategy).
- e. The teacher shows how to have positive environmental by asking friends or family for help (Environmental control strategy).

Stage 4 Memorize it

1. The students learn the steps of the vocabulary notebook strategy and what action is performed during each step until they become fluent in the steps of the strategy so they can use them without having to stop and think about the next step.

Stage 5 Support it

- 1. The teacher colaboratively uses the vocabulary notebook strategy and selfregulation strategies with the students.
- The teacher makes sure they work to attain their goal (to know the meaning of some content words which are used in simple short biography text and able to develop their self-regulation in learning vocabulary).
- 3. The teacher offers constructive feedback guidance and positive reinforcement.

Stage 6 Independent Performances

- The teacher asks the students to practice working on the vocabulary notebook strategy themselves in a group. They also have to use the self-regulation strategies as needed.
 - a. Each group reads the text they are selected and chooses five unknown words from the text.
 - b. Each group writes the sections they prefer to have.
 - c. Each group completes each section by using dictionary.
 - d. Each group does an exposure by asking and answering questions.
 - e. Each group shares the notebooks with the other group. Each group asks five questions related to the words the other group noted. Each group answers the questions. The group with the highest score wins.
- 2. The teacher monitors and supports the student's performance by looking on how the students use the strategy and teaching the strategy again if the students use it incorrectly.

2.8. Students' Perception toward Learning Activities Presented through Modified SRSD in Vocabulary Learning

MET Project (2012) states that determining perception of the teaching and learning in the class is needed as tools for teacher evaluation and feedback. The project asks the perception from students because no one has bigger stake in teaching effectiveness than students. It is in line with Richards (2001) who states that students are in good position to assess the effectiveness of teaching. Further, he claims that although students are often critical, they usually have a good sense of whether a teacher prepares his or her lesson, teaches relevant content, provides lessons that are engaging, relevant, and at an appropriate level of difficulty.

In order to measure students' perception of the learning process, the students' perception questionnaire was used. It consists of some theories; SRSD stages provided by to Graham and Harris (2005b) and Graham and Harris (1996) cited in Santangelo et al (2008), self-regulation provided by Dornyei (2001), and vocabulary notebook provided by Schmitt & Schmitt (1995) presented in the table below.

CDCD (
SRSD stages	1. Developing background knowledge
Graham and Harris (2005b) and	2. Discuss it
Graham and Harris (1996) cited in	3. Model it
Santangelo et al (2008)	4. Memorize it
	5. Support it
	6. Independence performance
Self-Regulation	7. Emotion control
(Dornyei, 2001)	8. Metacognitive control
	9. Environment control
	10. Commitment control
	11. Satiation control
Vocabulary notebook	12. Formats
(Schmitt & Schmitt, 1995)	13. Writing Word Pairs
	14. Enriching Knowledge
	15. Recycling
	16. Learner Independence
	17. Expanding Rehearsal
	18. Personal Word Store
	19. Reviewing Notebooks
	20. Selecting words

Table 2.1. The Content of Students' Perception Questionnaire

In this research, the students' perception questionnaire was used to measure students' perception of the learning in the experimental class. It is needed to know students' perception of the learning activities done in the class.

2.9. Theoretical Assumption

Considering the concepts mention above, it can be predicted that there will be significant difference on the students' self-regulation and vocabulary size in learning vocabulary. It is presumed that by designing students' learning activities by using the modified SRSD, the students will be facilitated to monitor, evaluate and modify their own learning which in turn strengthens self-regulation skills and autonomous learning that can lead into the enhancement of their vocabulary size.

2.10. Hypothesis

Hence, the following hypothesis are put forward:

- $H_A 1$: There is a significant difference of the students' self regulation before And after the treatments of modified SRSD in vocabulary learning.
- H₀1 : There is no significant difference of the students' self regulation beforeAnd after the treatments of modified SRSD in vocabulary learning.
- $H_A 2$: There is a significant difference of students' vocabulary size after the treatments of modified SRSD in vocabulary learning.
- H_02 : There is no significant difference of students' vocabulary size before and after the treatments of modified SRSD in vocabulary learning.

This chapter deals with review of related literatures; vocabulary, vocabulary size, vocabulary learning strategies, self-regulation, Self-regulated Strategy Development (SRSD), teaching SRSD in vocabulary learning, procedure of teaching, students' perception toward learning activities presented through modified SRSD in vocabulary learning, theoretical assumption, and hypothesis.

III. RESEARCH METHODS

This chapter deals with research methods that cover: design, variables, population and samples, instruments, data collecting techniques, research procedure, data analysis and hypothesis testing.

3.1. Design

This research was carried out quantitatively. The research design employed to find out the significant difference of students' self regulation and their vocabulary size by comparing the pretest result with the posttest result. The design can be presented as follows:

T1 X T2

T1 = Pretest X = Treatments by using modified SRSD T2 = Posttest

Hatch & Farhady (1982: 20)

Moreover, in order to find out the third research question about student's perception toward the learning activities, the students' perception questionnaire was handed out after the treatments.

3.2. Variables

The current study presents two variables, namely independent and dependent variable. The independent variable was Self-Regulated Strategy Development (SRSD) and the dependent variables were the students' self regulation and their vocabulary size in vocabulary learning.

3.3. Population and Sample

The population of the research was the second grade students of Senior High School 1 Purbolinggo. There were six classes of the second grade and each class consists of 30-35 students. In this research, the researcher took one class randomly as the experimental class.

3.4. Instruments

There were three kinds of instruments that were used in this research. Those instruments would be explained as follows.

3.4.1. SRCvoc Questionnaire

In this study, the researcher used Self-Regulating Capacity in vocabulary learning scale (SRCvoc) provided by Tseng, et al (2006) to assess students' self regulation. The purpose of questionnaire in the study is to answer the first research question about the students self-regulation before and after the treatment of modified SRSD in vocabulary learning. The questionnaire consists of twenty questions about self-regulation. The researcher used six points of Likert scale from "strongly agree" up to "strongly disagree".

3.4.1.1. Validity of the SRCvoc Questionnaire

The construct validity was obtained by employing Self-Regulating Capacity in vocabulary learning scale (SRCvoc) provided by Tseng, et al (2006). It used Dornyei's (2001) five facets of self-regulatory strategies in the area of English vocabulary learning.

No	Categories	Item Number	Total
1	Commitment Control	4, 7, 10, 13	4
2	Metacognative Control	5, 9, 11, 16	4
3	Satiation Control	1, 8, 18, 19	4
4	Emotion Control	2, 6, 12, 15	4
5	Environmental Control	3, 14, 17, 20	4
Total			20

Table 3.1. Specification Table of the SRCvoc' Questionnaire

3.4.1.2. Reliability of the SRCvoc Questionnaire

It was confirmed by Tseng, et al (2006) that the SRCvoc is highly reliable research instrument since the mean of Cronbach Alpha coefficient was 0.77 and all the individual scale coefficient were above 0.70.

Self- regulation	Cronbach Alpha
Environmental Control	0.85
Metacognative Control	0.79
Satiation Control	0.75
Emotion Control	0.78
Commitment Control	0.66

 Table 3.2. The Subscales Reliability of SRCvoc

Where:

A very low reliability ranges from 0.00 to 0.19 A low reliability ranges from 0.20 to 0.39 An average reliability ranges from 0.40 to 0.59 A high reliability ranges from 0.60 to 0.79 A very high reliability ranges from 0.80 to 0.100

3.4.2. Vocabulary Size Test

Vocabulary size test is used to measure the second research question about the students vocabulary size before and after the treatments of modified SRSD in vocabulary learning. The test was adopted from Nation and Beglar (2007) (Appendix 1). It measures students' receptive vocabulary size in reading. There is a 14,000 version containing 140 multiple-choice items, with 10 items from each 1000 word family level. It typically takes around 40 minutes to sit the test. Nguyen and Nation (2011) show that it is important to sit all levels of the test because for various reasons some words at the lower frequency levels will be known. This may be because they are loan words or cognates, they relate to learners hobbies and interests, because they are technical words in fields the learners are familiar with, or because the learners just happened to meet them.

Moreover, in order to determine the vocabulary size of the participants, the total score needs to be multiplied by 100 to get their total receptive vocabulary size. Thus, a score of 35 out of 140 means that the learner's vocabulary size is 3,500 word families. The formula can be stated as follows:

$$S = \frac{R}{140} X 14000$$

Where:

S: the learner's total receptive vocabulary size

R: the total of the correct answer

3.4.2.1. Validity of the Vocabulary Size Test

Nation and Beglar (2007) explain the validity of the test by measuring what it is supposed to measure and does not measure other things. Beglar (2010) found that the test was very clearly measuring a single factor (presumably written receptive vocabulary knowledge) and other factors played a very minor role in performance on the text. From the ideas above, it is not necessary to be validated.

3.4.2.2. Reliability of the Vocabulary Size Test

Nation and Beglar (2007) state that the test performs consistently and reliably, even though the circumstances change. In Beglar's trialling of the test (2010), these changes included comparing the performance of male subjects with female subjects, comparing 70 item versions of the test with the 140 item version, and comparing learners of various proficiency levels. Rasch reliability measures were around 0.96 (Beglar, 2010).

3.4.3. Students' Perception Questionnaire

The purpose of the questionnaire in the study is to measure the students' perception of the teaching and learning process in the experimental class. It consists of 20 items in total. The response options use 6 likert scale (1=strongly disagree– 6=strongly agree).

3.4.3.1. Validity of the Students' Perception Questionnaire

In order to measure the students' perception of the learning activities in the class, the students' perception questionnaire was used. The construct validity was obtained by employing some theories; SRSD stages provided by Graham and Harris (2005b) and Graham and Harris (1996) cited in Santangelo et al (2008), self-regulation provided by Dornyei (2001), and vocabulary notebook provided by Schmitt & Schmitt (1995) which can be seen in the table below.

SRSD stages	1. Developing background knowledge
Graham and Harris (2005b) and	2. Discuss it
Graham and Harris (1996) cited in	3. Model it
Santangelo et al (2008)	4. Memorize it
	5. Support it
	6. Independence performance
Self-Regulation	7. Emotion control
(Dornyei, 2001)	8. Metacognitive control
	9. Environment control
	10. Commitment control
	11. Satiation control
Vocabulary notebook	12. Formats
(Schmitt & Schmitt, 1995)	13. Writing Word Pairs
	14. Enriching Knowledge
	15. Recycling
	16. Learner Independence
	17. Expanding Rehearsal
	18. Personal Word Store
	19. Reviewing Notebooks
	20. Selecting words

Table 3.3. Specification Table of the Students' Perception Questionnaire

3.4.3.2. Reliability of the Questionnaire

In relation to the reliability of the quantitative data, this study employed internal consistency through Cronbach's alpha to indicate the reliability. The cronbach's alpha for this questionnaire was 0.887 (Appendix 16). It means that the

questionnaire is highly reliable to measure students' students' perception of the learning activities in the class through the modified SRSD.

3.5. Data Collection Techniques

In collecting the data, the researcher used the SRCvoc questionnaire (Appendix 3), the vocabulary size test (Appendix 1), and the Students' Perception questionnaire (Appendix 14) to answer the research questions. The SRCvoc questionnaire was used to answer the first research question about the difference of students' self-regulation before and after the treatments of modified SRSD, the vocabulary size test was used to answer the difference of students' vocabulary size before and after the treatments of modified SRSD, and Students' Perception questionnaire to answer students' perceptions toward learning activities presented through modified SRSD in vocabulary learning.

Here are the description of collecting the data:

 Administering Self-Regulating Capacity in vocabulary learning scale (SRCvoc) and Vocabulary Size Test

The purpose of this step is to find out the students' self regulation and vocabulary size. The questionnaire and the test was completed in the first and the last meeting.

2. Conducting the Treatment

The treatments conducted for three meetings in experimental class. The researcher gave the treatment to increase the students' self regulation. The treatments used the modified Self Regulated Strategy Development (SRSD)

instructional strategies and self-regulating strategies for vocabulary consisted of six steps: develop background knowledge, discuss it, model it, memorize it, support it, and independent performance. The Vocabulary Learning Strategy (VLS) that used in this model was a vocabulary notebook.

3. Delivering Students' Perception Questionnaire

The purpose of this step is to find out the students' perception of the teaching learning process in the class. The questionnaire and the test were completed in last meeting.

3.6. Research Procedure

The procedures in administering the research were as follows:

1. Identifying the Problem

Based on the background of the problem in the first chapter, it was formulated to find out the significant difference of students' self regulation and students' vocabulary size before and after the treatments of modified SRSD and students and also students' perception toward learning activities presented through modified SRSD in vocabulary learning..

2. Determining the Sample and Population

The population of this research was the second grade students of SMAN 1 Purbolinggo. There were six classes of second grade students, which were two social classes and four science classes. One class was choosen randomly as the sample. 3. Determining Research Instruments

The researcher used a questionnaire that is Self-Regulating Capacity in vocabulary learning scale (SRCvoc) provided by Tseng et al., (2006) and a vocabulary size test provided by Nation and Beglar (2007).

4. Administering the Pre-Test

The researcher gave a pre-test for the experimental class. It was administered before conducting the treatments. Self-Regulating Capacity in vocabulary learning scale (SRCvoc) was chosen to assess the students' self regulation and vocabulary size test from Nation and Beglar (2007) was used in assessing the students' vocabulary size.

5. Conducting Treatments

There were three times of treatments that were done by the researcher. Each treatment consisted of ninety minutes.

6. Administering the Post-Test and Handing out Students' Perception Questionnaire

After conducting the treatment, the researcher gave the post-test to discover the final result of this research. It was used to find out the significant difference of students' self regulation and their vocabulary size before and after the treatments of modified SRSD in vocabulary learning. Moreover, Students' Perception Questionnaire was also given to the students' in order to find out their perception of the teaching learning process in the class.

7. Analyzing the Test Result

The researcher analyzed the data from pre-test and post-test result by using Repeated Measured T-test through SPSS program. To figure out the results of the first and the second research question, the researcher gathered the data and analyzed them through Statistical Package for Social Sciences (SPSS) 23.0. the researcher analyzed the data by following these steps:

- 1. The researcher tabulated the result of pretest and posttest into SPSS 23.0 and analyzed them using *Paired Samples T-Test*.
- 2. Based on the results of the analysis, the researcher drew a conclusion whether the difference in the students' self-regulation and vocabulary size before and after the treatments are significant.

3.8. Hypothesis Testing

The hypothesis testing was done to prove whether the hypothesis proposed in this research is accepted or not.

The hypothesis of this research would be:

- H_A1 : There is a significant difference of the students' self regulation before and after the treatments of modified SRSD in vocabulary learning.
- H_01 : There is no significant difference of the students' self regulation before and after the treatments of modified SRSD in vocabulary learning.
- $H_A 2$: There is a significant difference of students' vocabulary size after the treatments of modified SRSD in vocabulary learning.
- H_02 : There is no significant difference of students' vocabulary size before and after the treatments of modified SRSD in vocabulary learning.

The criteria are:

- 1. H_0 is accepted, if the t-value is lower than t-table.
- 2. H_0 is rejected, if the t-value is higher than t-table.

This chapter explained eight components namely: design, variables, population and samples, instruments, data collecting techniques, research procedure, data analysis, and hypothesis testing.

V. CONCLUSIONS AND SUGGESTIONS

This chapter presents the conclusions of this research and the suggestions for English teachers and other researchers who want to conduct any relevant researches.

5.1. Conclusions

Based on the results of the data analyses and discussion, the following conclusions are drawn:

- 1. The adapted SRSD could increase students' self-regulation significantly in vocabulary learning because it managed the disturbing emotional states or moods, managed concentration and reduced procrastination, eliminated negative environmental influences, enhanced goal commitment, and added extra attraction to the task routine.
- 2. The adapted SRSD could increase students' vocabulary achievement significantly in vocabulary learning because it empowered students to be self-directed in their vocabulary learning and reflected vocabulary program principles.

3. The students agree that by following the stages of SRSD as an instructional sequence, students were helped to learn the strategy and use it automatically. Moreover, the vocabulary notebook format and activities made them easier to encounter the new words, enrich, and recall them independently according to their own preference.

5.2. Suggestions

Referring to the conclusions above, the researcher would like to propose some suggestions below:

1. Suggestion for English teachers

Since there is a limitation of time in learning vocabulary in class, the English teacher can use the adapted SRSD where the instruction begins as teacherdirected but with a goal of empowering them to be self-directed. The students then will choose which strategy fits them better according to their own preference so that they are able to be more responsible for their studies by controlling their own learning.

2. Suggestion for other researchers

In this research, the researcher conducted adapted SRSD in vocabulary learning at second year students of senior high school to find out students' vocabulary size and self-regulation achievement. The other researchers can adapt SRSD on different skills, on different level of students, with different strategies (by using flash card, English-language media, word test, etc.). Unfortunately, the collection of data in this study did not use triangulation technique. This study only based on the tests (for research question number 1 and 2) and the questionnaire (for research question number 3). Hence, the researcher recommends that further research use triangulation technique to facilitate validation of data through cross verification from two or more sources.

In brief, this chapter presented the conclusions of this research and the suggestions for English teachers and other researchers who would like to conduct any relevant researches.

REFERENCES

- Amirian, S.M.R., and Heshmatifar, Z. 2013. A Survey on Vocabulary Learning Strategies: A Case of Iranian EFL University Students. *Journal of Language Teaching and Research*, 4 (3), pp. 636-641.
- Araya, D., Pe a, R., Rodriguez, N., Spate, S., and Vergara, K. 2013. Learning Strategies and Self-Regulation in Vocabulary Acquisition: A Research Project about EFL Learners Study Experience and Achievement. http://www.repositorio.uchile.cl/handle/2250/112733. (Retrieved on March 2017).
- Baharudin, H., and Ismail, Z. 2015. Learning Strategies of Arabic Language Vocabulary for Pre-University Students' in Malaysia. Asian Social Science, 11 (10), pp. 32-38.
- Bakry, M. S., and Alsamadani, A. H. 2015. Improving the Persuasive Essay Writing of Students of Arabic as a Foreign Language (AFL): Effects of Self-Regulated Strategy Development. *Procedia - Social and Behavioral Sciences*, 182 (1), pp. 89–97.
- Baumeister, R. F., and Vohs, K. D. 2008. Self-Regulation, Ego Depletion, and Motivation. *Social and Personality Psychology Compass*, 1 (1), pp. 1-14.
- Beglar, D. 2010. A Rasch-Based Validation of the Vocabulary Size Test. Language Testing, 27 (1), pp. 101-118.
- Bozpolat, E. 2016. Investigation of the Self-Regulated Learning Strategies of Students from the Faculty of Education Using Ordinal Logistic Regression Analysis. *Educational Sciences: Theory & Practice*, 16 (1), pp. 301-318.
- Collier-Macmillan International. 1965. *The Key to English*. London: Collier-Macmillan Limited.
- Crossley, S. A., Salsbury, T., McCarthy, P., and McNamara, D.S. 2008. Using Latent Semantic Analysis to Explore Second Language Lexical Development. *American Association for Artificial Intelligence*, 1(1), pp. 1-6.
- Dornyei, Z. 2001. *Motivational Strategies in the Language Classroom*. Cambridge: Cambridge University Press.

- Fahim, M., and Rajabi, S. 2015. Applying Self-Regulated Strategy Development Model of Instruction to Teach Writing Skill: Effects on Writing Performance and Writing Motivation of EFL Learners. *International Journal of Research Studies in Education*, 4 (2), pp. 29-42.
- Fatemipour, H., and Najafgholikhan, M. 2015. The Impact of Self-Regulated Strategy Development on Vocabulary Learning among English Language Learners. *Mediterranean Journal of Social Sciences*, 6 (5), pp. 249-258.
- Fowle, C. 2002. Vocabulary Notebooks: Implementation and Outcomes. *English Language Teaching Journal*, 56 (4), pp. 380-388.
- Gairns, R., and Redman, S. 1986. Working with Words: A Guide to Teaching and Learning Vocabulary. Cambridge: Cambridge University Press.
- Hatch, E., and Brown, C. 1995. *Vocabulary, Semantics, and Language Education*. Cambridge: Cambridge University Press.
- Hatch, E., and Farhady. H. 1982. *Research Designed and Statistics for Applied Linguistics*. Cambridge: Newbury House Publisher.
- Hirsh, D., and Nation, P. 1992. What Vocabulary Size is Needed to Read Unsimplified Texts for Pleasure? *Reading in a Foreign Language*, 8(2), pp. 89-96.
- Kalajahi, S. A. R., and Pourshahian, B. 2012. Vocabulary Learning Strategies and Vocabulary Size of ELT Students at EMU in Northern Cyprus. *English Language Teaching*, 5 (4), pp. 138-149.
- Lessard-Clouston, M. 2013. *Teaching Vocabulary*. Alexandria: TESOL International Association.
- Lip, P. C. H. 2009. Investigating the Most Frequently Used and Most Useful Vocabulary Language Learning Strategies among Chinese EFL Postsecondary Students in Hong Kong. *Electronic Journal of Foreign Language Teaching*, 6 (1), pp. 77–87.
- MET Project. 2012. Asking Students about Teaching: Students Perception Surveys and Their Implementation. http://k12education.gatesfoundation.org/wpcontent/uploads/2015/12/Asking_Students_Practitioner_Brief.pdf. (Retrieved on February 2017).
- Mizumoto, A. 2013. Enhancing Self-efficacy in Vocabulary Learning: A Self-Regulated Learning Approach. *Vocabulary Learning and Instruction*, 2 (1), pp.15-24.

- Namaghi, S. A. O., and Malekpur, A. 2015. Vocabulary Learning Strategies from the Bottom-Up: A Grounded Theory. *The Reading Matrix: An International Online Journal*, 15 (2), pp. 235-251.
- Nation, P., and Beglar, D. 2007. A Vocabulary Size Test. *The Language Teacher*, 31 (7), pp.9-13.
- Nguyen, L. T. C., and Nation, I.S.P. 2011. A Bilingual Vocabulary Size Test of English for Vietnamese Learners. *RELC Journal*, 42 (1), pp. 86-99.
- Nodoushan, M. A. S. 2012. A Structural Move Analysis of Discussion Subgenre in Applied Linguistics. 6th International Conference on Languages, *E-Learning and Romanian Studies*. http://journals.lub.lu.se/index.php /elears/issue /view/ 507. (Retrieved on July 2016)
- Pan, Q., and Xu, R. 2011. Vocabulary Teaching in English Language Teaching. *Theory and Practice in Language Studies*, 1 (11), pp. 1586-1589.
- Ranalli, J. 2012. Alternative Models of Self-Regulation and Implications for L2 Strategy Research. *Studies in Self-Access Learning Journal*, 3 (4), pp. 357-376.
- Richards, J. C. 2001. *Curriculum Development in Language Teaching*. Cambridge: Cambridge University Press.
- Saengpakdeejit, R. 2014. Awareness of Vocabulary Learning Strategies among EFL Students in Khon Kaen University. *Theory and Practice in Language Studies*, 4 (6), pp. 1101-1108.
- Santangelo, T., Harris, R. K., Graham, S. 2008. Using Self-Regulated Strategy Development to Support Students who have "Trubol Giting Thangs into Werds". *Remedial and Special Education*, 29 (2), pp. 78-89.
- Schmitt, N., and Schmitt, D. 1995. Vocabulary Notebooks: Theoretical Underpinnings and Practical Suggestions. *English Language Teaching Journal*, 49 (2), pp. 133-143.
- Senturk, B. 2016. Self-Regulation Strategies and Vocabulary Size of EFL Turkish University Students. *Procedia - Social and Behavioral Sciences*, 232 (1), pp. 90–97.
- The IRIS Center. 2008. SRSD: Using Learning Strategies to Enhance Students' Learning. http://iris.peabody.vanderbilt.edu/module/srs/. (Retrieved on July 2016).

- Tseng, W. T., Dornyei, Z., and Schmitt, N. 2006. A New Approach to Assessing Strategic Learning: The Case of Self-Regulation in Vocabulary Acquisition. *Applied Linguistics*, 27 (1), pp. 78-102.
- Walters, J., and Bozkurt, N. 2009. The Effect of Keeping Vocabulary Notebooks on Vocabulary Acquisition. *Language Teaching Research*. 13 (4). pp. 403-423.
- Zarei, A.A., and Hatami, G. 2012. On the Relationship between Self-Regulated Learning Components and L2 Vocabulary Knowledge and Reading Comprehension. Academy Publisher, 2 (9), pp. 1939-1944.
- Zhang, L. and Seepho, S. 2013. Metacognitive Strategy Use and Academic Reading Achievement: Insights from a Chinese Context. *Electronic Journal* of Foreign Language Teaching, 10 (1), pp. 54–69.
- Zimmerman, B. J., and Bandura, A. 1994. Impact of Self-Regulatory Influences on Writing Course Attainment: The Role of Self-Efficacy Beliefs and Personal Goal Setting. *American Educational Research Journal*, 31 (1), pp. 845-862.
- Zimmerman, B. J. 1998. Academic Studding and the Development of Personal Skill: a Self-Regulatory Perspective. *Educational Psychologist*, 33 (2/3), pp. 73-86.
- Zumbrunn, S. H., Tadlock, J.,and Roberts, E. D. 2011. Encouraging Self-Regulated Learning in the Classroom: a Review of the Literature. *Metropolitan Educational Research Center*, 10 (1), pp. 1-28.