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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Abstract. 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. This research was carried out quantitatively and involved thirty-four second year students at SMAN 1 Purbolinggo. The data were collected through SRCvoc, Vocabulary Size Test, and students’ perception questionnaire which have been validated. The data were analyzed using Paired Samples T-Test. The researcher found that there were significant differences of students’ self-regulation and vocabulary size before and after the treatments of modified SRSD in vocabulary learning. Besides, the students agree that by following the stages of SRSD as an instructional order, they were helped to learn the strategy and use it automatically.

Keywords: SRSD, self-regulation, vocabulary size.
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Abstrak. Penelitian ini bertujuan untuk mengetahui 1) perbedaan self-regulation siswa sebelum dan sesudah pembelajaran menggunakan SRSD yang telah dimodifikasi dalam pembelajaran kosakata, 2) perbedaan vocabulary size siswa sebelum dan sesudah pembelajaran menggunakan SRSD yang telah dimodifikasi dalam pembelajaran kosakata, dan 3) persepsi siswa tentang aktivitas pembelajaran menggunakan SRSD yang telah dimodifikasi dalam pembelajaran kosakata. Penelitian ini dilakukan secara kuantitatif dan melibatkan tiga puluh empat murid tahun kedua di SMAN 1 Purbolinggo. Data dikumpulkan melalui SRCvoc, Vocabulary Size Test, dan kuesioner persepsi siswa. Data dianalisis menggunakan Paired Samples T-Test. Peneliti menemukan perbedaan yang signifikan pada self-regulation dan vocabulary size siswa sebelum dan sesudah pembelajaran menggunakan SRSD yang telah dimodifikasi. Selain itu, siswa setuju bahwa dengan mengikuti tahapan SRSD sebagai urutan yang instruksional, siswa terbantu untuk belajar strategi dan menggunakankannya secara otomatis.

Kata kunci: SRSD, self-regulation, vocabulary size
INTRODUCTION

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 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 made an attempt to carry out the modified Self-Regulated Strategy Development (SRSD) to enhance students’ self-regulation and their vocabulary size in vocabulary learning. 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.

**METHODS**

This research was carried out quantitatively. Thirty-four second year students at SMAN 1 Purbolinggo participated in this research. There are three kinds of instruments employed by the researcher, they are Self-Regulating Capacity in vocabulary learning scale (SRCvoc), Vocabulary Size Test (VST), and students’ perception questionnaire.
The first instrument, SRCvoc, was provided by Tseng, et al (2006). It was used to assess students’ self-regulation before and after the treatments. It has twenty questions and it consists of six points of Likert scale from “strongly agree” up to “strongly disagree”. It used Dornyei’s (2001) five facets of self-regulatory strategies in the area of English vocabulary learning (commitment control, metacognitive control, satiation control, emotion control, and environmental control). 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.

The second instrument, VST, was provided by Nation and Beglar (2007). 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. 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. 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. Moreover, the study stated that the Rasch reliability measures were around 0.96.

The third instrument, students’ perception questionnaire, was used 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). 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). 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. It means that the questionnaire is highly reliable to measure students’ students’ perception of the learning activities in the class through the modified SRSD.

To answer the first and the second research questions, the researcher tabulated the result of pretest and posttest into SPSS 23.0 and analyzed them using Paired Samples T-Test. 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. To answer the third research question, the researcher tabulated the result and analyzed them by using descriptive statistics of SPSS.
RESULTS

A. Students’ Self-Regulation Achievement

After administering the pretest and posttest, both results were compared to figure out the difference of students’ self-regulation before and after the treatments of modified SRSD in vocabulary learning.

Table 1. Students’ Mean Score of the Pretest and Posttest (Paired Samples Statistics)

<table>
<thead>
<tr>
<th>Pair</th>
<th>Pretest ALL</th>
<th>Posttest ALL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>2.7691</td>
<td>5.1221</td>
</tr>
<tr>
<td>N</td>
<td>34</td>
<td>34</td>
</tr>
<tr>
<td>Std. Deviation</td>
<td>.34400</td>
<td>.21784</td>
</tr>
<tr>
<td>Std. Error Mean</td>
<td>.05900</td>
<td>.03736</td>
</tr>
</tbody>
</table>

It could be seen that the mean score increased from 2.7691 in the pretest to 5.1221 in the posttest with the mean gain score 2.353. In other words, there was a difference in the students’ self-regulation before and after the treatment. However, it is essential to find out whether the difference is significant or not. Therefore, the researcher did hypothesis testing through Paired Samples T-Test and the results were as follows.

Table 2. The Difference of Students’ Self-Regulation (Paired Samples Test)

<table>
<thead>
<tr>
<th>Pair</th>
<th>Paired Differences</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Std. Error Mean</th>
<th>95% Confidence Interval of the Difference</th>
<th>Sig. (2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>POSTTEST ALL – PRETEST ALL</td>
<td>2.3529 4</td>
<td>.32097</td>
<td>.05505</td>
<td>2.46493</td>
<td>2.24095</td>
<td>42.745</td>
</tr>
</tbody>
</table>

The results showed that the two-tailed significance was .000, the t-value was 42.745 and the t-table was 2.042 (Appendix 19). 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). It means that H₀₁ was rejected and H₁ was accepted. In other words, there is a significant difference of students’ self-regulation before after the treatments by using modified SRSD.

Specifically, SRSD increased the students’ self-regulation in all of its aspect, 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).
B. Students’ Vocabulary Size

After administering the pretest and posttest, both results were compared to figure out the difference of students’ vocabulary size achievement before and after the treatments of modified SRSD in vocabulary learning.

Table 3. Students’ Mean Score of the Pretest and Posttest (Paired Samples Statistics)

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>N</th>
<th>Std. Deviation</th>
<th>Std. Error Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pair 1 Pretest</td>
<td>7441.18</td>
<td>34</td>
<td>1326.448</td>
<td>227.484</td>
</tr>
<tr>
<td>Posttest</td>
<td>9182.35</td>
<td>34</td>
<td>2021.471</td>
<td>346.679</td>
</tr>
</tbody>
</table>

From the table above, it can be seen that the difference of the mean score of pretest and posttest was 1741.17 word families. In other words, there was a difference in the students’ vocabulary size before and after the treatment. However, it is essential to find out whether the difference is significant or not. Therefore, the researcher did hypothesis testing through *Paired Samples T-Test* and the results were as follows.

Table 4. The Difference of Students’ Vocabulary Size Achievement (Paired Samples Test)

<table>
<thead>
<tr>
<th></th>
<th>Paired Differences</th>
<th>Std. Error Mean</th>
<th>95% Confidence Interval of the Difference</th>
<th>Sig. (2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>Std. Deviation</td>
<td></td>
<td>Lower</td>
<td>df</td>
</tr>
<tr>
<td>Pair 1 Post test – Pre test</td>
<td>1741.176</td>
<td>1988.469</td>
<td>341.020</td>
<td>2434.986</td>
</tr>
</tbody>
</table>

The results showed that the two-tailed significance was .000, the t-value was 42.745 and the t-table was 2.042 (Appendix 19). 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). It means that $H_0$ was rejected and $H_A$ was accepted. In other words, there is a significant difference of students’ vocabulary size before and after the treatments by using modified SRSD.

C. The Students’ Perception toward Learning Activities Presented through Modified SRSD in Vocabulary Learning

After handing out the SRCvoc, the researcher tabulated the result and analyzed them by using descriptive statistics of SPSS.
Related to the table below, it implied that students’ mean score of questionnaire was (5.3015). It means that the students agreed that the modified SRSD was good for vocabulary learning. It can be said that students have positive perception toward the implementation of the modified SRSD in vocabulary learning.

Specifically, there were three parts of modified SRSD in vocabulary learning measured in the questionnaire, i.e. SRSD stages (item number 1-6), Self-regulation (item number 7-11), and vocabulary notebook (item number 12-20). Tables below provided the mean score of each aspect.

### Table 5. The Means Score of Students’ Perception Questionnaire

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>MEANS</td>
<td>34</td>
<td>4.15</td>
<td>6.00</td>
<td>5.3015</td>
<td>.36566</td>
</tr>
<tr>
<td>Valid N (listwise)</td>
<td>34</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Table 6. Means of SRSD Stages

<table>
<thead>
<tr>
<th>No</th>
<th>Items</th>
<th>Means</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Developing background knowledge</td>
<td>5.68</td>
</tr>
<tr>
<td>2</td>
<td>Discuss it</td>
<td>5.26</td>
</tr>
<tr>
<td>3</td>
<td>Model it</td>
<td>5.29</td>
</tr>
<tr>
<td>4</td>
<td>Memorize it</td>
<td>5.44</td>
</tr>
<tr>
<td>5</td>
<td>Support it</td>
<td>5.53</td>
</tr>
<tr>
<td>6</td>
<td>Independence performance</td>
<td>5.09</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>32.29</td>
</tr>
<tr>
<td>Average</td>
<td></td>
<td>5.38</td>
</tr>
</tbody>
</table>

Table 6 above indicates that the average of students’ mean score was 5.38. Ranging from the highest to the lowest: Developing background knowledge, Support it, Memorize it, Model it, Discuss it, and Independence performance. The average of means score (5.38) showed that the students agreed with the idea that those SRSD stages were good for their vocabulary learning, especially the developing background knowledge stage.

### Table 7. Means of Self-Regulation

<table>
<thead>
<tr>
<th>No</th>
<th>Items</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>7</td>
<td>Emotion control</td>
<td>5.26</td>
</tr>
<tr>
<td>8</td>
<td>Metacognitive control</td>
<td>5.35</td>
</tr>
<tr>
<td>9</td>
<td>Environment control</td>
<td>5.15</td>
</tr>
<tr>
<td>10</td>
<td>Commitment control</td>
<td>4.97</td>
</tr>
<tr>
<td>11</td>
<td>Satiation control</td>
<td>5.53</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>26.26</td>
</tr>
<tr>
<td>Average</td>
<td></td>
<td>5.25</td>
</tr>
</tbody>
</table>

Table 7 above indicates that the average of students’ mean score was 5.25. Ranging from the highest to the lowest: satiation control, metacognitive control, emotion control, environment control, and commitment control. It means the students agreed with the idea that those self-regulation types were good for their vocabulary learning, especially the satiation control.
Table 8 above indicates that the average of students’ mean score was 5.27. Ranging from the highest to the lowest: writing word pairs, recycling, enriching knowledge, selecting words, reviewing notebooks, formats, expanding rehearsal, learner independence, and personal word store. the students agreed that the vocabulary notebook principles were good for their vocabulary learning, especially the writing word pairs.

DISCUSSION

A. Students’ Self-Regulation Achievement

The result of this study showed that the students’ self-regulation achievement was different after being taught by using modified SRSD in class XI MIA 1 of SMAN 1 Purbolinggo. Based on the result above, it could be said that modified SRSD was likely successful to increase students’ self-regulation in vocabulary learning. It was in line with Fatemipour and Najafgholikhan’s (2015) theory which said that SRSD was an approach with a self-regulation strategy instruction as an extra component that could motivate the learners to monitor, evaluate and modify their language production which in turn strengthened self-regulation skills and autonomous learning.

Specifically, SRSD increased the students’ self-regulation in all of its aspect, 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).

In this study, the emotion control became the most increased aspects. According to Tseng et.al (2006) emotion control is managing the disruptive emotional states or moods that will be undermined the determination. The reason behind it became the most increased aspect might be because according to Zimmerman (1998), self-regulation processes are kinds of self-directed feelings, thought, and behaviour for achieving academic goals. Here, the students tried to direct their own feeling by having positive-talk, using relaxation and meditation technique,
and sharing feelings with someone else that undermined their determination in learning vocabulary.

The metacognitive control also got a high point following the emotion control aspect. According to Tseng et al. (2006), the metacognitive control is managing concentration and reduce procrastination. According to Baumeister and Vohs (2008), self-regulation refers to a person’s ability to change her/his behavior. In this study, the students tried to change their behaviors by giving self-reminder to concentrate, imagining the lack of concentration, and cutting short any procrastination in learning vocabulary.

The environment control was on the middle of the rank. It eliminated negative environmental influences with exploiting positive environmental influences by eliminating negative things, such as noise and temptations to do other things than learning vocabulary, and creating social pressure to support learning vocabulary, such as inviting friend to a meeting with the purpose of getting the work started.

The commitment control took the forth rank. It heled the students enhance their goal commitment by imagining the successful outcomes of learning vocabulary and negative consequences of abandoning the action.

In this study, the satiation control became the lowest increased aspect, but the increased was significant. It added extra attraction if the routine task becomes boring by performing the action with an artistic sense (taking note by using own preference colors, shapes, pictures, etc).

Based on the explanation above, it could be concluded that the modified SRSD is increased students’ self-regulation significantly in vocabulary learning because it managed the disruptive emotional states or moods that undermined the determination, managed concentration and reduce procrastination, eliminated negative environmental influences, enhanced goal commitment, and added extra attraction to the task routine.

B. Students’ Vocabulary Size

The result of this study showed that the students’ vocabulary size achievement was different after being taught through modified SRSD. As stated by Sokmen (1997) cited in Kalajahi and Pourshahian (2012) that students’ problem in learning vocabulary in classroom is it is impossible for students to learn all the vocabulary they need in the classroom. Thus, vocabulary expanding process requires the higher level of autonomy and more responsibility from learners themselves.

The reason why the modified SRSD was used in this study was because it provided a framework for teaching instructional strategies and self-regulation strategies. The instruction was begun as teacher-directed but with a goal of empowering students to be self-directed. Bozpolat (2016) reported that individuals with high levels of self-regulation skills also have a high level of success. It is in line with Mizumoto’s study (2013) which revealed that the effects of integrating a self-regulated learning approach on self-efficacy in vocabulary learning. The findings from the current longitudinal study suggest that through a self-regulated
learning approach, it would be possible, for teachers and students, to enhance self-efficacy, which in turn may contribute to the development of students’ vocabulary knowledge. The Mizomoto’s study also supported by Senturk’s (2016) which investigated the relationship between Turkish EFL learners' self-regulated learning components and vocabulary knowledge. He inferred that the higher the vocabulary size of the students, the more self-regulated vocabulary learning components the students have. It could be seen that developing students’ vocabulary achievement could be done by empowering students to be self-directed in their vocabulary learning.

Moreover, unlike the original model which provided writing strategy in the model, the modified SRSD provided a vocabulary learning strategies, that was, vocabulary notebook. It helped the students develop their vocabulary achievement. It was in line with Schmitt and Schmitt (1995) who states that it enhances vocabulary study. Moreover, Fowle (2002) state that it provides opportunities for developing self-management strategies.

Schmitt and Schmitt (1995) state eleven principles need to be considered when designing any vocabulary program. Those principles are used in setting up the vocabulary notebook. They are: 1) the best way to remember new words is to incorporate them into language that is already known. 2) organized material is easier to learn, 3) words which are very similar should not be taught at the same time, 4) word pairs can be used to learn a great number of words in a short time, 5) knowing a word entails more than just knowing its meaning, 6) the deeper the mental processing used when learning a word-the more likely that a student will remember it, 6) the deeper the mental processing used when learning a word, the more likely that a student will remember it, 7) the act of recalling a word makes it more likely that a learner will be able to recall it again later, 8) learners must pay close attention in order to learn most effectively although implicit learning can occur when learners are not paying specific attention to language, 9) words need to be recycled to be learnt, 10) an efficient recycling method is the expanding rehearsal, and 11) learners are individuals and have different learning styles.

The first principle, “the best way to remember new words is to incorporate them into language that is already known” was applied in the activity by using semantic map to visualize the relationship between the new words and those already known.

The second principle, “organized material is easier to learn” was employed to set up the format of the vocabulary notebook. The notebook was arranged in a loose-leaf binder so that the pages can be taken out and moved around. Pages with better-known words can be put further back and lesser one can put towards the front. The arrangement also can be based on topics, part of speech, themes, etc.

The third principle, “words which are very similar should not be taught at the same time” was used as an advice in grouping the words. It is
because it is better for them to avoid placing words which are very similar until they are known well enough not to be cross-associated.

The fourth principles, “word pairs can be used to learn a great number of words in a short time” was implemented in asking them to discover L1 translation and L2 synonym for L2 target word as the intial learning of a word’s meaning. The fifth principles, “knowing a word entails more than just knowing its meaning” was employed as additional kinds of word knowledge in the notebook includes word’s form (spelling and pronunciation), grammatical characteristics, root form and derivatives, frequency, stylistic qualities, etc.

The sixth principle is “the deeper the mental processing used when learning a word, the more likely that a student will remember was used in the activity.” Here, the semantic maps were applied to make a deeper and richer semantic processing of a new word. So did the stylistic word, collocation, and keyword illustration.

The seventh principle, “the act of recalling a word makes it more likely that a learner will be able to recall it again later”, was employed in recalling system of the activity. In the beginning, the students were asked to do an activity of word pairs in an L1-L2 order then discovered and practiced the meaning of new word as an receptive activity. After that, they used the word in written sentence, an example sentence, as a productive activity.

The eight principle is “learners must pay close attention in order to learn most effectively although implicit learning can occur when learners are not paying specific attention to language”. Here, word recognition and speech production system were largely learnt through exposure, but semantic meaning needs attention and elaborative practice to be remembered.

The ninth principle is “words need to be recycled to be learnt”. Here, the students regularly went through their notebooks and did something with the words, such as added possible affixes, added to draw semantic maps, added collocation, etc. It is also related to the tenth principle, “an efficient recycling method is the expanding rehearsal”. The students reviewed the words which were still in the receptive translation level and begin to enrich it into productive level.

The eleventh principle, “learners are individuals and have different learning styles” was applied as the students chose their own text related to the theme, difficult word, forms of enrichment, resource material, and they made their own vocabulary notebook by considering their own preference.

From the description above, it could be implied that the eleven principles which were taken into account when designing a vocabulary program were considered in the vocabulary notebook activity. Those principles made the vocabulary notebook activity valuable for the students to enhance their vocabulary. Based on the explanation above, it could be concluded that the modified SRSD significantly increased students’ vocabulary achievement in
vocabulary learning because it empowered the students to be self-directed in their vocabulary learning and reflected vocabulary program principles.

C. The Students’ Perception toward Learning Activities Presented through Modified SRSD in Vocabulary Learning

The result of this study showed that the students’ mean score of questionnaire was 5.3015. It means the students agreed that the modified SRSD was good for vocabulary learning.

Specifically, the students’ perception questionnaire used in this study consists of 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).

The first part of the questionnaire asks the students about their perception toward the SRSD stages. The stages are presented in item number 1-6. The result showed that they agreed that the SRSD stages were helpful for their vocabulary learning because; 1) Developing dictionary skill in the beginning of the treatment helped them apply vocabulary notebook strategy later (developing background stage), 2) Paying attention to the introduction of the vocabulary notebook and self-regulation strategy helped them know the new strategies easily (discuss it stage), 3) Paying attention to the teacher who showed how to do vocabulary notebook and self-regulation strategies helped them understand the strategies better (model it), 4) Learning how to do those strategies made them memorize how to do it (memorize it stage), 5) Collaboratively working with teacher and friends made them understand well how to do it by themselves (support it stage), 6) Working on the vocabulary notebook in a group and in individual were helpful for their vocabulary learning (independent performance stage).

From the explanation above, it could be seen that the students agreed the stages in an modified SRSD were good for vocabulary learning. It is in line with Fatemipour and Najafgholikhan’s finding (2015) which revealed that self-regulated strategy development gave a significantly positive impact on the vocabulary learning of Iranian intermediate EFL learners. Moreover, a similar study conducted by Araya et al. (2013) concluded that providing self-regulatory training to students and making them aware of it can be considered as the foundation for general learning, specifically, in terms of vocabulary knowledge. The stages of SRSD; developing background knowledge, discuss it, model it, memorize it, support it, and independent performance stage are useful for students’ vocabulary learning. By following those stages as an instructional sequence, teachers can help their students learn the strategy and use it automatically.

The second part of the questionnaire asks the students about their perception of the self-regulation. It consists of five items from item number 7 -11. The result showed that they agreed that the self-regulation strategy used in the activity was
helpful for their vocabulary learning because; 1) Doing positive talk helped them control their mood (Emotion control), 2) Giving self-reminder to concentrate helped them control their concentration (Metacognitive control), 3) Inviting friend to work together helped them to have positive environmental influences (Environment control), 4) Imagining positive outcomes and negative consequences helped them enhance their goal commitment (Commitment control), 5) Taking note by using own preference colors, shapes, pictures, etc made learning interesting (Satiation control).

From the illustration above, it could be seen that the students agreed that the self-regulation in an modified SRSD was good for vocabulary learning. It supported Mizumoto’s (2013) study about the effects of integrating a self-regulated learning approach on self-efficacy with vocabulary learning. The findings revealed that through a self-regulated learning approach, it would be possible, for teachers and learners alike, to enhance self-efficacy, which in turn may contribute to the development of vocabulary knowledge.

The third part the questionnaire asks the students about their perception of the vocabulary notebook. They are nine items and they are presented in item number 12-20. The result showed that they agreed that the vocabulary notebook strategy used was helpful for their vocabulary learning because; 1) Arranging notebook in loose-leaf binder made easier for them learn (Formats), 2) Writing word pairs helped them learn many words in short time (Writing Word Pairs), 3) Adding information of a word enriched their knowledge (Enriching Knowledge), 4) Regularly going back and doing something to the word that has been learned helped them recall (recycling), 5) Discovering the meaning of a word from many sources by themself made them more independent” (Learner Independence), 6) Reviewing word and enriching it was helpful to enhance their vocabulary (Expanding Rehearsal), 7) Choosing my own words from my ownsource made them interested (Personal Word Store), 8) Reviewing notebook by the teacher gave them important feedbacks (Reviewing Notebooks), 9) Making a note encouraged them find their own words from reading and other activities (Selecting words).

From the elaboration above, it could be seen that the students agreed the vocabulary notebook in an modified SRSD was good for vocabulary learning. It is in line with Walter and Bozkurt’s (2009) study about students’ attitude towards the use of vocabulary notebook. Their study revealed that the students had positive attitudes about the usefulness of the vocabulary notebook and the students also appeared to enjoy using the notebooks for various activities.

Based on the explanation above, it can be concluded that 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.
CONCLUSIONS AND SUGGESTIONS

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. 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. 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.

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 teacher-directed 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. 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.

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