



# Self-Regulated Learning Strategies in Vocabulary Learning Using Socrative App

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## ABSTRACT

Self-Regulated Learning (SRL) strategies has been implemented in psychological learning context. The research regarding the SRL has dynamically spread to some recent issues in the learning process, including the language learning and technology to obtain students' learning achievement. Therefore, this study highlights the English language learning among secondary school students regarding the vocabulary learning achievement through one of the Mobile Apps called Socrative. This study employed a qualitative research to investigate the issue and involved 21 students as participants who were observed and interviewed. The findings figured out that the students implemented two out of fourteen SRL strategies in the EFL vocabulary learning; (1) Seeking assistance and (2) Organization, but the fact revealed that the students did not make an outstanding result based on their work on Socrative regarding to the vocabulary learning.

## 1. INTRODUCTION

Strategy-based instruction has a significant effect in making the learners responsible during the learning process, both in terms of efforts and results. Plenty of strategies have been implemented on the development of English language learning both written and spoken. Proper strategies may have resulted proper outcome in the learning process as long as the procedure aligned with the goals of achievement in the language learning process. One of the useful strategies in learning a language is the Self-Regulated Learning strategies that shows the students' liberated learning to obtain the achievement in EFL vocabulary learning.

SRL emphasizes the learning process based on the mental ability of the learners and turns it into an academic learning ability. In the process of the learning achievement, a learner who applies self-regulated learning, tends to be more focused on several things such as determining learning goals, choosing the proper strategy for them to learn, monitoring learning progress every day, seeking learning support, and to be consistent in achieving their learning goals (Zimmerman & Schunk, 2008).

Additionally, learners' recognition towards their learning process and ability also applied in the language learning which can not only be done conventionally in the classroom, but the incorporation of technology in it is believed to be able to increase the potential in the learning process, because it has more sophisticated resources and ease the learners in seeking the learning materials (Thorne et al., 2009).

(Benson, 2007) believes that when ICT (Information Communication Technologies) is combined with language learning, then learners' comprehension will be further improved in understanding the target language. Not to mention, young people in this era tend to get used to the technologies that lingers among them on the daily basis, so that the term "digital natives" are often pinned to the young learners (Prensky, 2001). Technology in language learning tends to ease the learners to understand some vocabularies in the target language. The popularity of learning using mobile app and wireless network has been spread sporadically among the young learners, including English learning systems that provide accessible advance options to comprehend more English vocabularies (Chang & Hsu, 2011). One of the learning mobile applications that accessible to the learners is Socrative App. Mobile app for learning seemed to be more practical and convenient to use.

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Considering Self-Regulated Learning and technology as the combo factor in achieving learners' comprehension in vocabulary learning, there are several studies that emphasized SRL in vocabulary learning using ICT. (Sun & Wang, 2020) figured out that Self-Regulated Learning has effectively increased learners' motivation in EFL learning process and achieve their learning goals. (Chen & Hu, 2018) also believed that the use of ICT in vocabulary learning increase learners' ability in EFL learning, because the learning materials tend to be more complex and easier to understand. All in all, SRL strategies and the use of mobile app is expected to support learners in attaining their learning goals and liberate their learning style.

From the that emerged in the previous studies, this study aims to figure out (1) the strategies in Self-Regulated Learning that are frequently used in English vocabulary learning and (2) the effectiveness of Socrative app in students' vocabulary learning result while implementing the SRL strategies in the classroom.

Self-Regulated Learning strategies has been experiencing the dynamicity on its term. One of the common definition is that the SRL has two significant features (metacognitive and cognitive) and motivational beliefs (Pintrich, 1999). Those features generally occur systematically. The metacognitive behavior occurs where learners put their efforts in implementing the proper learning style and needs for them to achieve the learning goals, while the cognitive behavior occurs where learners implement multiples of strategies and decide which one that suits them while looking at their learning progress (Cuevas, 2015).

There are fourteen strategies listed in SRL according to (Zimmerman, 1990) Self-evaluation, Keeping records and monitoring; organizing and transforming, Goal setting and planning; time management, Seeking information, Environmental structuring, Seeking assistance from peers, Seeking instructor assistance, Seeking assistance from other resources, Reviewing exams, Reviewing notes and/or course materials, Reviewing graded work, Better aimed efforts (quality), More generic effort (quantity), and Same as before (no change).

Vocabulary study, however, is geared on facilitating social interaction, allowing for the expression of feelings, and predicting success in school. Vocabularies were developed linguistically to be understood by students, hence it is important to teach English as a foreign language (EFL) to both native and non-native speakers (Dakhi & Fitria, 2019). This research also sought to break up the monotony of the typical English class by having students use the Socrative app on their smartphones to check their understanding of the material that is being covered (Jamalipour & Farahani, 2015).

## 2. METHODS

This study employed qualitative method where the teacher in the classroom directly became a researcher. According to (Hamied, 2017) qualitative research were aimed to dig a depth information regarding the phenomenon that occurred within the conducted research.

This study was conducted in one of the junior high school in Cimahi because the school has been implemented ICT in their teaching-learning activity, involving twenty-one students in one particular classroom of the 9th grader. Students were selected based on their performance on admission exams, their grades in elementary and middle school, and the recommendations of their instructors. Furthermore, based on their academic success, pupils might be moved to a different accomplishment track. There were also three instruments were used to obtain the data of the study which were questionnaires, observation, and interviews. This study also employed field notes during the observation session.

Several instruments were used in the process of collecting the data. Those instruments were observation, questionnaire, interview, and weekly exercise. Twenty-one students were observed at the beginning of a learning session, and then the questionnaires were distributed after a number of concerns had been identified. Lastly, a few students were chosen at the end of the observation to participate in interviews to round up the data collection.

Data analysis was gathered from several instruments which were questionnaires, observation, and interviews. The result of the analysis figured out that each of the learners implemented different SRL strategies in each meeting and gave different results on their weekly exercise. In addition, the descriptive statistics were used to analyze the collected data from the questionnaire that employed Likert's 5 graded scale that has five points, never, seldom, sometimes, often, and always.

The observations were conducted using observation checklist that listed fourteen SRL strategies that may implement by the learners during the learning process in the classroom. Lastly, the interview session was conducted in order to clarify the collected result from the previous instruments by transcribing participants' response on the recording tape, added by the learners' result on their weekly exercise on EFL vocabulary learning.

The method of the research covers the methodology of the research, participants and data sampling (or the materials of the research), the specific information or details of the place where the author conducts a research, data collection, statistical information (if quantitative analysis is used), research instruments, and how the data is being analyzed. The authors should avoid too many formulas, charts, tables, or figures because the page is limited unless they are essential to appear.

### 3. RESULT AND DISCUSSION

What are the strategies in Self-Regulated Learning that frequently used in EFL vocabulary learning? According to the questionnaire and observation, most of the learners used Organization, Self-efficacy, and Seeking-assistance strategies in EFL vocabulary learning. There were several considerations that determined the students' behaviour in implementing three of the strategies.

#### A. Self-Regulated Learning Strategies

The result from each of the observation indicated different result on students' comprehension of the vocabulary. Based on the observations, students' behaviour during the class indicated three strategies that frequently appeared: (1) Seeking assistance and (2) Organization. On the first observation, students were unaware about their learning strategies at the first place, they came without preparation for English class. Some of them forgot to bring their dictionary and mobile phones to use the Socratic App. The Organization strategy were frequently appeared due to the fact that students managed to write the learning material and new vocabularies on their notebooks. At this point, students may prepare themselves for writing by engaging in self-reflection and encouraging a higher rate of self-initiating methods before to writing and a higher rate of self-monitoring strategies throughout writing (Faraj, 2015).

On the second observation, students appeared to be more prepared for the learning activity. They brought dictionary and the rest who were forgetting the dictionary and mobile phones initiatively went to the school library to lend English dictionaries. Most of the students implemented the Seeking-assistance strategy where they directly asked the teacher or their friends in the classroom to seek for an information or answer regarding the learning material instead of looking out the meaning of the vocabularies by themselves. As (Huh & Reigeluth, 2016) examined that there is a correlation between a student's social context and their SRL. Teachers' lessons, as a significant part of the learning environment, may have a major impact on students' desires to acquire new knowledge and expand their understanding.

On the third observation, where students were being asked to do the exercise in comprehending the vocabularies related to the learning chapters, most of the students were frequently implemented different strategies: Organization, Seeking assistance, Self-efficacy, and Internal-task interest. Most of the students were actively engaged with the learning activity such as having a discussion with the peers and teacher, looking out the meaning of a word from the dictionary or directly asked the classmates or teacher, and they were fascinated to know more vocabularies based on their interest or things found on the daily basis. Several investigations have looked into how students' sense of self-efficacy and other dimensions relate to their performance in the classroom. Most research has found a strong correlation between students' ability to self-regulate their academic behaviour, their confidence in their ability to attain their academic goals, and their academic success (Lee et al., 2014).

After conducting the observation, this study was aimed to figure out students' learning strategies not only in school but also from their environment such as family and friends at home. The document analysis in the form of questionnaire were given and consist of fourteen questions aligned with fourteen SRL strategies. The result showed that most of the students (12 out of 21 students) still consistently used Organization strategy to achieve the learning goals. They still managed to write the learning material and new vocabularies they just found on their notebooks. The students (13 out of 21 students) were also willing to ask the teacher and peers to seek for the information that they need which indicated Seeking assistance strategy.

It is obvious that most of the participants were implementing two strategies during the EFL learning process; (Organization & Seeking assistance). By writing the English vocabularies on their notebook, it is

believed that implementing Organization strategy was practically ease them to figure out the meaning of a certain term. The notes were also help the participants in recalling some vocabularies in order to understand the previous material and to answer the questions on the exercise that given by the teacher. Since (Bandura A, 1997) theory of socio cognition governs the area of SRLs and since (Hayes, 2000) idea of writing as a cognitive process, there is a symbiotic link between SRLs and students' writing outcomes.

Some of the participants still refuse to look up a word in the dictionary if they have trouble remembering it. Instead, students were able to ask their teacher and classmates in class about the meanings of the concepts they were having trouble with. A small number of students also admitted to using a personal or library copy of the dictionary to aid in their comprehension. However, in this circumstance, the majority of participants were actively seeking clarification from others around them.

The questionnaire participants were asked to fill out about the SRL techniques they used in the classroom served to further clarify both methods. Thirteen out of the twenty-one respondents said that they routinely used the organizational technique of writing down vocabulary words and the seeking assistance strategy of asking classmates, teachers, and other adults for help with their assignments (e.g. asked family members or colleagues at home).

*Is there any effectiveness in using Socrative app on students' vocabulary learning result while implementing the SRL strategies in the classroom?*

From the result of learners' weekly exercise in the vocabulary learning, most of the learners did not seemed to give such an outstanding result on the Socrative app. It was determined from the final result of three weekly exercises on Socrative app regarding their learning material, the participants showed that the average score were still below the school's minimum criteria of mastery learning.

#### B. Vocabulary Learning using Socrative App

Based on the tests that examined students' comprehension regarding the vocabularies in EFL context using the Socrative App, students were experiencing such difficulties in comprehending some vocabularies.

Since Organization strategy seemed to be frequently used by the students, the researcher managed to clarify the result from the interview session with the selected students who have been involved the whole observation and actively participated during the teaching learning activity. The students admitted that they were easily forget something if they did not write down the learning essentials, the efficiency of writing might took some time but they were needing the notes to recall certain explanations or vocabularies to do the homework, and it was just naturally became their habit since the elementary school.

From the result of the interview, all participants admitted that they get used to write the learning material on their notebook in order to make them easier to recall the previous material in the upcoming meetings. They also stated that by writing and looking for the information from the people around them, it is easier for them to understand the particular learning material. In this case, asking for the meaning of one English vocabulary to a person is as easy as they write it on their notebooks.

After completing all of the instruments, it was clear that most students still rely on tried-and-true memory aids like writing things down to prepare for tests and forthcoming meetings. According to (Baniabdelrahman & Al-Shumaimeri, 2013), EFL students often write vocabularies to help them recall certain phrases; nonetheless, several students said they were still unsure of the meaning of some vocabularies while responding to exam questions. The interviewees' responses corroborated a finding from (Ana, 2018) study that students' use of educated guesses to decipher course materials and complete assignments was high.

The results of the participants' understanding in figuring out particular vocabulary were below average even when technology was incorporated into the learning process. Teachers and students alike need more experience using educational mobile apps before they can produce truly remarkable results in the classroom.

## 4. CONCLUSION

This study investigated the strategies and the effectiveness of Self-regulated Learning in EFL vocabulary learning among secondary school students, through one of the mobile app called Socrative. The conclusion is drawn according to the collected data from the instruments (observation, questionnaire and interview).

Firstly, according to the observations in the classroom, some of the participants were implementing four strategies: Organization, Seeking assistance, Self-efficacy and Internal-task interest. But the consistency from all observations of the strategy implementation only held two strategies that indicated through the participants' behaviour in the classroom. From the observations followed by the questionnaire to clarify the result, Organization and Seeking assistance strategy dominated the participants' learning style in comprehending some English vocabularies. 13 out of 21 students admitted that they tend to write the vocabularies on their notebook and ask the people around to figure out the meaning of a certain term.

Secondly, after the observation and questionnaire were conducted, the use of Socratic app were also determined the participants learning result in EFL vocabulary comprehension. The result showed that even though the technology has involved, participants' leaning result on vocabulary seemed to be out of track and did not give such impressive result on their exercise. The interview session also confirmed that most of the participants were facing some difficulties in figuring out some terms because the lack of practice in using the app and did not have much time to look into their notes or to ask the people around them. Therefore, the interview result figured out that guessing some terms might help them only to finish the exercise.

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This leads to a statement that some learning strategy especially in EFL vocabulary learning and the technology joint, did not always show an impressive result. The successful process of the learning could be from the teachers, students, parents, school stakeholder, and the involvement of the government that could possibly support the teaching learning programme for the sake of education.

## 6. REFERENCES

- Ana, I. K. T. (2018). Teaching English Vocabulary for Young Learners through Electronic Guessing Game. *Journal of Psychology and Instructions*, 2(1), 22. <https://doi.org/10.23887/jpai.v2i1.13738>
- Bandura A. (1997). *Self Efficacy; The Exercis of Contorol* (pp. 5-174). [https://www.academia.edu/28274869/Albert\\_Bandura\\_Self\\_Efficacy\\_The\\_Exercise\\_of\\_Control\\_W\\_H\\_Freeman\\_and\\_Co\\_1997\\_pdf](https://www.academia.edu/28274869/Albert_Bandura_Self_Efficacy_The_Exercise_of_Control_W_H_Freeman_and_Co_1997_pdf)
- Baniabdelrahman, A. A., & Al-Shumaimeri, Y. (2013). Strategies used by Saudi EFL students to determine the meaning of English words. *English Language Teaching*, 7(1), 75-92. <https://doi.org/10.5539/elt.v7n1p75>
- Benson, P. (2007). Autonomy in language teaching and learning. *Language Teaching*, 40(1), 21-40. <https://doi.org/10.1017/S0261444806003958>
- Chang, C. K., & Hsu, C. K. (2011). A mobile-assisted synchronously collaborative translation-annotation system for english as a foreign language (EFL) reading comprehension. *Computer Assisted Language Learning*, 24(2), 155-180. <https://doi.org/10.1080/09588221.2010.536952>
- Chen, J., & Hu, J. (2018). Enhancing L2 Learners' Critical Thinking Skills Through a Connectivism-Based Intelligent Learning System. *International Journal of English Linguistics*, 8(6), 12. <https://doi.org/10.5539/ijel.v8n6p12>
- Cuevas, J. (2015). Is learning styles-based instruction effective? A comprehensive analysis of recent research on learning styles. *Theory and Research in Education*, 13(3), 308-333. <https://doi.org/10.1177/1477878515606621>
- Dakhi, S., & Fitria, T. N. (2019). The Principles and the Teaching of English Vocabulary: A Review. *JET (Journal of English Teaching)*, 5(1), 15. <https://doi.org/10.33541/jet.v5i1.956>
- Faraj, A. K. A. (2015). Scaffolding EFL Students' Writing through the Writing Process Approach. *Journal of Education and Practice*, 6(13), 131-142.
- Hamied, F. A. (2017). *Research methods: A guide for first-time researcher*. UPI Press.

- Hayes, J. R. (2000). A new framework for understanding cognition and affect in writing. In R. Indrisano & J. R. Squire (Eds.), Perspectives on writing: Research, theory, and practice. *International Reading Association*, 6–44.
- Huh, Y., & Reigeluth, C. M. (2016). *Designing instruction for self-regulated learning*. In *Instructional-Design Theories and Models Vol. IV: The learner-centered paradigm of education*. Routledge. [https://www.researchgate.net/publication/308517808\\_Designing\\_Instruction\\_for\\_Self-regulated\\_Learning\\_pre-publication\\_final\\_draft\\_183](https://www.researchgate.net/publication/308517808_Designing_Instruction_for_Self-regulated_Learning_pre-publication_final_draft_183)
- Jamalipour, S., & Farahani, A. A. K. (2015). The Effect Of Schematic Knowledge on Iranian EFL learner's reading comprehension. *International Journal of Applied Linguistics and English Literature*, 4(6), 154–159. <https://doi.org/10.7575/aiac.ijalel.v.4n.6p.154>
- Lee, W., Lee, M., & Bong, M. (2014). Testing interest and self-efficacy as predictors of academic self-regulation and achievement. *Contemporary Educational Psychology*, 86–99. <https://doi.org/10.1016/j.cedpsych.2014.10.002>
- Pintrich, P. R. (1999). The role of motivation in promoting and sustaining self-regulated learning. *International Journal of Educational Research*, 31(6), 459–470. [https://doi.org/10.1016/S0883-0355\(99\)00015-4](https://doi.org/10.1016/S0883-0355(99)00015-4)
- Prensky, M. (2001). Digital Natives, Digital Immigrants Part 1. *On the Horizon*, 9(5), 1–6. <https://doi.org/10.1108/10748120110424816>
- Sun, T., & Wang, C. (2020). College students' writing self-efficacy and writing self-regulated learning strategies in learning English as a foreign language. *System*, 90, 102221. <https://doi.org/10.1016/j.system.2020.102221>
- Thorne, S. L., Black, R. W., & Sykes, J. M. (2009). Second language use, socialization, and learning in internet interest communities and online gaming. *Modern Language Journal*, 93(SUPPL. 1), 802–821. <https://doi.org/10.1111/j.1540-4781.2009.00974.x>
- Zimmerman, B. J. (1990). Self-Regulated Learning and Academic Achievement: An Overview. *Educational Psychologist*, 25(1), 3–17. [https://doi.org/10.1207/s15326985ep2501\\_2](https://doi.org/10.1207/s15326985ep2501_2)
- Zimmerman, B. J., & Schunk, D. H. (2008). *Motivation: An essential dimension of self-regulated learning*. In D. H. Schunk & B. J. Zimmerman (Eds.), *Motivation and self-regulated learning: Theory, research, and applications*. Lawrence Erlbaum Associates Publishers.