

# Investigating Language Learning Strategies in an Online Learning Environment among Adolescent in an English as Second Language Setting

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## Abstract

The effect from Covid-19 has not stopped since 2020 and has caused the government to stop all physical activity including teaching and learning at school. Changing from traditional teaching and learning methods to online classes would naturally change the dynamic of teaching and learning therefore impacting students' learning skills and the amount of knowledge gained. Consequently, this research aims to find out which language learning strategies choose by Form 5 students when learning English during online classes. This research involved cross-sectional survey therefore it is a self-completed online questionnaire involving 302 respondents. This study employs quantitative methods involving descriptive statistics and ANOVA to find the significant difference. The findings showed that common LLS employed by Form 5 students are memory strategies supported by the highest mean value and affective strategy is the lowest mean value. By identifying the Form 5 students' learning strategies for English subjects during online learning, educators can make it as reference to help the students in improving their learning style to achieve better outcomes in the future.

**Keywords:** Covid-19, Online Classes, Learning Strategies, Teaching And Learning, Learning Skills

## Introduction

The year 2020 has recorded major transmission of a newly found deadly virus, novel coronavirus (SARSCov-2) or well-known as COVID-19 which has deemed as pandemic and changed every aspect of life around the world (Ain et al., 2020). In order to break the chain of this virus, the government has disallowed any gathering activities during Movement Control Order (MCO) and fortified physical distancing in Standard Operating Procedure (SOP) which has been announced in March 2020 (Prime Minister's Office, 2020). Since a cluster should not be formed, all educational institutions are required to shift their teaching method from traditional classroom setting to online distance learning. With the sudden news and an immediate switching of teaching methods, both educators and learners must adapt to this situation.

Although after the struck of COVID-19, learning institute still needed to continue their learning process for the sake of student's education, thus Malaysia's government has decided

to overcome the situation with online distance learning. The situation and acceptance of teaching and learning online is different with face-to-face teaching and learning which results to students' limitation in learning online. Falih et al (2016) stated that students found that learning online has lower outcomes than traditional classroom setting because students encountered many problems from internet connection to problems regarding understanding materials of the lessons during online classes. They also agreed that they have better grade performance during learning face to face compared to online distance learning. This will affect students' academic performance poorly especially during examinations particularly SPM students in Malaysia.

This research is driven from a study conducted by Simin (2012), where the researcher had stated the importance of language learning strategies as knowing its usage can influence learners' achievements and performance, it is significant to study how learners used learning strategies. Simin (2012) has investigated learners' learning strategies based on gender. This research attempts;

- (a) to explore the Form Five students' problems in understanding English lessons during online learning.
- (b) to identify Form Five students' learning strategies in comprehending English lessons during online learning.

By identifying students' problems in understanding lessons during online classes as well as students' learning strategies to improve their apprehension of the lessons, both teachers and students will be able to recognize suitable students' learning strategies depending on student's capabilities to enhance their knowledge despite learning online. Students have problems understanding lessons taught by the teacher throughout online classes, so this study helps to explore students' learning strategies to improve their understanding of online lessons during a pandemic.

The findings of this study will help the teachers to recognize problems faced by the students during online learning in accordance with students' learning abilities and assist students to expand and change their learning styles to improve their knowledge during online learning. Other than that, teachers will be able to prepare varieties of materials to increase students' proficiency and grasp of the lessons. Previously, a study conducted by Dorand (2021) suggested any future research related to the usage of language learning strategies (LLS) to focus more on the importance of framework to the quality of online teaching service in language learning. Thus, it can improve awareness related to the use of language learning strategies (LLS).

## **Literature Review**

### **Learners Learning Strategies**

Hashemi (2012) stated that language learning strategies affected learners' learning outcomes, which is required in achieving a second language or foreign language. Nunan (1999) has stated that learners used different strategies to acquire the language whether individually or involving other people. As cited in Ghani (2003), language learning strategies interpret the learners' action for language acquisition, retention, retrieval, and performance (Rigney, 1978) which impacted the flow of the lessons (Oxford, 1990). A few past studies have found that

learners' language proficiency and performances are related with language learning strategies (O'Malley et al., 1985; Politzer & Mc Groarty, 1985). Brown et al (1983) has proven that educators believed that applying learning strategies in education influenced learners' proficiency level.

Implementing language learning strategies in language learning significantly determines learners' achievement as well as self-confidence (Simin, 2012). As cited from Simin (2012), past researchers have found that educators acknowledge the possibility of second or foreign language acquisition is related to learning strategies applied by the learners and learners are able to learn the language if they know how to implement proper strategies in their learning style (Abraham & Vann, 1987; Chamot, 1987; Cohen & Aphek, 1981; Hosenfeld, 1977; Wenden, 1991). There are three different techniques of learning strategies which are cognitive strategies, metacognitive strategies and socio-affective strategies (O'Malley and Chamot, 1990). Comprehending the process of obtaining a new language is the learners' cognitive activities (Bayuong, Hashim and Yunos, 2019). Language learning strategies help learners to learn a new language comfortably as it is different from their mother tongue which is pleasurable towards language users (Dalila and Harwati, 2021).

Based on research carried out by Ai and Kow (2010) involving first year undergraduate students with high and low proficiency in learning English found that their preferred language learning strategies is metacognitive strategies and they also discovered that students with low proficiency also use metacognitive strategies during learning. Another study conducted five years later by Semry and Mahendran (2015) about the relation of language learning strategies with reading where they found that readers also use metacognitive strategies in reading. Then, another study reported that Malaysian young learners mostly used compensation strategies in learning English (Sarina and Hanita, 2021) and a year after Donna and Harwati (2022) found that Malaysian learners preferred to use affective strategy in learning English as second language.

### **Online Lessons**

The outbreak of Coronavirus which impacted the whole world is paving a new adventure for educators to try new teaching methods as teaching and learning sessions are changed to online lessons (Keivanpour, 2021). Waris et al (2020) mentioned that online lessons require internet connection for communication purposes. Zounek & Sudicky (2012) explained that online lessons can include both live teaching and learning sessions and the recorded versions of the lessons. According to Sadia (2021), teaching online takes up more hard work than preparing for teaching in the classroom from planning the lesson until executing it as everyone involved directly or indirectly must be able to adapt to the sudden changes.

As online classes require different effort from face to face, students must behave themselves during lessons (Barnard et al., 2009). According to Moustakes & Robrade (2022); Murgatrod (2020), teachers are facing challenges during online education as they are given little to no training. Online lessons are affected by teachers' attitudes towards operating technology (Kisanga, 2016; Prior et al., 2016b; Wasserman & Migdal, 2019). Seizing students' attention during online classes and adapting content of the lessons to accommodate with online learning should be the results for teachers' positive attitude (Tuparova et al., 2006; Hwang et al, 2013). During online lessons, some students are struggling mentally where they feel disconnected and hard to not be distracted throughout the lessons (Selco & Habbak, 2021). Dhawan (2020) suggested a few solutions to this limitation which include pre-recorded video,

create a fun learning process, create, and use digital platforms to communicate and always create an opportunity for students to ask questions and to give their honest feedback regarding the online session.

### **Learners' Strategies in Learning Online**

Being a student with high rationale as well as having great self-regulation skills are great for thriving online classes (Barbour & Reeves, 2009). As extracted from Chin-Hsi et al (2017), many researchers have found that self-regulation learning is important and found to be positively impacting online learning (Kuo et al., 2015; Barnard et al., 2008; Barnard-Brak et al., 2010; Kuo et al., 2014; Puziferro, 2008). The students' skills in learning and their aims when studying are the factors related to the strategies used when learning online (King et al, 2000). According to Lilian (2011), students with learning-how-to-learn skills can utilize learning availability either in the classroom or outside from the class session efficiently. Hartnett (2016) agreed that students who undergo online learning relied on their ability to control, create, and preserve communications and active participation with digital resources.

Students can control their own learning outcomes using language learning strategies such as setting their own goal, reflect themselves and review from their friend (Mastan & Maarof, 2014; Nguyen & Gu, 2013). The success of learning tends to be controlled by students who can perform well in English courses (Kamisah et al, 2021). Solak and Cakir (2015) agreed that students can achieve success in learning if they use good and proper strategies during online lessons. Fitri et al (2023) agreed that in online language learning, learners need to set their own goals and select good learning material and learning platforms to achieve effective online learning sessions.

### **Methodology**

#### ***Research Design***

The quantitative approach was chosen for this research because this method offers to measure statistically data analysis using means. After identifying the problems for this study, research questions are formed. A series of questions are created based on the research objectives and SILL is adapted and adopted as the questionnaire for the research instrument. The respondents are chosen based on cluster sampling. Form 5 students who will sit for Sijil Pelajaran Malaysia (SPM) in 2021 are chosen as the research participants. The data is collected in an online survey specifically involves Form 5 students using Google Form. The survey link was delivered to 347 respondents. However, only 302 respondents answered the form, and 45 respondents did not answer the form. Four of the forms were invalid which means only 298 forms are valid for this study. The time given for the students to complete the questionnaire is one week. After one week, the Google Form link is closed, and the data will be collected and divided into their own categories.

#### ***Instruments***

There are two parts of the questionnaire, Part A and Part B. Part A is the demographic of the respondents which consists of three parts: gender, level of proficiency and previous examination's grade. Part B is a questionnaire adopted from SILL by (Oxford, 1990). The questionnaire consists of 50 questions from different categories and measured using Likert-scale ranging from 1 until 5, where 1 is Strongly Disagree and 5 is Strongly Agree. There are 6 parts of the questionnaire and the number of questions in these categories are different for

each category. The first part is Part A which is memory strategy and has 9 questions, and Part B is cognitive strategy and has the most questions which is 14 questions. Part C is compensation strategy and has 6 questions, meanwhile Part D is metacognitive strategy and has 9 questions. Then, Part E is affective strategy and has 6 questions, and Part F is about social strategy and has 6 questions.

## Findings

### **Mean and Standard Deviation of Each Strategy**

Using the mean and standard deviation formula, value of mean and standard deviation for memory strategy, cognitive strategy, compensation strategy, metacognitive strategy, affective strategy and social strategy was calculated. The results are as follows:

Table 1

*Result for mean and standard deviation calculated for each strategy*

<b>Strategies</b>	<b>SD</b>	<b>Mean</b>	
Memory Strategy	3.498		
Cognitive Strategy	3.431	3.822	3.735
Compensation Strategy	3.450	3.752	3.751
Metacognitive Strategy	3.450	3.725	3.755
Affective Strategy	3.429		
Social Strategy	3.449		

The result shows that the highest mean value among the six strategies is 3.822 which is calculated for memory strategy. Then followed by social strategy with the mean value of 3.755, compensation strategy with mean value of 3.752, metacognitive strategy with mean value of 3.751, cognitive strategy with mean value of 3.735 and affective strategy with the lowest mean value which is 3.725. The difference between the highest mean value and the lowest mean value is relatively small. Based on Table 1, the highest standard deviation value among six strategies is 3.498 which is calculated for memory strategy. Then followed by metacognitive strategy and compensation strategy with same standard deviation value of 3.450, social strategy with standard deviation value of 3.449, cognitive strategy with standard deviation value of 3.431 and affective strategy with the lowest standard deviation value which is 3.429. There is only a slight difference between the highest value and the lowest value.

### **Significant Difference ANOVA (p-value)**

ANOVA p-value is also calculated for each strategy. Table 2 shows the p-value for each strategy. It was calculated using Microsoft Excel ANOVA formula and the result was as stated below.

Table 2

*P-value results for each strategy*

Strategies	p-value
Memory Strategy	0.017
Cognitive Strategy	0.011
Compensation Strategy	0.013
Metacognitive Strategy	0.012
Affective Strategy	0.014
Social Strategy	0.015

Based on the result in Table 2 above, the highest p-value was from memory strategy group which is 0.017 followed by social strategy with p-value of 0.015, affective strategy with p-value of 0.014, compensation strategy with p-value of 0.013, metacognitive strategy with p-value of 0.012 and cognitive strategy with the lowest p-value of 0.011. We can clearly see that all p-value involved are  $p < 0.05$  which shows there was significant difference between each strategy.

### **ANOVA Test Between Means**

This test was run in Microsoft Excel using ANOVA single factor formula. The results are as shown in Table 4.4 below. According to the table, the value we had for the six strategies means are  $F(5,24) = 1.306$ ,  $p < 0.05$ .

Table 3

*ANOVA test between means*

## SUMMARY

Strategies	Count	Sum	Average	Variance
Memory Strategy	5	2682	536.4	156802.3
Cognitive Strategy	5	4172	834.4	319295.3
Compensation Strategy	5	1788	357.6	62140.3
Metacognitive Strategy	5	2682	536.4	137147.3
Affective Strategy	5	1788	357.6	63908.8
Social Strategy	5	1788	357.6	66708.8

## ANOVA

Source of Variation	SS	df	MS	F	P-value	F crit
Between Groups	876199.5	5	175239.9	1.305679	0.294727	2.620654
Within Groups	3221127	24	134213.6			
Total	4097327	29				

In conclusion, based on the analyzed result there is no significant difference between the six strategies. However, we can conclude that the most preferred strategy used by Form 5 students in learning English online is the memory strategy with the highest mean and

standard deviation value. These findings shows that the respondents from this study mostly use their memory to remember the knowledge they had during online lesson to study and learn English language. Their second most preferred strategy is social strategy meanwhile the least preferred language learning strategy from this study is affective strategy. As the results of this study among all strategies involved are slightly difference to each other with the mean range between 3.725 to 3.833, it shows that the students use all of the learning strategies in order to ensure their success and fully understand their lesson in learning online.

### **Discussion**

The main reason for this study is to find Form 5 student's method of language learning strategies during online class. Language learning strategies involve direct strategies (memory, cognitive and compensation strategy) and indirect strategies (metacognitive, affective and social strategy). The means concluded in this study for all six strategies are 3.822 (memory strategy), 3.735 (cognitive strategy), 3.752 (compensation strategy), 3.751 (metacognitive strategy), 3.725 (affective strategy) and 3.755 (social strategy).

#### *The highest and lowest mean value and standard deviation*

The findings of this study suggested the most preferred language learning strategies among Form 5 students in learning English during online lessons is under direct strategies which is memory strategy. Memory strategy has the highest mean and standard deviation among all of the language learning strategies. This finding is opposite with the findings found by Sarina and Hanita (2021) for the young learners aged 10 where memory strategy was their least preferred strategy. Meanwhile, affective strategy is the least preferred strategy used by Form 5 students in learning English. Memory strategies are the method used in order to help learners to store and restore the information when needed (Oxford, 1990). Teachers and educators need to consider the findings found in this study in order to plan the lesson before starting a class to ease students in learning. For those students who are inclined to memory strategy, teachers need to focus in getting students attention during learning by using visual, pictures and colours and repetition. Meanwhile, teachers can encourage the learners to use affective strategy frequently by giving them some practices involving public speaking for them to manage their anxiety and always give them positive support to encounter their problems.

This finding also shows that there was significant relationship between language learning strategies and learning English in an online learning. This finding does not in line with the study conducted by Kamisah et al (2021) where the researcher agreed that there was no significant relationship between language learning strategies and learning English online.

#### *The highest and lowest frequency among all items*

From the total number of 50 questions from the survey, the question with the highest frequency is question number 43 which is under affective strategy. The item is "I write down my feelings in a language learning diary". From the total number of 298 respondents, 138 respondents with 46.3% frequency percentage agree that they express their emotions in a diary. That action helps them to improve their language skill while expressing their feelings. However, the question with the lowest frequency is question number 2 which is under memory strategy. A total number of 11 respondents with 3.7% frequency answered strongly disagree regarding "I use new English words in a sentence so I can remember them".

## Conclusion

This study aims to examine Form 5 students language learning strategies style, highly preferred language learning strategies and the least preferred language learning strategies. By using quantitative method, a series of questions in Google Form were formed and the link was delivered to 347 respondents which resulted in only 302 responses. After one week, the data is gathered and divided into their own categories. Based on this study, we can conclude that the most preferred language learning strategy used by Form 5 students during online lessons is memory strategy. This shows that Form 5 students involved in this study mostly use their memory to memorize the content during online lessons. Based on the findings, we also agreed that other strategies from this study such as cognitive strategy, compensation strategy, metacognitive strategy, social strategy and affective strategy are also being used by Form 5 students during online learning as the means for each strategy only slightly differ from each other. Affective strategy falls under the least preferred language learning strategy.

The implementation that we can suggest for this study is for the educators or teachers to refer to the findings to plan the lesson ahead before entering the class. This can benefit both parties as the teachers know what their students need, and students can easily understand their teacher's explanation related to English subjects. As Form 5 students tend to use memory strategy during their lesson, educators and teachers need to include more interesting activities such as using online quizzes or games for English content. This study also can help curriculum designers to create or prepare proper materials to improve the students' performance although the students must study on their own. They can create an educational framework that covers the students' ability in order to help the students to learn by themselves and accommodating to the students' needs during online lessons.

For future studies, researchers may include more studies regarding language learning strategies for secondary school students and expand the sample sizes to include students from different communities such as urban, suburban, and rural schools. The researchers also suggested conducting research based on gender, ethnicity, and level of proficiency of students to provide more information about the usage of language learning strategies among adolescence in the future. Additionally, researchers might include Form 1, Form 2, Form 3 and Form 4 students as well as samples for bigger scale and findings. In short, it is important to find out learners preferred language learning strategies as it can help educators to observe their student's learning style and can help the teachers to prepare learning material relevant to student's preferred language learning method.

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