

A Case Study on the Application of Cognitive Strategies to Malay Mandarin Learners

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ABSTRACT

Through questionnaire survey and interview, this research analyzes the cognitive strategies application of Universiti Teknologi MARA Perlis Malay students during their Mandarin language learning process. This research then further conducts the case studies on the good language learners, to find out the method of cognitive strategies used by the good language learners to enhance Mandarin language using ability. The results have shown that, good language learners prefer to learn Mandarin through Mandarin films and pay more attention to the use of Chinese characters in social media than general learners. On the whole, there are not many applications of cognitive strategies for the Malay students, and their awareness of self-directed learning is still weak. Therefore, this study also explores the methods of teachers to assist students in learning.

Keywords: *Mandarin, Malay, good language learner, cognitive strategies, learning strategies*

INTRODUCTION

Universiti Teknologi MARA has been offering basic Mandarin classes since 1968. The main purpose of the Mandarin foundation course offered by the university in Malaysia is to enable learners to use Mandarin at a preliminary level (Heng, Cheong & Taib, 2014). The purposes of Malay students participating in basic Mandarin courses are for the economic efficiency (Lee & Chow, 2015) and to gain job competitiveness (Chen & Li, 2015). However, according to the curriculum of the basic Mandarin course at Universiti Teknologi MARA, learners only need to attend classes for 2 hours a week, 14 weeks in a semester, and the whole course only needs 3 semesters to complete. In fact, due to the particularity of Chinese characters, learners need to spend 3.5 times more in learning Mandarin than learning European languages (Asia Education Foundation, 2008), which means learners need more efforts to master Mandarin. Due to insufficient for formal courses and the lack of channels for immersion in the target language environment, learners need to be more active to master Mandarin. In other words, learners must consciously use learning strategies to create more pragmatic Mandarin in the non-target language environment, to strengthen memory and improve Mandarin application ability. The question is: are learners aware that they need learning strategies to improve their Mandarin application ability?

Learners learn Mandarin through the practice and application of Mandarin, which belongs to cognitive strategies of learning strategies. Since the 70s, the focus of foreign language research has gradually shifted to exploring how learners learn, and the study of learning strategies has developed accordingly. There are many definitions and classifications of learning strategies. According to the information processing

theory, O 'malley and Chamot (1990) classified strategies into three categories: metacognitive strategies, cognitive strategies and social/emotional strategies. According to Rubin (1989), information processing for cognitive strategies include: getting process, storing process, and using process. O 'malley and Chamot (1990) refered to Rubin (1975, 1989) to define cognitive strategies. Cognitive strategies are learning strategies that are directly used to learn language and process learning materials, such as repetition, classification, deduction, elaboration, note-taking, inference, use of keywords, etc. In short, it is a strategy that involves the analysis, synthesis, or transformation of the learning material (Ellis, 1997). When discussing about the cognitive strategies, Di Carlo (2017) tried to identify the processes that occur in the three dimensions of information processing (encoding, storage, and retrieval). Generally, cognitive strategies are inseparable from the process of information processing, including the operation of input and output, the adjustment ability required by learners in learning. Besides cognitive strategies, there are two other categories of learning strategies. Social or emotional strategies provide more access to the language and learners learn the language through collaboration with others, while metacognitive strategies are used for self-management of self-learning. This paper will focus on the cognitive strategies of Malay students. This is because learners in Universiti Teknologi MARA do not use much social/emotional strategies in the non-target language environment, and their awareness of self-management in metacognitive strategies is not high (Marimuthu, Liaw, Lim & Er, 2015). As the most basic and explicit specific learning method, cognitive strategies have the most direct impact on learning. In addition, the survey and analysis of good Mandarin learners show that the learning strategies they use most are also cognitive strategies (Wu, 2007). Therefore, this study shall first discuss the application of cognitive strategies among Malay learners.

In addition, we can find that some learners are still able to learn Mandarin effectively although they are in a non-target language environment, and the application of these good learners' cognitive strategies is also what we need to pay attention to. The definition of good language learner varies according to different studies. Generally, good language learner has a high level of mastery of the knowledge or skills of the target language. Researchers usually set a certain achievement or grouping as a "benchmark", and high-group or high-class learners are designated as good language learners (Wu, 2007). In any case, "good learner" and "general learner" are only relative concepts. The extensive research on learning strategies of good language learner is based on the basic idea which is learning strategies can be acquired through appropriate training. General learners can also master the learning strategies of good language learners to improve their learning ability and effect. Research shows that language learning strategies play an important role in cultivating learners' communicative competence, improving their language level and autonomous learning ability (Oxford & Crookall, 1989; Oxford, 1990). Therefore, it is the focus of this paper to explore how good language learners in Universiti Teknologi MARA can improve their Mandarin application ability through cognitive strategies, as a model for other learners.

Although there have been a lot of studies on the learning strategies of good language learners at the present stage, the learning strategies used by good language learners in different regions may not be the same (Lin, 2012). So, regions with different cultural backgrounds need to find learning methods for good language learners in these regions. Therefore, this paper studies learners of the same culture, age and similar educational background, so their strategies can be provided as a reference for Malaysian Malay students. It is also hoped that through this study, learners will be aware of their own learning methods to acquire the strategies to enhance their strengths and make up for their weaknesses, as to become independent learners. On the other hand, in recent years, more and more Mandarin teachers from China have come to Malaysia's universities to teach Mandarin to Malay students. Therefore, this research can also help Mandarin teachers to better grasp the characteristics and conditions of Malaysian Malay students, to help teachers adjust the teaching mode and improve the teaching effect.

LITERATRE REVIEW

Although basic Mandarin classes in Malaysia were started by Universiti Teknologi MARA in the late 1960s, research on learning Mandarin as a foreign language did not begin until the 1990s. Early studies focused on the problems faced by Malay learners in learning Mandarin, such as Chinese characters, dialogue, grammar and other problems (Zhong & Huang, 1992; Saw, 1997; Ooi, 1998). Since the beginning of the 21st century, research has focused more on specific grammar problems encountered by Mandarin learners (Chai, 2007; Chen, 2008; Tan, 2009; Hoe, 2009) and how to use technology in teaching (Chuah, 2004). In the past 10 years, the research has shifted from technical issues to humanistic aspects and started to focus on teaching methods (Hoe & Mah, 2011; Teh, Siraj & Wong, 2017; Heng, Cheong & Taib, 2017). With the development of cognitive psychology, research has shifted from focusing on "how to teach" to "how to learn", focusing on learners' own learning strategies (Wu, 2007; Tan & Hoe, 2017). As for learners' learning strategies, researchers mainly studies how learners memorize new words and learn Chinese characters. Studies show that learners are not interested in learning strategies to expand new words, and they are not active users of learning strategies for Chinese characters. They use more strategies for memorizing learning strategies (Lee, Ng & Ngeh, 2017). When studying the metacognitive strategies of Malay students, it is found that their metacognitive strategies are not applied frequently and their applications are not diversified (Marimuthu, Liaw, Lim & Er, 2015). Generally, either in vocabulary learning strategies (Lee, Ng & Ngeh, 2017; Tan & Hoe 2017) or metacognitive strategies (Marimuthu, Liaw, Lim & Er, 2015), all the findings showed that majority learners were only moderate strategy users. However, these studies mainly focus on the analysis of overall learning strategies. There is no study discussing from a microscopic perspective and individual situations.

As for the research on learning strategies of good language learners, it was carried out as early as the 1970s, such as Rubin (1975), Fillmore (1976) and Naiman, Fröhlich, Stern and Todesco (1978). Their research was usually done from a macro perspective. By analyzing and summarizing a series of learning characteristics of good language learners, the researcher intends to reveal the application of learning strategies of good language learners so as to understand the methods to improve learning efficiency. Many studies have shown that good learners are more frequent, persistent and better at applying learning strategies than the general language learners (Green & Oxford, 1995; Griffiths, 2003; Oxford, 1999). The study of good language learners is an effective way to determine how language learning strategies affect language learning (Rubin, 1975). Since the 1990s, research has focused on exploring effective learning strategies and training methods (Green & Oxford, 1995; Nyikos & Oxford, 1993; O' Malley & Chamot, 1990). These studies find that success in language learning is more complex than the reasons found in their strategies. Of course, there are many learning strategies of good language learners, and the learning strategies of good language learners in different regions are also different (Barjesteh, Mukundan & Vaseghi, 2014). In recent years, many studies have been conducted according to the learning strategies of good language learners in different regions (Lin, 2012 & Yang, 2012). As Griffiths and Oxford (2014) conclude while reviewing the 21st-century language learning strategies from an international perspective, some of the content of learning strategies might look somewhat different in diverse parts of the globe, largely because of educational systems influenced by contrasting cultural values, but there is hope that researchers from varied cultures will make effort to learn from each other. This shows that the studies of learning strategies from different regions are all significant.

OBJECTIVES

The first objective of this paper is to discuss the application of cognitive strategies of Malay students during their Mandarin language learning process. In addition, this paper also wants to explore how the good language learners in Universiti Teknologi MARA can improve their Mandarin application ability through cognitive strategies, as a model, encouragement and impetus for other learners.

METHODOLOGY

This study collects data through questionnaire survey and interview method. A week before the learners took the writing test, the researchers distributed questionnaires to students who took level 2 and 3 basic Mandarin courses at Universiti Teknologi MARA Perlis during March until July 2019. These students come from different programmes and are in a non-target language environment. They had not studied Mandarin before taking basic Mandarin courses at Universiti Teknologi MARA. The questionnaire consists of two parts. The first part is about learners' personal information, and the second part is about their application of cognitive strategies in daily life, including listening, speaking, reading and writing skills. The second part of the questionnaire mainly refers to the cognitive strategies in the Oxford learning strategy scale, and is adapted according to the research purpose, which includes 14 items. The questionnaire adopted a five-level scale from "never" to "often", with scores ranging from 1 to 5. SPSS was used for statistical and quantitative analysis. According to the results of statistical analysis, the overall reliability of the questionnaire Cronbach alpha= 0.898. In this study, 40 questionnaires were distributed to 32 general learners and 8 good language learners. The data of 40 valid questionnaires were statistically analyzed.

Then, based on the overall scores of the semester, 4 learners who had excellent scores and were willing to participate in the interview, had been selected for the interview. They were labeled as S1 to S4 according to their grades, from highest to lowest. The basic information of the research subjects is shown in Table 1. The interview of this study was mainly conducted by the researcher with the learners face-to-face. Prior to the interview, the consent of the learners was solicited, and classroom observation, homework samples and test papers of the learners were collected for reference. The interview was semi-structured. Learners mainly adopted introspection and retrospection approach to verbal report. The interview lasted about 30 minutes and was conducted in Malay which is the learners' native language, so that they could convey their ideas more accurately. Interviews were recorded and the data presented in this paper were translated from Malay transcripts. After the interview, nearly 2 hours of interview recording and 13,000 words of interview manuscript after transcription had been obtained. Due to the limitation of space, this paper only chooses some research results to report.

Table 1 : Basic Information of the Research Subjects

Code	Gender	Age	Family Background	Time of Learning Mandarin	Course	Birthplace
S1	Female	22	No Chinese background	3 semester	Business Administration	Perak
S2	Female	23	No Chinese background	2 semester	Computer Science	Kelantan
S3	Female	22	No Chinese background	2 semester	Computer Science	Terengganu
S4	Female	22	No Chinese background	2 semester	Computer Science	Pahang

RESULTS AND ANALYSIS

Based on the questionnaire and personal practice, this paper explores the ways general learners and good language learners improve their Mandarin application ability through cognitive strategies in non-target language environment. The two tables below respectively show the five cognitive strategies most used by general learners and good language learners.

Table 2 : High Frequency Cognitive Strategies used by General Learners

	Frequency Sorting	Minimum	Maximum	Mean	Std. Deviation
Listen to Mandarin Song	1	1	5	2.86	1.099
Communicate with friends in Mandarin	2	1	5	2.61	.803
Try to read Chinese characters in public places (e.g. store names, signs, menus)	3	1	4	2.50	1.082
Read books in Mandarin	4	1	5	2.47	1.000
Send short message to teachers or friends in Pinyin	5	1	4	2.17	.811

Table 3 : High Frequency Cognitive Strategies used by Good Language Learners

	Frequency Sorting	Minimum	Maximum	Mean	Std. Deviation
Listen to Mandarin Song	1	4	5	4.25	.500
Watch Mandarin film	2	3	4	3.50	.577
Communicate with friends in Mandarin	2	3	4	3.50	.577
Send short message to teachers or friends in Pinyin	4	3	4	3.25	.500
Use Chinese character on blogs, Facebook, Twitter, email, etc.	4	3	4	3.25	.500

First of all, in general, this study found that the frequency of daily application of Mandarin was not high, the initiative was not strong, and the autonomous learning ability was generally weak among the Malay students in Universiti Teknologi MARA Perlis. Table 2 shows the cognitive strategies with high frequency of use, including the mean and variance of each option. The average indicates that learners' application of Mandarin in daily life is only at the level of "sometimes". The highest average is only 2.86, and the total average is only 2.13. This indicates that the frequency of learners' application of cognitive strategies in daily life is low, and the application has not reached the ideal level. The cognitive strategies of good language learners were slightly better, with the highest mean of 4.25 and the total mean of 3.50. The overall mean of learners is not high, which may be because they are not aware that the application of enhanced cognitive strategies can improve their Mandarin, that is, they have a weak sense of participation. A large standard deviation indicates that learners have a large internal difference and a high degree of dispersion in the selection and use of cognitive strategies. For the cognitive strategies, the general learners often apply Mandarin by listening to and singing Mandarin songs, then practicing Mandarin with their friends, and then trying to read Chinese characters everywhere. The first and second methods are also the main methods for good language learners to improve their Mandarin application ability through cognitive strategies. The following results will be further discussed.

DISCUSSION

Through interviews and observations, we found: first, good language learners' application of Mandarin in cognitive strategies and their tendency to learn Mandarin are through relaxing and happy methods, that is, through watching their favorite Mandarin films and listening to songs to achieve the effectiveness of learning. This approach is based on repetition to make practice perfect. All the interviewees said that they like to listen to the theme songs of Mandarin films or TV series, and S4 revealed that if the theme music sounds good, she will further search for lyrics and understand its meaning. And the lyrics of the song are generally rhymed, rich sense of rhythm, conducive to recitation. Different from general learners, good learners are more interested in Mandarin films. Respondents all indicated that learners will try their best to understand the content of their favorite film or drama. Respondents S2 and S4 said that in order to learn Mandarin through films, they tried to understand the content of films without reading subtitles. They are especially inclined to enhance their sense of Mandarin language by watching Mandarin films. Interviewee S2 indicated that this method is not only fun and easy, but also can help understand the application of Mandarin language from the communication of characters in the film. For example, "zaoan" (good morning) and "zuijin zenyang" (how are you recently) can replace "zaoshang hao" (good morning) and "Ni hao ma" (how are you) in the Mandarin textbook. Respondent S3 expressed confidence that she is fond of Mandarin films, so sometimes she can understand the content without relying on subtitles. Learners in other countries, such as Italy, also insist on watching TV and films, because watching TV and films with pictures is helpful for understanding the contents (Wu, 2007).

In addition, making brief communication with friends who are also Mandarin learners is also considered a more relaxed way. Although some of the interviewees' Mandarin learning partners were from other ethnic groups, for example, S1 said that she practiced Mandarin to an aboriginal colleague who worked in a gas station and was adopted by Chinese as a child, but the Mandarin learning partners of the other three interviewees were all Malay. They all tend to choose the person closest to them, that is, a friend or roommate, to talk in Mandarin. S2 said that she and her roommate would greet each other in Mandarin every morning, "We will try to say some food words we both understood in Mandarin when we eat together." Respondent S3 said that when she and her friend talk in Mandarin, if they don't understand, she explains, so they both learn from it. From here, we can see that a good language learner lives with at least one fixed Mandarin learning partner. According to research, this may be a very important learning strategy for successful learners (Wu, 2007). If you are with close or familiar friends, you can overcome the anxiety and practice more easily. Moreover, because you share the same culture and learning environment, you can avoid many communication barriers. Although they only use short words to greet each other, wish each other and ask questions, as soon as they speak out, it is learning, which deepens their impression of Mandarin vocabulary. The above happy and relaxed learning style is shared by all learners, but good language learners are more active in using it and have a strong awareness of learning.

From the questionnaire and interview, we found that the good language learners pay more attention to the use of Chinese characters than the general learners. Their use of Mandarin is not limited to listening and speaking, but to trying to incorporate Chinese characters or pinyin into their daily writing. Respondents S1 and S2 only used pinyin, while S3 and S4 mostly used Chinese typing. During the interview, interviewee S4 revealed that her use of pinyin or Chinese characters was deliberate. Although the main audience could not understand it, she admitted that she was already learning as she wrote. When Chinese characters appear in the article, interested readers ask her to explain the relevant words, which is another touch and impression. It can be seen that good language learners are more active in using Chinese characters than general learners. According to the survey, only 36.8% of the Chinese learners in Universiti Teknologi MARA said that they have actual access to and use of Chinese characters in daily life. The researchers suggested that this may be the result of the fact that the learners live in a non-Chinese gathering area, or it may be the result of the learners' lack of sensitivity to Chinese characters

(Chen & Li, 2015). The influence of cultural environment on learners is not repeated here. This paper believes that learners' own attitude actually influences their learning effect. Because they are both in the environment of non-target language, we find that the good language learners will deliberately apply Chinese characters on Facebook, Instagram, Twitter, etc., or deliberately use pinyin and Chinese characters when sending short messages. They are more likely to create an opportunity to apply Chinese characters than the general learners. They also have obvious learning consciousness and initiative. Even if the environment is not favorable to them, they still create the conditions for learning. Wu (2007) also confirmed this point when he studied 535 samples, that is, good language learners have relatively good learning awareness and methods, and will actively look for opportunities to use Mandarin. Other studies have also confirmed that good language learners are more autonomous and self-managed, and take great responsibility for their own learning (Oxford, 1999).

Although good language learners have a significant awareness of autonomous learning, the results of this study prove that general learners' autonomous learning ability is still weak at the present stage and they need the help of teachers very much. Therefore, as Mandarin teachers, they can guide students in the following ways:

1. Create a happy and relaxed learning environment.

Through this study, it can be found that the Malay students in the Mandarin class at Universiti Teknologi MARA tend to be lively and happy in language learning. Steve Kaufmann (2003), who is good at nine languages, once quoted Zhuangzi's "study of inaction" as saying that language learning should follow the nature and find self-realization, because language learning should be full of happiness and enthusiasm rather than depression and pain. The traditional eastern way of learning by rote sometimes makes students feel bored and suffer. Perhaps the methods commonly used in the west, such as imagination, flashcards, sounds and other lively ways, deserve our attention. Therefore, teachers should respect students' individuality, stimulate students' desire for knowledge and arouse their initiative. They can introduce Mandarin singing, drama performance and other Chinese cultural activities as they like and adjust the teaching atmosphere through group cooperation and experiential learning, so that students can learn in a pleasant and relaxed atmosphere.

2. Create an environment for communication with native speakers.

The results of the study show that what is more worrying is that although the good language learners are eager to communicate with native speakers, but due to their shyness, timidity, lack of confidence, they have few opportunities to communicate with native speakers. Even so, other learners must face the same problem. Therefore, teachers can create more opportunities for them to communicate with native speakers. This is because the teaching environment is not limited to the campus and classrooms, and any resource and immaterial space that can promote formal or informal learning is an integral part of the teaching environment (Cornell, 2002). The direct environment of foreign language teaching can be composed of interactive people and teaching materials involved (McDermott, 1977). For example, teachers can design a language task in classroom teaching, ask students to look for a Chinese person to complete a short film of dialogue, or go to a Chinese restaurant to copy the menu. In addition, teachers can also organize some extracurricular activities through cooperation with Mandarin language institutions and clubs, such as summer camps, Mandarin song singing contest, Chinese culture exhibition, etc., so that students can have more opportunities to communicate with native speakers and they can acquire the ability of using Mandarin in specific scenes.

3. Encourage students to have at least one regular Mandarin learning partner.

Although communicating with native speakers is the fastest way to improve Mandarin proficiency, due to the cultural environment, students are not likely to encounter Chinese persons in their own location. Even if they encounter Chinese persons by chance, they do not have the courage to speak, so it is a compromise to practice with friends. Students should be encouraged to communicate with friends who are learning Mandarin, as they are not only friendly and natural without pressure, but

they are also more lasting contact objects. In addition, teachers should also provide more daily examples for students, so that students can use Mandarin more in their daily interactions.

4. Introduce Mandarin learning strategies to students.

To learn Mandarin well, learners must learn to receive more language input outside the classroom and look for more opportunities to use the language. Therefore, teachers have the responsibility to assist young students, introduce more learning strategies to students consciously, and guide students to find and choose their own learning methods. In addition, teachers can also teach Mandarin learning strategies to students through specialized courses and lectures, so as to arouse their attention and reflection on learning strategies and improve their learning methods. It is of great significance that the teaching and training of learning strategies by Mandarin teachers to students can effectively improve learning strategies.

CONCLUSION

As the saying goes, practice makes perfect. As long as students have more contact with the language, they will become familiar with it. Besides learning and using the language in class, students should also create more opportunities to use Mandarin through various learning strategies in daily life. The application of language in daily life is different from the strict teaching in class, as it has obvious effects. The constantly changing situation can make the brain to be in a positive state of operation, which is conducive to the accumulation of memory. How to use learning strategies in a variety of ways to improve their ability to apply Mandarin should be taught and created by learners independently after referring to the cognitive strategies of good language learners. Teachers only play a stimulating and intense role in the long process of language learning. Therefore, it is strongly suggested that learners, with the assistance of teachers, should independently find suitable learning strategies to make up for the deficiencies of learning a language in a non-target language environment.

REFERENCES

- Asia Education Foundation. (2008). The future of Chinese language education in Australian school: National forum report. Victoria: Asia Education Foundation.
- Barjesteh, H., Mukundan, J., & Vaseghi, R. (2014). A synthesis of language learning strategies: Current issues, problems and claims made in learner strategy research. *Advances in Language and Literary Studies*, 5(6), 68-74.
- Chai, C. S. (2007). Penggunaan preposisi bahasa Cina di kalangan pelajar Melayu: Satu analisis kontrastif dan analisis kesilapan. [The use of prepositions in Mandarin of Malay students: One contrast analysis and error analysis]. (Master's thesis). Universiti Malaya, Petaling Jaya.
- Chen, R. S. (2008). A Study on syntactic errors and language transfer of Malay students in the process of learning Mandarin as a second language] (Master's thesis). Hangzhou: Zhejiang University.
- Chen, S. L., & Li, Z. H. (2015). An analysis of Chinese character learning of students in Mara University of Technology (Malaysia)]. *Chinese Language Globalization Studies*, (01), 54-63.
- Chuah, Y. F. (2004). Teaching and learning Chinese language through web-based instruction at UiTM Shah Alam-an exploratory study (Doctoral dissertation). Multimedia University, Johor.
- Cornell, P. (2002). The impact of changes in teaching and learning on furniture and the learning environment. *New Directions for Teaching and Learning*, (92), 33-42.
- Di Carlo, S. (2017). Understanding cognitive language learning strategies. *International Journal of Applied Linguistics and English Literature*, 6(2), 114-126.

- Ellis, R. (1997). *Second language acquisition*. Oxford: Oxford University Press.
- Fillmore, L. W. (1976). *The second time around: Cognitive and social strategies in second language acquisition*. (Vol. 1). Dept. of Linguistics.
- Green, J. M., & Oxford, R. (1995). A closer look at learning strategies, L2 proficiency, and gender. *TESOL Quarterly*, 29(2), 261-297.
- Griffiths, C. (2003). *Language learning strategy use and proficiency: The relationship between patterns of reported language learning strategy (LLS) use by speakers of other languages (SOL) and proficiency with implications for the teaching/learning situation*. (Doctoral dissertation). Research Place, Auckland.
- Griffiths, C., & Oxford, R. L. (2014). The twenty-first century landscape of language learning strategies: Introduction to this special issue. *System*, (43), 1-10.
- Heng, B. C., Cheong, C. Y. M., & Taib, F. (2014). Penilaian kurikulum pengajaran bahasa Mandarin komunikatif: Satu kajian pendekatan iluminatif [Assesment of communicative Mandarin language curriculum: A study of the illuminative approach]. *JuKu: Jurnal Kurikulum & Pengajaran Asia Pasifik*, 2(3), 52-59.
- Hoe, F. T. (2009). Masalah pembelajaran urutan kata dalam ayat bahasa Mandarin dalam kalangan pelajar bukan penutur asli [The learning problem of word order in Mandarin sentences among non-native students]. *Esteem Academic Journal*, 5(2), 150-164.
- Hoe, F. T., & Mah, B. Y. (2011). Group-arrange-touch-up (GAT): A method of teaching non-native Mandarin speakers in restructuring elementary Mandarin sentence. *Esteem Academic Journal*, 7(2), 111-124.
- Kaufmann, S. (2003). *The linguist: A personal guide to language learning*. Canada: Steve Kaufmann.
- Lee, A. C., Ng, L. L., & Ngeh, H. E. (2017). Investigating the usage of vocabulary learning strategies among high and low proficiency Malay undergraduates. *International Journal of Modern Languages and Applied Linguistics*, 1(01).
- Lee, P. L. & Chow, T. V. F. (2015). Research on attitudes of learning Chinese as a foreign language learner in Malaysian University towards the Chinese language. *The Science Education Article Collects*, (12), 44-46.
- Lin, X. T. (2012). *Study on the learning strategies of successful Korean Chinese Learners* (Master's thesis). East China Normal University, Shanghai.
- Marimuthu, R., Liaw, S. C., Lim, T. H., & Er, A. N. (2015). A survey on the use of metacognitive self-regulatory learning strategies by students from the different faculties of UiTM Pulau Pinang. *Esteem Academic Journal*, 11(2), 18-26.
- McDermott, R. (1977). Social relations as contexts for learning in school. *Harvard Educational Review*, 47(2), 198-213.
- Naiman, N., Fröhlich, M., Stern, H., & Todesco, A. (1978): *The good language learner*. Toronto: Ontario Institute for Studies in Education.
- Nyikos, M., & Oxford, R. (1993). A factor analytic study of language-learning strategy use: Interpretations from information-processing theory and social psychology. *The Modern Language Journal*, 77(1), 11-22.
- O'Malley, M. J., & Chamot, A. U. (1990). *Learning strategies in second language acquisition*. United Kingdom: Cambridge University Press.
- Ooi, P. S. (1998). *Bahasa Mandarin dalam kalangan pelajar Melayu di Institut Teknologi Mara (ITM): Satu analisis kesilapan sintaksis [Mandarin among Malay students at the institute Teknologi Mara (ITM): An analysis of syntax error]* (Master's thesis). Universiti Teknologi Mara, Shah Alam.
- Oxford, R. L. (1990). *Language learning strategies: What every teacher should know*. New York: Newbury House.

- Oxford, R. L. (1999). Relationships between second language learning strategies and language proficiency in the context of learner autonomy and self-regulation. *Revista Canaria de Estudios Ingleses*, 38, 109-126.
- Oxford, R., & Crookall, D. (1989). Research on language learning strategies: Methods, findings, and instructional issues. *The Modern Language Journal*, 73(4), 404-419.
- Rubin, J. (1975). What the "good language learner" can teach us. *TESOL quarterly*, 41-51.
- Rubin, J. (1989). How learner strategies can inform language teaching. *Proceedings of LULTAC, Institute of Language in Education, Hong Kong*.
- Saw, K. L. (1997) Kesilapan sintaksis dalam pembelajaran bahasa Mandarin di kalangan Dewasa Melayu [Syntax error in learning Mandarin among Malay adults] (Master's thesis). Universiti Malaya, Petaling Jaya.
- Tan, S. K. (2009). Penggunaan kata partikel penegas bahasa Cina di kalangan murid-murid Melayu: Satu analisis kesilapan [Use of reinforcement particles in Mandarin among Malay students: An analysis of errors] (Master's thesis). Universiti Malaya, Petaling Jaya.
- Tan, T. G., & Hoe, F. T. (2017). A survey on Chinese characters learning strategies of Malay students in the faculty of engineering at a university in Malaysia]. *Journal of Chinese Language Education*, 15(2), 16-30.
- Teh, H. S., Siraj, S., & Wong, S. L. (2017). Penilaian kurikulum pengajaran bahasa Mandarin komunikatif: Satu kajian pendekatan iluminatif [Assessment of communicative Mandarin curriculum: A study of the illuminative approach]. *JuKu: Jurnal Kurikulum & Pengajaran Asia Pasifik*, 2(3), 52-59.
- Wu, Y. (2007). The study on the learning strategies employed by Chinese learners in different social environments] (Doctoral dissertation). Shanghai Normal University, Shanghai.
- Yang, Z. L. (2012). Study on learning strategies and learning styles of successful Chinese learners] (Doctoral dissertation). Shandong University, Jinan.
- Zhong, Q. S., & Huang, B. Y. (1992). A preliminary study on Malay students' difficulties in Chinese learning]. *Chinese Teaching in the World*, (1), 49-53.