**Faculty of Language and Communication**

**Students' Vocabulary Learning Strategies and Teachers' Vocabulary Teaching Practices in Malaysian Primary School English Language Classrooms**

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Students' Vocabulary Learning Strategies and Teachers' Vocabulary Teaching Practices in Malaysian Primary School English Language Classrooms

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# DECLARATION

I declare that the work in this thesis was carried out in accordance with the regulations of Universiti Malaysia Sarawak. Except where due acknowledgements have been made, the work is that of the author alone. The thesis has not been accepted for any degree and is not concurrently submitted in candidature of any other degree.

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# ABSTRACT

English is introduced as a compulsory subject in Malaysia starting from primary school. However, students failed their UPSR English exam due to insufficient vocabulary knowledge. Studies have shown that Malaysian school students have limited strategies in their vocabulary learning, the lack of vocabulary learning strategies interfere with their vocabulary learning. Strategies in language learning assists learners to be self -regulated. This study aims to investigate vocabulary teaching and learning in Malaysian primary schools. Surveys and interviews were conducted on the students where observations and interviews were conducted with the teachers. Results show that students used cognitive strategies in their vocabulary learning, which emphasis more on repetition and mechanical means of words. Teachers provided students with explanations and answers instead of focusing on strategy instruction. The findings of this study provided insights concerning Malaysian primary schools' English vocabulary teaching and learning.

**Keywords:** language learning, vocabulary learning strategies, vocabulary teaching practices, strategy instruction, primary school

**Strategi Pelajar Dalam Pembelajaran Tatabahasa dan Strategi Guru dalam Pengajaran Tatabahasa Bahasa Inggeris di Bilik Darjah Sekolah Rendah di Malaysia**

***ABSTRAK***

*Di Malaysia, Bahasa Inggeris merupakan satu subjek wajib bermula dari sekolah rendah. Namun, pelajar masih gagal dalam ujian Bahasa Inggeris UPSR disebabkan kekurangan pengetahuan tatabahasa. Kajian menunjukkan pelajar di Malaysia kekurangan strategi dalam penggunaan tatabahasa. Kekurangan pengetahuan dari segi strategi menyebabkan pelajar menghadapi masalah dalam pembelajaran tatabahasa. Strategi membantu murid untuk berdikari dalam pembelajaran. Kajian ini bertujuan untuk menyiasat pembelajaran dan pengajaran tatabahasa Bahasa Inggeris di sekolah rendah di Malaysia. Tinjuan dan temu bual dengan pelajar dijalankan manakala pemerhatian dan temu bual dijalankan dengan guru. Keputusan kajian menunjukkan pelajar menggunakan strategi kognitif dalam pembelajaran tatabahasa, yang lebih berfokus kepada pengulangan dan penghafalan perkataan. Guru mengajar tatabahasa dengan memberi maksud perkataan dan penjelasan tanpa berfokus kepada pengajaran strategi. Kajian ini memberi satu gambaran berkenaan dengan pengajaran dan pembelajaran tatabahasa Bahasa Inggeris dalam sekolah rendah di Malaysia.*

***Kata kunci:*** *Pembelajaran bahasa, strategi dalam pembelajaran tatabahasa, pengajaran tatabahasa, pengajaran strategi, sekolah rendah*

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MBMMBI   Memertabatkan Bahasa Melayu Memperkukuhkan Bahasa Inggeris

VLS     Vocabulary learning strategies

# CHAPTER 1

# INTRODUCTION

## 1.1     Chapter Overview

This chapter covers the issues that underline the background of the study and the problem statement. Besides, it also includes the objectives of the research, the research questions, the significance of the study as well as the definition of key terms.

## 1.2     Background of the study

In Malaysia, English is taught as the second language in all primary and secondary schools (Curriculum Specification, 2015). Efforts are taken to ensure that English is also learned by school students. First, the Ministry of Education used the 1996 Education Act to reaffirm the role of English. Second, *Memartabatkan Bahasa Melayu Memperkukuhkan Bahasa Inggeris* (MBMMBI) policy which means upholding the Malay language and strengthening command of English is introduced to Malaysian learners. This policy aims to increase students' exposure to English in the classroom and improve their language skills (Kamsin & Mohamed, 2020). The goal of this MMBMBI policy is to strengthen learners' English language so that learners can use the language to explore various fields and compete internationally (Yamat et al., 2014).

The role of English language is also emphasized in the Malaysian English Syllabus, which is to equip learners with basic English language skills (listening, speaking, reading, and writing) so that they can communicate and write in different situations (Curriculum Specification, 2015). It can be concluded that the goal of English language learning is to direct learners toward self-regulation and independence. Self-regulated learners are

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confident, strategic, resourceful, and self-reactive in their performance (Cubukcu, 2009). However, the deficiency in English competence among Malaysian learners is still a major concern among educators. According to Wang and Yamat (2019), 58 percent of Year Five students in an urban school had poor noun vocabulary knowledge, while 72 percent of the participants had poor vocabulary knowledge for verbs. Studies (Kaur, 2013; Kaur et al., 2017; Misbah et al., 2017) have shown that learners fail to master the English language due to vocabulary problems.

Vocabulary is important in language learning. Vocabulary knowledge is the basic aspect of language learning and language use (Nation, 2001). Therefore, students with large vocabularies could understand new ideas and concepts quicker than students with limited vocabularies. Nation and Waring (1997) mentioned that second language learners would need 3,000 words and above of high-frequency words as a minimum requirement to comprehend a text. Tahir et al. (2020) investigated the effect of explicit vocabulary instructions on 60 Form Two learners' English vocabulary learning for 22 weeks. Students were provided with a pre-test, explicit vocabulary lessons, a feedback form, a post-test as well a semi-structured interview. Results suggested that explicit method of vocabulary instruction enhanced participants' vocabulary knowledge. There are two aspects of knowledge of vocabulary, knowing several words (vocabulary breadth) and knowing the quality of those words (vocabulary depth) (Nation, 1990). Knowing a vocabulary item means more than knowing the concept, referents, and associations. Learners not only need to know its form in terms of spelling, pronunciation, and word parts but also its use in terms of functions, collocations, and constraints (Nation, 2001). Farjami (2007) further mentioned that most learners face problems in vocabulary retention.

In Malaysia, learners start to learn English in primary school, which is seven years old on average. Hakuta et al. (2000) mentioned that it takes three to five years to achieve oral proficiency and about four to seven years are required to develop academic English proficiency. Years of English learning significantly influenced students' vocabulary size (Tang, 2007). Malaysian learners learn English as a compulsory subject in primary school, which includes four basic skills namely listening, speaking, reading, and writing skills (Sulaiman et al., 2015), vocabulary learning is included in the teaching and learning of the four skills (Tahir & Mohtar, 2016). However, Tahir et al. (2020) who conducted a study on the effectiveness of visual vocabulary suggested that explicit vocabulary instruction is necessary to assist learners' English language learning.

Assistance and guidance from the teachers are necessary for learners younger than 11. Piaget suggested children younger than 11 are in the period of concrete operations. As such, they lack abstract thinking (Dworetzky, 1993). Children cannot comprehend and imagine the hypothetical future. They can learn fast but tend to forget fast. Children learn better if the information is presented to them as they have lower affective filters (Gürsoy & Akn, 2013). Most importantly, they do not have a purpose to learn a language (Gürsoy, 2012). In short, due to the children's characteristics and their developmental features, assistance and support from the teachers are crucial in facilitating their vocabulary learning process and guiding them toward autonomous learning. In summary, this section highlights the two main points, which are learners' vocabulary learning and teachers' role in vocabulary learning. The following chapter will move on to explain the statement of the problem.

## 1.3    Statement of the Problem

English is a compulsory subject in all primary schools (Sulaiman et al., 2015). Vocabulary learning is integrated into the teaching and learning of listening, speaking, reading as well as writing (Tahir & Mohtar, 2016). According to Letchumanan and Tan (2012), Malaysian students learn 1,000 high frequency words in primary school and 2,000 high frequency words in secondary school. However, Husaini et al. (2016) revealed that Malaysian students were found to have weak English vocabulary knowledge. Misbah et al. (2017) investigated 116 Year 6 students from seven primary schools in Labuan. The study was to identify the factors that interfere with students' vocabulary learning using questionnaire as an instrument. Results revealed that a lack of English vocabulary caused the students to fail their UPSR English subject. Similarly, Wang and Yamat (2019) also investigated vocabulary knowledge among 36 Year Five primary school students in an urban school in Malaysia using an adapted version of Nation's Vocabulary Levels Test (1983). It was identified that the majority of the Year 5 students had yet to master the vocabulary in the   Malaysian primary school English syllabus, 58% of the students had difficulty comprehending nouns and 72% had problems understanding verbs. A study by Chu et al. (2019) discovered that Malaysian secondary school students' vocabulary proficiency word level is beyond 2000 words. It is identified that Malaysian students have problems mastering the amount of vocabulary required by the Curriculum Specification (2015). As a result, the lack of vocabulary knowledge affects the learners' English language learning.

Khan et al. (2018) claimed that most learners could not recall the vocabulary they learned. Learners tend to forget the vocabulary that they have learned in class due to a lack of opportunity and limited hands-on experience (Razali et al., 2017). Yee and Wahab (2016) also mentioned that students tend to forget the vocabulary taught and have difficulties

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applying the vocabulary. Rahman and Shah (2016) stated that students with good English proficiency employed more strategies than students with weak English proficiency levels. They also suggested that learners should be exposed to the use of strategies for better vocabulary retention.

Learners should be explicitly taught about vocabulary learning methods, such as vocabulary learning strategies, for them to apply the strategies independently in different contexts (Ayin & Shah, 2020). When students select learning techniques, these strategies develop into learning tools that are more active, purposeful, conscious, and self-regulated (Oxford, 2003). Learners' choice of VLS based on different criteria such as motivation, culture, and proficiency. Beginners are more likely to employ "shallow" strategies such as simple memorization, repetition, and taking notes. Intermediate and advanced learners favor more complicated or "deeper" strategies such as imagery, inferencing, and the Keyword Method. (Schmitt, 2008 cited in Mokhtar et al., 2017). In short, vocabulary learning strategies help students improve their vocabulary retention. Learners with limited vocabulary learning strategies could have difficulty in selecting or applying the strategies in their vocabulary learning. The lack of strategies in vocabulary learning could be causing students to encounter problems in their vocabulary learning.

Besides, the teacher's role is crucial in vocabulary learning. Muhammad and Kiely (2018) mentioned that Malaysian teachers teach vocabulary within the spectrum of their pedagogical knowledge. Jerome and Samuel (2017) claimed that teachers' pedagogical is influenced by their beliefs on language teaching and learning. Strategy training assists learners to achieve autonomy in their learning (Nguyen & Gu, 2013). Therefore, strategy-based- instruction is necessary for vocabulary teaching. Kamile et al. (2012)  conducted a

study to find out the role of teachers, peers, and classroom environment and how they affect Malaysian ESL learners' vocabulary learning strategies use. They discovered that the majority of those who were interviewed stated that they learned vocabulary learning strategies such as writing the new words into the vocabulary notebook from their teachers in schools. Besides, the participants also mentioned that they were still using the strategies that were taught by the teachers in their vocabulary learning. In short, teachers' strategies use in vocabulary teaching will influence learners' vocabulary learning. Chu et al. (2019) conducted a study concerning vocabulary learning, which mentioned that teachers should avoid using dictionaries and employing words in sentences as approaches to teach vocabulary. Instead, teachers should provide learners with explicit instruction in vocabulary learning strategies. Rahman and Shah (2016) stated that teachers should emphasize vocabulary learning strategies in their vocabulary teaching practices. Wang and Yamat (2019), Nasaruddin and Kamalludeen (2020), as well as Tahir et al. (2020), suggested teachers should utilize various techniques and select suitable approaches in their vocabulary teaching practices. Overall, the studies emphasize the strategies that teachers could apply in their classrooms. Since teachers play an important role in learners' vocabulary learning, and studies suggested different teaching approaches to be used in English vocabulary classrooms, it is necessary to look into teachers' vocabulary teaching practices to apply the strategies efficiently. This indicates that more studies are needed to provide insight into primary school teachers' vocabulary teaching practices.

Three main issues have been underlined. First, the lack of vocabulary learning strategies among primary school students could be interfering with their vocabulary development. Secondly, there is a need to investigate teachers' vocabulary practices as there are different strategies that teachers could apply in their vocabulary teaching practices.

Third, to understand students' preferences in vocabulary learning strategies (VLS). These issues prompted the researcher to investigate vocabulary learning and teaching in primary schools in Malaysia such as determining Malaysian primary school students' strategies in vocabulary learning and investigating Malaysian primary school teachers' vocabulary teaching practices.

## 1.4    Aims, objective, research questions of the study

The study aims to investigate vocabulary teaching practices and learning strategies in primary schools in Malaysia. The objectives of the study are to:

(i)    determine Malaysian primary school students' strategies in learning vocabulary.

(ii)    investigate Malaysian primary school teachers' vocabulary teaching practices.

(iii)    investigate Malaysian primary school students' preferences in vocabulary learning strategies.

The research questions for this study are as follows:

RQ1:   What are the primary school students' strategies in learning vocabulary?

RQ2:   What are teachers' practices in teaching vocabulary at primary school?

RQ3:   Why do the students use the strategies in vocabulary learning?

## 1.5    Significance of the Study

This study will benefit language learners. By determining Malaysian primary students' vocabulary learning strategies (VLS), it allows the students to identify the types of vocabulary learning strategies which are more effective and beneficial for their vocabulary learning.

This study will benefit teachers, especially primary school English teachers. By gaining better insight into the current extent to which teachers conduct vocabulary teaching in primary schools, the findings of the study will offer increased professional development and future consideration of best practices among primary school teachers to meet education goals. Through the findings of this study, the teacher will have a better understanding of primary students' vocabulary learning strategies preferences. Hence, teachers can apply the strategies that students frequently used in their vocabulary teaching.

The findings of the study will also benefit the researchers working within the area of education and language learning. The researchers will understand more about vocabulary teaching in Malaysian primary schools and learn about the strategies that are effective for Malaysian primary school students. They will gain also more insight into the preference of Malaysian primary students' vocabulary learning strategies and adapt them to their research.

Besides, the findings of this study will benefit Malaysian education policymakers. This study provides insight into vocabulary teaching and learning in Malaysian primary schools. Consequently, the findings of this study will serve as guidelines for the policymakers to design a more comprehensive syllabus, English books, and programs.

Finally, the findings of this study will provide a holistic idea of the proposed framework, CALLA model works as a strategy instruction model in Malaysian primary school classrooms. Although the effectiveness of the CALLA model has been studied, the moves of employing this framework to investigate teachers' vocabulary teaching practices have received less attention. The findings of this study will contribute to a better understanding of how vocabulary learning strategy instructions are being conducted in Malaysian primary school classrooms.

## 1.6    Definition of the key terms

In this section, the definitions of key terms in the present study are explained.

## 1.6.1    Vocabulary learning

There are two basic approaches in vocabulary learning and teaching research, that is vocabulary can be either learned implicitly and incidentally or taught explicitly and intentionally (Wang, 2000). Ellis (1994) explained that implicit learning is the acquisition of knowledge that occurs unconsciously due to repeated exposures. On the contrary, explicit learning involves a conscious operation, in which learners experiment with the hypothesis while learning. Hulstijn (2001) clarified that incidental vocabulary acquisition means "learning of vocabulary as the by-product of any activity not explicitly geared to vocabulary learning", whereas; intentional vocabulary learning means "any activity geared at committing lexical information to memory" (p. 271). Reider (2003) concluded that "incidental learning as being composed of implicit learning processes (which happen without the learner's awareness) and/or of explicit learning processes (which take place without learning intention but involve online awareness and hypothesis formation)" (p. 28). In the present study, based on the definitions of vocabulary learning by Ellis (1994) and Reider

(2003), vocabulary learning can be referred to as a conscious operation that requires learners to practice, experiment, and remember the vocabulary in the process of learning.

### 1.6.2 Direct vocabulary instruction

Direct vocabulary instruction means the teacher develops learners' vocabulary by targeting specific words (Biemiller & Slonim, 2001). Sedita (2005) clarified direct vocabulary instruction as the teaching of specific words which involves the analysis of word roots and affixes. Blachowicz et al. (2006) also mentioned that direct vocabulary instruction means a teacher intentionally focuses on specific words to develop learners' vocabulary knowledge. In the present study, based on the vocabulary instruction theories (Biemiller & Slonim, 2001; Blachowicz et al., 2006), direct vocabulary instruction means teachers develop learners' vocabulary by giving the learners sufficient exposure to the form and the use of the words, which in this study will also be referred as vocabulary teaching practices.

### 1.6.3 Vocabulary learning strategies

In general, vocabulary learning strategies are a sub-category of learning strategies (Nation, 2001). According to Gu (1994), specific strategies which are used by non-native learners to learn new vocabulary in a language are called 'vocabulary learning strategies'. Cameron (2001) proposed that vocabulary learning strategies are actions taken by learners to assist them in comprehending and remembering vocabulary. According to Rahman and Shah (2016), vocabulary learning strategies mean actions taken by language learners to understand and remember the vocabulary items. In the present study, based on the vocabulary learning strategies theory, vocabulary learning strategies refers to strategies employed by learners to learn vocabulary.

**1.7 Chapter Summary**

This chapter provided a background for the present study. The need to explore vocabulary teaching and learning in primary schools in Malaysia is highlighted. In addition, the statement of the problem was explained and the objectives and the research questions in the present study were presented. The significance of the study and definition of the key terms were provided. In the following chapter, the literature review related to the present study will be explained and discussed.

**CHAPTER 2**

**LITERATURE REVIEW**

**2.1     Overview**

This chapter outlines the background and rationale for the present study. First, the definition of language learning is explained. Cognitivism is employed to explain the phenomenon of learning. Piaget's cognitive development theory, information processing model, and Anderson's Active Control of Thought (ACT) model are used in cognitive development and mental processes. Following that, learners' strategies in vocabulary learning, teachers' teaching practices, as well as strategies in vocabulary teaching, are discussed. CALLA model is chosen as the theoretical framework for this study. The effectiveness of the CALLA model is being reviewed. The key findings of the literature are highlighted to show the gap in the research. This chapter ends with a chapter summary.

**2.2     Language Learning**

A second language (L2) can be defined as "any language acquired after acquiring the mother tongue" (Aljumah, 2020, p. 200). Lightbown and Spada (2021) as well as Ismail and Yusof (2016) explained that learning happens explicitly and consciously in formal situations. In Malaysia, English is placed as second language in all primary and secondary schools (Curriculum Specification, 2015). Malaysian students are required to complete eleven years of formal English language education, excluding preschool. In the Malaysian education system, English language learning occurs in classrooms (Darmi & Albion, 2013). Mastery of English is important for learners to communicate (orally and in writing) in different situations (Curriculum Specification, 2015).  In summary, second language learning means

learners have to process and analyse the information they have learned and English learning happens in a classroom environment.

A recent study by Misbah et al. (2017) suggested that vocabulary problem is one of the factors which cause Malaysian primary school learners to fail in their English. To comprehend this issue, we need to first understand how human learning occurs. There are different views on the causes, processes, and consequences of learning. Schunk (2020) as well as Ertmer and Newby (2013) believe that learning means changes in behavior that result from practice or experience. Hence, learning involves changes in behavior, knowledge, and performance.

Learning theories can be answered from three viewpoints: i) Behaviorist theory, ii) Cognitive theory, iii) Constructivist theory (Ertmer & Newby, 2013). Behaviorist learning theory believes in stimulus response, reinforced behavior, positive and negative reinforcement (Winn, 1990, cited in Ertmer & Newby, 2013). Cognitivism emphasizes how learners' mind receives and organize information Constructivism involves learners' active involvement in constructing knowledge because learners learn from their experience (Bednar et al., 1992, cited in Ertmer & Newby, 2013). It can be concluded that these learning theories are different in addressing the important issues of learning.

As for this study, the focus will be on cognitive theory. According to Yilmaz (2011), the cognitive approach emphasizes making the knowledge meaningful and relating learners' prior knowledge to the new information, which means cognitive theory focuses on the processes involved in learning. Rahman and Shah (2016) claimed that successful language learners employ different cognitive strategies. Recent studies (Chen, 2010; Komachali & Khodareza, 2012; Aliasghar & Naderifar, 2018; Jazuli et al., 2019) have also proven that

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using strategies such as concept mappings, learning through games and flashcards are useful in vocabulary learning. It shows that vocabulary learning is relevant to learners' cognitive processes. Since it concerns more about the learners' cognitive aspects, cognitive theory is employed to explain this phenomenon.

### 2.2.1 Cognitivism

Cognitive theory emphasizes how learners' mind receives and organize information (Schunk, 2012). Cognitive learning concerns more about the existing knowledge of the learners and how they acquire knowledge instead of what learners do (Yilmaz, 2011). In short, cognitivism stresses the importance of what goes inside the learners' minds. For this study, learners' cognitive development is explained through Piaget's theory of cognitive development and learners' mental processes will be explored using McLaughlin's information processing model (1987) as well as Anderson's ACT model (1983).

### 2.2.2 Piaget's Theory of Cognitive Development

According to Piaget, second language learners are at a later stage of cognitive development. For example, Malaysian learners start English language learning at seven, so the way a seven years old thinks is different from a one year old child as they are at different stages of cognitive development. Based on Piaget's stages of cognitive development, seven years old child is in the beginning stage of concrete operational development, in which logical thinking starts to develop (Heo et al., 2011). To understand more about this situation, it is necessary to understand Piaget's basic concepts. As cited in Heo et al. (2011) there are three aspects in Piaget's basic concepts, which are (i) schemata (ii) adaptation (iii) stages of cognitive development.

### 2.2.3 Schema

A schema can be defined as a structure that arranges information into a meaningful system (Liu, 2015). According to Piaget (1952, p.7) schema can be defined as "a cohesive, repeatable action sequence possessing component actions that are tightly interconnected and governed by a core meaning." Schema changes and restructured based on the encounters in learners' learning experiences (Yilmaz, 2011). In short, schema can be described as a set of index cards that fill a person's brain, each card informs the person how to react to the incoming information and it restructures according to a person's encounters. For instance, an individual has schema about ordering food in a restaurant. The schema is stored in form of the pattern of behavior so when the individual comes to the restaurant, he/she retrieves the schema and applies it in the situation which includes reading the menu, ordering food, eating it, and paying the bill.

According to schema theory, learners' background knowledge determines the ease or complexity of understanding a text. Therefore, learners need to achieve a certain level of cognitive development or experience for effective learning to happen. It is thus, necessary for teachers to identify learners' prior knowledge and then provide them with more learning experience during the learning process.

### 2.2.4 Adaptation

As cited in Flavell (1963) Piaget asserts that intelligence is based on two biological attributes which are organization and adaptation. The organization is a habit of human beings to incorporate processes in a systematic way. Adaptation is the nature of a child to interact with the environment.

Based on Piaget's theory (1952, cited in Simatwa, 2010), intellectual development is a process of adjustment to the environment. When a new experience contradicts a person's current understanding, it will lead to a state of disequilibration in the schemata (Pritchard & Wollard, 2010). To achieve the state of equilibrium in the cognitive structure, he/she must modify or reorganize the schemata through adaptation. Assimilation is a process of incorporating new information into an existing schema (Fosnot, 1996). Accommodation is a process of modification when the existing schema does not function and requires changes to deal with new information (Fosnot, 1996). For example, a study by Cook & Cook (2005) described that assimilation happens when a child perceives a dog as a cow because they are four-legged animals, then accommodation happens when she realizes that a cow is physically bigger and it eats grass while a dog is smaller and it does not eat grass.

However, Piaget believes that assimilation and accommodation require time (Simatwa, 2010).As such, a child might involve in an activity but the modification process in the schema may not happen until the child has had further experiences. This also implies that learners are allowed to make mistakes in their learning process. In short, for assimilation and accommodation to happen, learners must be active in their learning. Since problem solving is a skill to be discovered, teachers could create situations that present useful problems to form disequilibrium among learners so that learners get to experiment and discover their learning.

**2.2.5    Stages of cognitive development**

Piaget believes that development precedes learning (Bormanaki & Khoshhal, 2017). There are four stages of cognitive development which are the sensorimotor stage, preoperational stage, concrete operational stage, and formal operational stage.    In the sensorimotor stage children start by exploring the environment around them through senses and physical activities then language. Next is the preoperational stage where children develop their language skills but they have difficulty comprehending the thoughts of others. When a child enters the formal operational stage, they begin to apply advanced levels of thinking or abstract ideas to resolve problems (Heo et al., 2011). It can be concluded that Piaget's stages of development focus on the logical development of learners, how they learn at different ages. However, learning only happens within the stages of development.

In short, Piaget's theory implies that learners are equipped with schemas to start the learning process. Their interaction with the environment enables learners to constantly adapt their schemas through the assimilation and accommodation process. Cognitive development is a continuous reorganization of mental processes due to biological maturation and experiences (Bormanaki & Khoshhal, 2017). For example, older children are considered to be more intelligent than younger children due to maturation and experiences. As a result, Piaget's theory implies that it is important for teachers to understand that the learning process happens to every learner at a different rate to promote effective learning. Learners should be provided with the opportunity to experiment with ideas or concepts (Lyster & Sato, 2013). For instance, some learners might find it easy to grasp complex information but for others, it could be a daunting task. In this situation, teachers could provide activities or learning strategies such as vocabulary games, mnemonic techniques so that learners can practice the new knowledge. Ertmer and Newby (2013) suggested that by using analogies or metaphors,

the teacher could arrange the new information in a way that enables learners to connect their prior knowledge with the new information.

Second language learning happens consciously. To provide suitable strategies and activities for learners, teachers first need to understand learners' mental processes. Language learners' unique mental factors and characteristics are crucial in language learning (Fahim & Zaker, 2014). Learners' mental processes can be explained through information processing models of second language learning. There are two information-processing models in second language learning: McLaughlin's (1990) information-processing model and Anderson's (1985) Active Control of Thought (ACT) model. As cited in Ellis (1994), information-processing frameworks perceive language learning as a complicated skill that includes mental processes. The purpose of using information processing models is to explain how second language learners process linguistic information, and how their ability to process the second language develops over time. This model conceptualizes learners' mental processes through the metaphor of a computer processing, encoding, storing, and decoding data. Meanwhile, the ACT model (1983, cited in Lyster & Sato, 2013) differentiates between what learners know and what learners do through declarative and procedural knowledge (O'Malley et al., 1987). In summary, these two models explain how learners process their learning from new information to become an automatic production. The details of the information processing model as well as ACT model are explored in the following sections.

### 2.2.6 Information-processing model

As cited in McLaughlin (1987), learning a second language is like learning a skill, there are different aspects of the task that requires multiple practices so that it becomes a fluent performance. McLaughlin (1987) proposed that automatization and restructuring are the predominant aspects of cognitive theory. Learners first need to acquire controlled

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attention, through sufficient practice the skill will become automatic processing. It is stored in the long- term memory. Then, short-term memory would be made available to enable further language learning.

In addition, McLaughlin (1987) suggested a process called restructuring. Restructuring means the modification of knowledge representation from 'exemplar-based to rule-based representation' (McLaughlin, 1990, p.118), which happens due to repeated movement from a controlled process to an automatic process. In short, when learners modify their existing knowledge, they tend to make language errors. Therefore, the repeated activation of the skill leads to automatic production.

Second language learning is an acquisition of skill and it involves conscious processing. This could be a challenging task for learners' cognitive skills and short term memory. For example, a simple greeting like 'Good morning' might be a daunting task for the early learner. However, it can be practiced until it becomes a fluent performance. The word 'Good morning' will then be stored in long-term memory, which can be accessed rapidly when needed.

### 2.2.7 Active Control of Thought (ACT) model

Anderson's (1983, 1985) Adaptive Control of Thought (ACT) can be defined as information processing theory of cognition and memory. The function of this model is to clarify what occurs in the acquisition of cognitive skills. Besides, Anderson's ACT model is a theory underpinning research on learning strategies. A transition from declarative to procedural knowledge occurs when learners learn a language (Macaro, 2003). In short, learning happens when declarative knowledge becomes procedural knowledge.

According to Anderson (1983), memory can be divided into three categories: working memory and declarative long- term memory and procedural long-term memory. Knowledge comes in two types which are declarative and procedural knowledge. Declarative knowledge means knowledge about the rules of language. Procedural knowledge is defined as knowledge of how to do something. Both declarative and procedural knowledge belong to different categories and are stored differently (Gagné, et al., 1993). For instance, a learner might initially understand the word "bow", because that individual has consciously learned the definition of the word. Nonetheless, he/she might not be able to construct sentences with the word "bow" in his/her writing. That is, this learner has declarative knowledge of that word, but that word has not been proceduralized yet. It is suggested that through practice, learners would be able to use the word without much hesitation. According to Anderson (1983), this is how learning occurs which is when declarative knowledge becomes procedural. Anderson (1983) further commented that declarative to procedural knowledge requires going through three stages: the cognitive stage, associative stage, and the autonomous stage. The cognitive stage is a process where the procedure is learned. In the examples outlined above, in the cognitive stage, the learner knows the word "bow" means a knot tied in two loops (noun) and it is also defined as bending the head as the sign of respect which is the verb. The associative stage is the process in which the learner learns about the application of knowledge. That is, the learner practices the use of the word "bow" with fill in the blanks exercise to distinguish between the noun and the verb. This implies that the learner learns to associate the practice with declarative knowledge. The autonomous stage is where the skill becomes an automatic production. In this stage, not only the learner could build sentences with the word "bow" but could also

integrate the word into his/her speech. That means the knowledge has become increasingly automatic where the use of declarative knowledge is no longer important.

It can be summarized that McLaughlin's (1987) information processing model and Anderson's (1983) Adaptive Control of Thought (ACT) model identify the importance of transferring knowledge in the process of learning. However, the process of transferring new information into knowledge could not happen without substantial opportunities for practice. The practice involves the process of transferring knowledge, from declarative to procedural knowledge. As a result, learning occurs when learners can transfer the information to another context. According to Bransford et al. (1999) "Transfer is an active, dynamic process rather than a passive end-product" (p. 41); and it "requires learners to actively choose and evaluate strategies, consider resources, and receive feedback" (p. 54). This implies that for the transfer process to happen it requires learners' participation. As such, the use of strategies in language learning is crucial.

**2.2.8  Strategies in vocabulary learning (VLS)**

Learning strategies means approaches used by learners to enhance their learning (Oxford, 1990). Language learning strategies is important to assist learners to direct their learning (Oxford, 2011). Studies have shown that the use of strategies will affect learners' language proficiency levels.

Subon (2013) conducted a study to identify the pattern of VL strategies among 88 Malaysian Form Six students. A taxonomy of vocabulary learning strategies by Gu & Johnson (1996) and Fan (2003) was used. The data was analysed using descriptive statistics and the results were noted quantitatively and qualitatively. The results revealed that the

students were a medium frequency of strategy use, which means they did not apply strategies frequently in their vocabulary learning and they had average proficiency levels in English.

Mutalib et al. (2014) investigated vocabulary learning strategies among 31 Malaysian Technical and Vocational Education and Training students. Questionnaires and semi structured interviews were employed as an instrument. Three students were randomly chosen for the interview. The data were categorized into vocabulary learning strategies. The results revealed that students with limited vocabulary learning strategies would encounter problems in acquiring English.

Ahmad et al. (2016) investigated the use of vocabulary strategies among 31 pre-Diploma Malaysian students. The students' vocabulary size was determined through Vocabulary Size Test and a questionnaire was employed to find out learners' strategies in vocabulary learning. Finally, a semi-structured interview was conducted. Eight learners were involved in the interviews. The findings indicate that the students were medium strategy users. This shows that strategies in vocabulary learning were not frequently applied. There were only four students with vocabulary size of over 8,000 and the frequency of them employing vocabulary learning strategies was higher as compared to students with a vocabulary size lower than 8,000. Therefore, insufficient use of vocabulary learning strategies could hamper learners from performing well in vocabulary learning.

Similarly, Nie and Zhou (2017) investigated vocabulary learning strategies employed by excellent English learners. Data were collected through case study approach which consisted of a questionnaire and structured interview. Three postgraduate students at a university in China participated in the study. The findings indicated that excellent language learners used more strategies in their vocabulary learning.

These studies investigated learners' strategies in vocabulary learning, both qualitative and quantitative methods were employed as instruments. The studies indicate that the frequency use of strategies will influence learners' vocabulary learning. Besides, the studies also indicate that different learners have different strategy preferences. Vocabulary learning strategies are used by students in various fields to suit their learning preferences and styles (Hadavi & Hashemi, 2014). Students' needs and preferences in vocabulary learning should be regarded to create effective learning (Ayin & Shah, 2020). According to Abdul Rahman and Nazri (2020), "There is no study that indicates any absolute strategies used for students of any fields of study."(p.19) This tendency highlights the need to further explore Malaysian primary school students' vocabulary learning strategies.

### 2.2.9 Classification of vocabulary learning strategies

Vocabulary learning strategies have different classifications. Oxford (1990) has divided learning strategies into two categories, direct and indirect strategies. Direct strategies consist of memory, cognitive and compensation, whereas, indirect strategies compromise metacognitive, affective, and social. Gu and Johnson (1996) divided vocabulary learning strategies into two categories: Metacognitive (of planning, monitoring, and evaluating) and Cognitive strategies (of attention, rehearsal, and production). Besides, O'Malley and Chamot (1990) classified learning strategies into three groups, which are metacognitive, cognitive, and social/affective strategies. Studies have shown that learners apply different strategies in their vocabulary learning.

A study by Yazdi and Kafipour (2014) investigated vocabulary learning strategies used by 20 Iranian undergraduate EFL learners. Data was collected using a quantitative method, learners were required to write journals on their daily vocabulary learning for six

weeks. Then, data were transcribed and analysed descriptively. It was found that learners frequently learn vocabulary by using vocabulary notebooks, connecting synonyms to antonyms.

Kavvadia (2016) studied the VLS used by 81 English language learners in a primary school in Greece. A questionnaire was used as an instrument. Data were analysed using descriptive statistics. The findings indicated that learners used pictures and translation to discover meaning, and used songs, games, stories and vocabulary notebooks.

Thékes (2017) investigated the VLS used by 86 Hungarian sixth-grade primary school students. Stoffer's (1995), Schmitt's (1997) and Pavičič's (2008) questionnaires were adapted as an instrument. The findings indicated that they learned vocabulary through translation, dictionaries, reading English comics, listening to English songs, consulting the teacher, and rote learning.

Noprianto and Purnawarman (2019) explored the vocabulary learning strategies of 116 Indonesian high school students. A questionnaire by Schmitt (1997) was employed. Data were analysed using descriptive statistics including minimum score, maximum score, mean and standard deviation. The findings revealed that learners were medium strategy users.

Based on these studies, two points are highlighted. First, it can be summarized that learners employ different strategies in vocabulary learning. Second, Schmitt's (1997) questionnaire was used in finding out learners' strategies. Vocabulary learning strategies can be divided into five categories. According to Schmitt (1997), the five categories are cognitive strategies, metacognitive strategies, determination strategies, memory strategies and social strategies.

**Cognitive strategies.** Strategies that are more to mechanical means. Cognitive strategies can be defined as "repetition, and using mechanical means to study vocabulary including keeping vocabulary notebooks" and the emphasis is not on mental processing (Schmitt, 2000, p. 136). Atasheneh and Naeimi (2015) conducted a study on 58 pre-intermediate university students in Iran. Students were appointed into two experimental and control groups based on their vocabulary pre-test results. Students in the experimental group were taught mechanical techniques. Post test results indicate that mechanical techniques could enhance learners' vocabulary knowledge.

**Metacognitive strategies**. Learners' effort to monitor their learning process and employ appropriate learning methods. Metacognitive strategies involve learners arranging, planning, and evaluating their language learning (Oxford, 1990).

**Memory strategies**.  Strategies that link the vocabulary to learners' background knowledge through imagery, keywords, grouping, associating, or semantic grids (Schmitt, 1997).

**Determination strategies**. Determination strategies include strategies such as guessing from context, contextual clues, referring to a dictionary and identifying parts of the speech. Schmitt (1997) explained that textual context, pictures, spoken discourse, gestures, or intonation that could give clues to meanings are included in contextual clues. Students would find out the meanings of words based on the context, structural knowledge, and reference material. As cited by Alamadi et al., (2018) guessing in a context such as using dictionary as well as inferring meaning from context could increase learners' vocabulary size.

**Social strategies**. Learners learn new words through interacting with others. As cited in Oxford (1990), social strategies involve learners asking questions, cooperate with others in their learning process.

Ayin and Shah (2020) conducted a study on Malaysian primary school students' strategies in vocabulary learning. The focus of this study is learners' vocabulary learning strategies. This study is different from the present study as the present study investigates both teachers' and learners' vocabulary teaching and learning strategies. Questionnaires were employed to investigate learners' vocabulary learning strategies. This study suggested that students' needs and preferences in vocabulary learning should be regarded to create effective learning. In short, the effectiveness of vocabulary learning strategies is relevant to students' preferences.

## 2.3    Teachers' teaching practices

Although strategies in vocabulary learning are crucial in determining learners' vocabulary knowledge, the transfer process could not happen without the support from the teachers. Teachers first should provide them with knowledge about strategies. As cited in Blanton (1998) to initialize and use schema for learning, it is significant for a learner to be "made aware of his background knowledge and exposed to strategies to 'bridge' from pre-requisite skills to learning objectives" (p. 172). It will be easier for learners to transfer their learning to new contexts if they are aware of how they think and learn (Perry, 2002; Halpern & Hakel, 2003). In short, learners need exposure and opportunities to practice their new learning in different ways. Teachers will support the transfer process by providing them with strategies. In this way, the transfer of learning will become an automatic production.

O'Malley and Chamot (1990) proposed that teachers could introduce to learners language learning strategies based on Anderson's ACT* model, strategies are defined as a set of productions that are compiled and fine-tuned until they become procedural knowledge' (p. 43). Hence, to obtain proceduralisation and automatization, language learning strategies (LLS) are to be introduced to learners with (IF) and (THEN) clauses. For instance, "IF the goal is to comprehend an oral written text, and I am unable to identify a word's meaning, THEN I will infer the meaning from the text" (O'Malley & Chamot, 1990; p.52). It shows that IF stands for the conditions and THEN represents the actions. In short, this IF and THEN method can be described as a 'formula' for learners to apply strategies whenever they encounter problems in their language learning. However, before learners can apply this 'formula', they need to be exposed to different types of strategies.

Stavy et al. (2019) investigated the use of language games in supporting vocabulary retention. The study was conducted on primary three Sarawakian English learners. Vocabulary retention tests were conducted. The results showed that learners "scored better after learning vocabulary through language games than through conventional teaching" (Stavy et al., 2019, p. 113).

Kee and Chong (2019) investigated the use of vocabulary journals in Malaysian English learners' vocabulary learning. The study was conducted on 27 Year five students in a primary school in Johor. Pre-vocabulary tests and post-vocabulary tests, semi structured interviews and students' works were employed as instruments. The vocabulary journal included "student- friendly definitions, visual representations, and writing sentences; each template had spaces for four words" (p. 111). The results indicated that vocabulary journals assisted learners' vocabulary retention.

Razali et al. (2017) investigated the use of theme-based vocabulary card games on Malaysian Year four learners' vocabulary retention. A quiz was employed for data collection. The findings indicated that the learners recalled the vocabulary better after having played the card game.

In addition, Jazuli et al. (2019) explored the use of pictures in vocabulary teaching for low proficiency school learners via PI- VOC. The study was conducted on 20 primary two English learners in an urban school in Melaka. Worksheets and interactive English games were employed as research instruments. The results showed that learners "were able to understand and remember the new words better when they learned the words with PI-VOC." (Jazuli et al., 2019, p. 317).

In short, different strategies were introduced to the learners to increase their vocabulary knowledge. However, Kamile et al. (2012) suggested that teachers' vocabulary teaching influences learners' strategies in vocabulary learning. A study by Muhammad and Kiely (2018) mentioned that Malaysian teachers' teaching practices are influenced by their beliefs and experience. Wang and Yamat (2019) also suggested that Malaysian teachers should utilize more creative and innovative ways in their vocabulary teaching practices. Therefore, further studies are needed to investigate Malaysian teachers' vocabulary practices. The present study focuses on investigating both students' and teachers' strategies in vocabulary learning.

## 2.3.1 Strategies in vocabulary teaching

Vocabulary is important in language learning. As cited in Gafoor and Remia (2013), children will perform better in speaking and writing if they have a sufficient vocabulary. Embi and Amin (2010) ascertained that having a wide range of vocabulary

enables learners to communicate effectively in the language. The study by Misbah et al. (2017) also identified that learners fail in their English because of vocabulary problems. Since vocabulary is a part of language learning, there are ten strategies that teachers could employ to assist learners to comprehend and organizing new information in vocabulary learning. The ten strategies are advance organizers, concept mapping, mnemonic, dictionary use, guessing from the context, note taking, word games, word lists, flashcards as well as watching movies with subtitles. The ten strategies are described in the following:

**Advance organizers**. According to Mercuri (2010), graphic organizers can be tools that enable teachers to examine students' learning on a particular topic, assess ongoing learning, and design and modify instruction to meet students' needs. They can also be an integral part of a supportive classroom environment. In short, advance organizer can be described as a framework that guides learners to get new ideas by linking them to the existing cognitive structure. That is, advance organizers could be used before instructional activities to initialize background knowledge so that learners have a conceptual framework to integrate the new information.

Mayer (1979) discovered four main features of an effective advance organizer: (1) It is simple and short; (2) it connects the similarities of the old and new information; (3) suitable for different learning situations; (4) provides opportunities for learners to generate a logical relationship between new information and old knowledge. Mohammadia et al. (2009) conducted a study on the role of advanced organizers in English language learning as a second language. The experimental group was taught with advanced organizer method and the control group was taught the conventional method by the same teacher. The findings show that the experimental group improved significantly. Evans (2003) studied the effects

of graphic organizers for Japanese readers on English expository texts and found that the integration of graphic organizers will lead to meaningful learning, and enhance reading comprehension.

In short, learning becomes more effective by employing advanced organizers. As such, it enables learners to transfer and apply new knowledge in a different context. It can be suggested that through the use of advance organizers, teachers assign learners the chance to create links between both new and old information and apply the knowledge to facilitate their learning.

**Concept mapping**. Categorized as either cognitive or metacognitive strategy. The underlying concept for concept-mapping strategy. According to Sundar (2022) is concept mapping technique combines two powerful learning strategies: retrieval practice and elaboration. Learners construct their understanding by connecting new information with prior knowledge. As a result, meaningful learning happens. For example in vocabulary learning, the concept mapping strategy enables learners to emphasize comprehending the words, connect the newly learned words with their prior knowledge in a logical way, conceptualize the relationship in an organized manner, then evaluate their understandings. According to Tarkashvand (2015), cognitive activities enable learners to create meaningful learning, better conceptual clarity and increase their vocabulary retention. In a study conducted by Saed et al. (2015) to find out the effectiveness of concept- mapping on science and language learning, findings revealed that it is effective in promoting meaningful learning and encouraging learners to be self-regulated. Naderifar (2018) investigated the use of concept mappings in vocabulary learning. It was identified that concept mapping could improve learners' self-regulation in vocabulary learning. Aziz and Yamat (2016) studied the

use of mind-mapping techniques to increase learners' vocabulary lists. Data were collected from 38 UKM students for four weeks. The study found that the mind-mapping technique could improve students' vocabulary lists. In short, the concept mapping strategy is effective in facilitating language learning and assisting learners to be independent in their learning.

**Mnemonic**. The use of mnemonics in vocabulary learning is useful in terms of increasing vocabulary learning and retention. Atkinson (1975) as cited in Fasih et al. (2018) acknowledged mnemonics as an effective method for foreign vocabulary learning. In addition, according to (Thompson, 1987 cited in Amiryousefi & Katari, 2011) mnemonic method is effective for vocabulary learning as compared to traditional methods such as the context method.

The mnemonic technique requires learners to create a link between their prior knowledge and new knowledge. As cited in Atkinson (1975), mnemonics techniques are defined as mental aids which guide learners in recalling distinguish items and information; for instance new word forms, numbers, and formulas. It requires learners to dismantle the formal segments of an item so that it would be easier for them to remember. Facts and information can be organized using keywords, peg words, and letter strategies. These methodologies are relevant to imagination and association, which also have a positive impact on remembering and retrieving new information (Mastropieri & Scruggs, 2017).

More recently, Azmi et al. (2016) examined the effectiveness of using mnemonic techniques in learning English vocabulary. The result of the findings identified that the respondents got a higher score in their evaluation by using mnemonic techniques as compared to the conventional way of English vocabulary teaching. A study by Fasih et al. (2018) investigated how keyword mnemonic vocabulary teaching could improve

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comprehension and vocabulary learning among 256 third year senior high school students in Iran. The findings showed that mnemonic vocabulary instruction improved students' vocabulary learning. Atay and Ozbulgan (2007) investigated the effects of memory strategy instruction on vocabulary recall. The study showed that memory strategies or mnemonic strategies can improve vocabulary learning.

Collectively, a similarity between the three strategies has been identified. That is, the use of cognitive strategies in language learning is to create a firm link between learners' prior knowledge and new information. Other strategies such as referring to the dictionary, guessing meaning from the context, and note taking can also be considered cognitive strategies (Bai, 2018). Besides, other strategies can be applied in vocabulary learning, such as using wordlists, watching English movies, and using flashcards. These strategies will be explained in the following:

**Dictionary**. An effective tool to enhance vocabulary acquisition while reading (Hulstijn, 1992) and improve reading comprehension (Davies, 1989; Vesel 2005). Studies reveal that bilingual dictionaries are preferred by the majority of L2 learners (Laufer,1997; Schmitt,1997). Learners prefer bilingual dictionaries because it is easier to find the meanings of translation in their L1 (Scholfield,1982). Bilingual dictionary could enhance L2 learners' comprehension as the definitions are provided in the learners' first language (Scherfer, 1993).

Luppescu and Day (1993) mentioned that students using dictionaries performed significantly better on the vocabulary retention test than those who did not. Cho and Krashen (1994) proposed that reading plus dictionary use resulted in higher vocabulary retention as compared to reading only. Xu (2010) studied the effect of dictionary use on second language

incidental vocabulary acquisition. The findings revealed that the use of a dictionary has a positive impact on vocabulary learning and reading development.

**Guessing from the context.** McCarthy (1988) believes context happens within the text itself such as the morphological, syntactic, and discourse information. Learning from context includes learning from extensive reading, conversation, and listening to stories, films, television, or the radio (Nation, 2001). It requires four important elements: the reader, the text, the words, and clues to activate guessing in a written or spoken text. This technique encourages learners to be self-regulated and independent in their learning. Learners can establish meanings through illustrations, the similarity of spelling or the mother tongue, and general knowledge (Walters, 2004).

Fan (2003) reported that among the 56 vocabulary learning strategies identified, guessing from context was the second most used strategy. The findings of this study also revealed that proficient learners prefer to use both guessing from context and dictionary strategies in learning new vocabulary. As cited in Letchumanan (2015) learning from context is beneficial and effective, as native speakers learn most words this way However, Cobb (2007) clarified that new vocabulary occurs at a ratio of 1:10. Therefore, for a typical learner with a vocabulary of 2,000 word families, it is impossible to guess the meaning successfully. Learners often recall only 1 out of every 12 tested words, or less than 1 word for every 1,000 words, after reading a text without a particular objective of learning new words (Dronjic, 2019). Dronjic (2019) further emphasized the importance of vocabulary teaching, "learners in a typical integrated-skills classroom without a specific focus on vocabulary simply do not know enough of it" (p. 32).

**Note taking.** Vocabulary notebook is an effective approach to learn vocabulary (Alhatmi, 2019). As cited in Schmitt and Schmitt (1995), other than L1 translation, entries such as parts of speech, pronunciation, sentences, and collocations should also be included in the notebooks. Note taking strategy encourages learners to be independent. Taking notes enables learners to create their way of remembering newly learned words (Waring, 2002).

As reported by Naderifar (2018) vocabulary notebooks could enhance learners' self-regulation in vocabulary learning. Velaa and Rushidi (2016) analysed the effect of vocabulary notebooks on EFL students' vocabulary acquisition. The result showed that the use of vocabulary notebooks is effective in vocabulary learning. Another study by Walters and Bozkurt (2009) mentioned that vocabulary notebooks can be an effective learning tool in EFL classrooms.

**Games.** According to Chen (2010) learning through games is in arousing children's learning interest. Vocabulary games assist learners to store new words and the meanings in their memory, vocabulary games can be implemented after direct instructions are given in class (Paynter et al., 2005).

Aghlara and Hadidi- Tamjid (2011) investigated the effects of using a digital computer game on Iranian children's vocabulary learning. The findings indicated that using digital computer games in vocabulary learning is an effective strategy. Another study by Bakhsh (2016) shows that using games as a tool in vocabulary teaching enables young learners to learn vocabulary effectively, the researcher also suggested games such as Hot Potatoes, Memory Challenge, Last One Standing, Pictionary, and Bingo. Similarly, Aslanabadi and Rasouli (2013) conducted a study on the effect of games on the improvement of Iranian EFL vocabulary knowledge in kindergartens. The study was conducted at two

kindergartens. The results revealed using games in vocabulary learning could motivate learners and improve their confidence. In summary, vocabulary games can be used to strengthen learners' vocabulary knowledge.

**Word list**. A vocabulary learning method in which learners learn the second language (L2) along with their first language (L1) definition (Baleghizadeh & Ashoori, 2011). A word list is one of the effective strategies for vocabulary learning and it does not require much time. Therefore, it is widely used by learners (Thornbury, 2002).

Sitompul (2013) examined the effect of using flashcards and word lists on fifty graders' vocabulary mastery. It was found that students' vocabulary mastery improved after they were taught using flashcards and wordlist. Van Benthuysen (2003) similarly reported positive results in using the University Word list (UWL) with 14 Japanese EFL college students for 9 months. The learners were given sublists every 2 weeks, along with example sentences. The learners showed significant vocabulary growth at the end of their program.

**Flashcards**. Sets of cards that contain information such as words and numbers. According to the study by Sitompul (2013) using flash cards is effective in enhancing learners' interest to learn English vocabulary. Komachali and Khodareza (2012) also conducted a study to investigate the effect of using vocabulary flash cards on Iranian pre-university students' vocabulary knowledge. The results revealed that employing flashcard strategy vocabulary learning is an effective strategy. Erbey et al. (2011) studied the effects of using flashcard-based instruction with a reading racetrack to teach letter sounds, sight words, and math facts to elementary students with learning disabilities. The results show that some learners showed significant improvement in their learning.

**Watch movies with subtitles.** Teachers can encourage learners to learn English vocabulary by watching English movies. Movies can be used as a tool to promote language learning. Using movies to teach a language can increase learner's motivation and lower the anxiety of learning a language (Etemadi, 2012). As compared to stagnant text and audio materials, movies could motivate learners intrinsically in language learning (King, 2002).

Movies with subtitles are also effective in assisting learners' vocabulary learning. Sirmandi and Sardareh (2016) investigated the effectiveness of bimodal subtitle films on vocabulary learning among 60 Iranian learners. The results showed that bimodal subtitle films enhance vocabulary learning. Neuman and Koskinen (1992) studied the effects of captions on vocabulary and concept learning among seventh and eighth graders. Captions are "subtitles that can only be seen on television sets equipped with special electronic telecaption decoder" (Neuman & Koskinen, 1992 p. 97). Learners who were exposed to captioned TV outperformed the groups which were not provided with captions in vocabulary and written recall tests. Winke et al. (2010) examined the effects of captioning order, target language, and language proficiency on the comprehension of videos. The results showed that learners that were exposed to captions did well in their vocabulary and comprehension tests.

Although all these strategies are useful in vocabulary learning, every learner is different when it comes to learning. In the process of learning vocabulary, combining strategies is more effective than employing a particular strategy (O'Malley & Chamot, 1990). That means, using strategies such as advanced organizers, mnemonics and concept mapping is effective in vocabulary learning but they might not be suitable for all learners. By exposing learners to different strategies, learners will have more options in identifying strategies that are suitable for themselves. However, knowing the strategies does not mean

the learners will integrate them into their learning. Schunk (2008) proposed that learners require careful instructions to make good choices of learning strategies in their vocabulary learning and it can be applied through strategy instruction. This study identifies CALLA model as a suitable strategy for instruction for primary school learners' vocabulary learning.

## 2.4 Strategy Instruction Cognitive Academic Language Learning Approach (CALLA)

Strategy Instruction Cognitive Academic Language Learning Approach (CALLA) perceives language as a cognitive ability. Therefore, it should be developed to the extent that learners can utilize it independently. In the CALLA model, both learners and teachers share equal responsibility in the learning process. Teachers introduce and train learners with learning strategies and learners continue to practice and master the use of strategies. CALLA model is recursive, this model provides an option for both learners and teachers to revisit the prior instructional phases as needed (Chamot, 2005). Learners can opt to revisit the prior phase or proceed to the next instructional phase when there is a need.

According to Chamot (2008), there are three main strategy instruction models. These three strategy instruction models are summarized in Table 2.1, they are the Styles and Strategies- Based Instruction model (Cohen, 1998), CALLA model (Chamot, 2005) as well as Grenfell and Harris model (1999). These models emphasize providing learners with practice opportunities so that learners could use the strategies independently. Besides, these instructional models have two similar features. First, they focus on developing learners' metacognitive perception through learning strategies. Secondly, strategy instructions are facilitated through teachers' demonstration and modeling (Chamot, 2004). In summary, they emphasize the use of strategies to promote self-regulated learning and the role of teachers in the learning process.

**Table 2.1:** Models for Language Learning Strategy Instruction (Chamot, 2008)

| Style and Strategies-Based Instruction, SSBI Model (Cohen, 1998) | Cognitive Academic Language Learning Approach, CALLA Model (Chamot, 2005) | Grenfell & Harris (1999) |
|---|---|---|
| Teacher as diagnostician: Help students to identify current strategies and learning styles.<br><br>Teacher as language learner : Shares own learning experiences and thinking processes | Preparation : Teacher identifies students' current learning strategies for familiar tasks. | Awareness raising : Students complete a task and then identify the strategies they used. |
| Teacher as learner trainer : Trains students how to use learning strategies. | Presentation : Teacher models, names and explains new strategy : asks students if and how they have used it. | Modeling: Teacher models, discusses value new strategy, makes checklist of strategies for learner use. |
| Teacher as coordinator : Supervises students' study plans and monitors difficulties. | Practice : Students practice new strategy; in subsequent strategy practice, teacher fades remainders to encourage independent strategy use. | General practice : Students practice new strategies with different tasks. |
| Teacher as coach: Provides ongoing guidance on students' progress. | Self- Evaluation : Students evaluate their own strategy use immediately after practice. | Action planning : Students set goals and choose strategies to attain those goals. |
| | Expansion : Students transfer strategies to new tasks, combine strategies into clusters, develop repertoire of preferred strategies. | Focused practice: Students carry out action planning using selected strategies; teachers prompt so that students use strategies automatically |

**Table 2.1** continued

| Assessment : Teacher assesses students' use of strategies and impact on performance. | Evaluation : Teacher and students evaluate success of action plan; set new goals; cycle begins again. |
|---|---|

The comparison of these three models reveals that the most suitable to be used for the purpose of this study is CALLA model. First, CALLA model is an instructional approach that integrates language development with content area instruction and explicit instruction in learning strategies. Second, CALLA model focuses on learning, rather than teaching. Third, CALLA model is an approach based on the belief that learning strategy instruction requires the role of the teacher (Chamot, 2005). Besides, CALLA focuses on producing learners who are independent in their learning, which is similar to the goal of the Malaysian English Curriculum Specification (2015), learners would be able to apply English language that they have learned in different situations. CALLA model also emphasizes on the role of both teachers and students, both teachers and students share equal responsibility in vocabulary learning. Teachers and learners' responsibilities in language learning can be summarized through Figure 2.1.

TEACHER'S RESPONSIBILITY

PREPARE
PRESENT
PRACTICE
EVALUTE
EXTEND

ATTEND
PARTICIPATE
APPLY                THE
STRATEGIES
ASSESS               THE
STRATEGIES
USE         STRATEGIES
INDEPENDENTLY

STUDENT'S RESPONSIBILITY
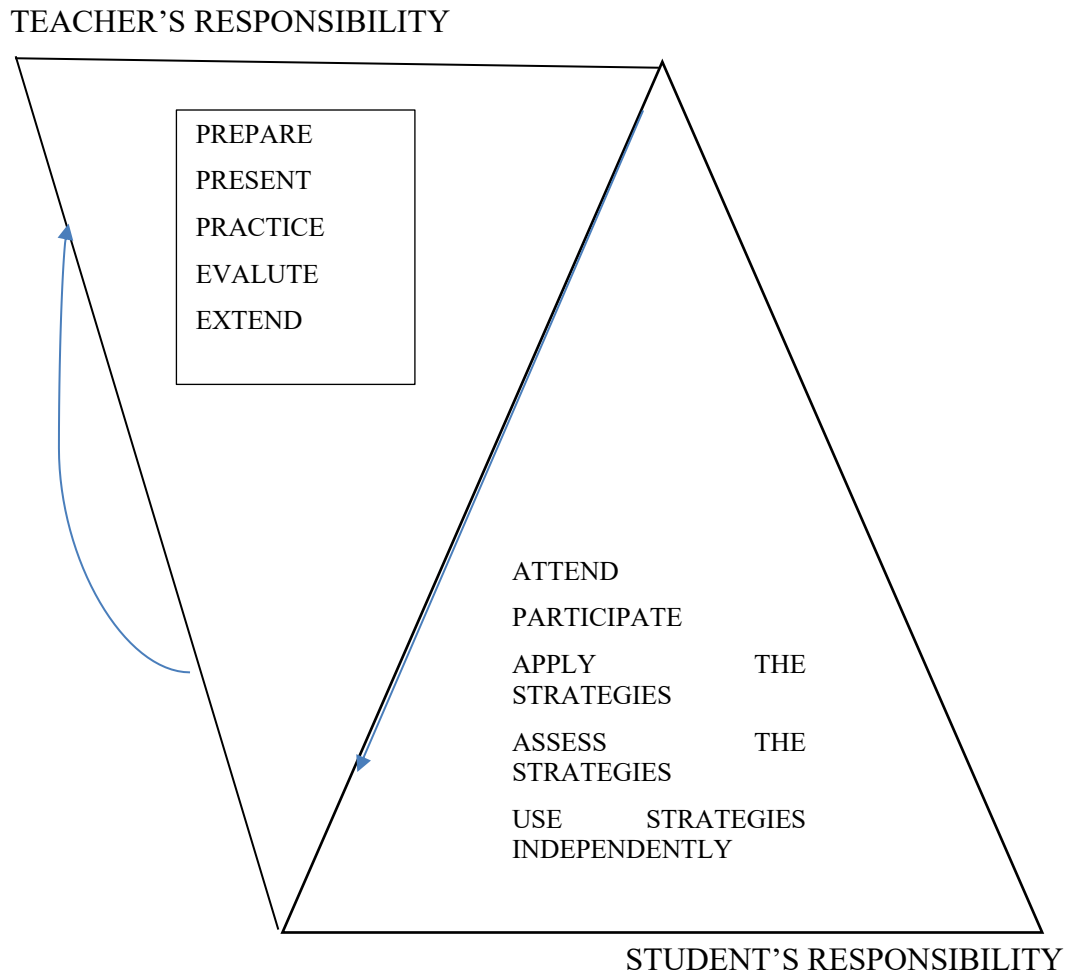
**Figure 2.1:** CALLA Framework for Strategy Instruction (Chamot, 2009)

## 2.4.1   Prepare

Prepare is a phase for teachers to learn about learners' existing knowledge and for learners to identify the strategies that already exist in their prior knowledge (Chamot, 1999). Marzano (2004) mentioned that "What students already know about the content is one of the strongest indicators of how well they will learn new information relative to the content" (p. 1). Activities for this stage includes class discussion about the strategies that can be applied to the tasks, think aloud session, teachers can also use questionnaires and checklists to identify the strategies they used in their learning as well as using diary entries (Chamot, 1999).

### 2.4.2   Present

In this phase, teachers need to explain and model the learning strategy. Teachers can discuss about the characteristics, the use, and applications of the strategy explicitly by using examples. Besides, teachers can also relate to her own strategy use. For example, a teacher can first introduce to the students different type of strategies that she applied in her own learning, the students will need to recall the strategies that they observed. The teacher will then further explain the strategies and how to apply them effectively (Chamot, 1999). That means learners are introduced to different strategies and they have the choice to choose strategies that are suitable for their learning.

### 2.4.3   Practice

In this phase, students can practice the learning strategies with an authentic learning task. For example, students are given a story to read, first the students talk about images in the story, discuss the new words with their peers or guess the meanings by using context cues, and then concluding the story. Students can practice the strategies through any language or content task and language modalities (Chamot, 1999). Students understand the words better when they are given the opportunity to process the information through activities or games (Beck et al., 2002). The students apply the strategies with the assistance of the teachers (Cubukcu, 2008).

### 2.4.4   Evaluate

In this phase, students evaluate their own success in employing the strategies (Chamot, 1999). Activities that can be used are self- questioning, discussions after strategies practice, learning logs, checklists for strategies employed, as well as open ended questionnaires for students to identify the usefulness of each strategy (Cubukcu, 2008).

### 2.4.5 Extend

In this final phase, students will decide on the strategies that they found to be effective, employ the strategies to other contexts, and devise their interpretations of metacognitive learning strategies (Chamot, 1999). That means learners have become independent and self- regulated in their learning.

In short, these five stages can be related to declarative knowledge in Anderson's ACT model. However, the transfer of information from declarative knowledge to procedural knowledge could not happen without the role of the learners. CALLA model is a learning strategy instruction that emphasizes making the learners more active by teaching them how to learn and how to use what they have learned to solve problems, which means this model assists learners to be self -regulated and independent in the process of learning.

To be independent in the learning process, learners have to go through five stages: (1) Attend; (2) Participate; (3) Apply strategies with guidance; (4) Assess strategies; (5) Use strategies independently (Chamot, 2009). These five stages can be described through metacognitive strategy model. Metacognition is defined as awareness and control of cognitive processes and strategies, such as learners' selecting suitable strategies in completing a task (Flavell, 1976). A study by Mahmoudi et al., (2010) found that explicit metacognitive knowledge such as understanding a task and applying suitable strategies assist language learning to be more effective. According to Boekaerts (1999) there are three metacognitive strategies are most critical for regulating the learning process, namely, planning, monitoring,  and evaluation. The strategy of planning includes understanding the task as well as selecting appropriate cognitive strategies to achieve the learning goal. Then, it proceeds to the monitoring process. Learners will need to check their

learning current progress toward the achievement goals. Evaluation stage occurs after the task has been completed. Learners can assess their task performance and the effectiveness of the strategies. Learners will start to manage their learning by determining the best method of learning. The following part will further explore the use of CALLA model in language learning.

## 2.5    CALLA model: A Review

This section includes a review of the studies on CALLA model, the findings and the conclusion are presented. Moreover, the gaps in the literature are summarized and highlighted at the end of this section.

### 2.5.1    Studies on Cognitive Academic Language Learning Approach (CALLA) model

There are studies conducted to investigate the effectiveness of CALLA approach in language learning. A study conducted by Lye and Goh (2017) to compare the effectiveness of two instruction models, which are the Metacognitive Pedagogical Sequence (MPS) and the Cognitive Academic Language Learning Approach (CALLA). Metacognitive strategies, planning, monitoring and evaluation were individually taught to learners. The CALLA Handbook: Implementing the Cognitive Academic Language Learning Approach (Chamot & O'Malley, 1994) and The Learning Strategies Handbook were employed as guidance. Besides, participants were encouraged to make their own decisions on selecting the suitable metacognitive strategies for their listening tasks. A quasi-experimental research was conducted among 50 Malaysian ESL learners at a tertiary institution in Malaysia. The results showed that learners' listening comprehension performance using both models improved significantly compared to their pretest scores.

Another study by Marimuthu et al. (2016) determined the effectiveness of cognitive academic language learning approach (CALLA) developed by Chamot (2005) in helping UiTM learners to improve their reading comprehension performance. Participants were required to join a series of workshop sessions in order to master the metacognitive strategies in their reading comprehension lessons. Strategy instruction was delivered as prescribed in Chamot's (2005) Cognitive Academic Language Learning Approach (CALLA) model of teaching learning strategies. Adaptation to the model was made to suit study requirements. A quasi-experimental design was utilized. Results of the study showed that the group that received training through CALLA showed better use of the MCS. This means that learners showed significant improvement in their reading comprehension performance after CALLA training. Therefore, it can be concluded that the use of CALLA as an instructional strategy does contribute towards the improved performance in language learning, particularly in reading comprehension.

Alharahsheh (2015) investigated the effect of using CALLA (Cognitive Academic Language Learning Model) in writing. The researcher used a quasi-experimental design. 30 ninth-grade students participated in the study. Strategy instruction was delivered as prescribed in Chamot's (2005) Cognitive Academic Language Learning Approach (CALLA) model of teaching learning strategies. Pre- and post-test data were collected and statistically analysed. Based on the results of the findings, three conclusions were reached. First, CALLA was effective in improving students' writing achievement. Second, students expressed enjoyment and pleasure through the use of CALLA approach. Third, CALLA approach improved students' achievement satisfaction.

The findings proposed that CALLA approach is effective to be employed as a strategy instruction in facilitating learners' vocabulary knowledge. For instance, a study by Palasan (2017) investigated the use of CALLA in improving grammar, vocabulary and reading comprehension skills among the fifth grade learners in Philippines. 82 learners were chosen to be the respondents. The investigation was carried out utilizing a pre-test—post-test quasi-experimental research approach. Respondents were divided into two groups: the control group and the experimental group. Control group was exposed to usual English reading classes, whereas, the experimental group was exposed to CALLA for 20 sessions. The control group did not show any significant differences in terms of results. As for the experimental group, learners' performance showed significant improvement. This implies that CALLA approach is more effective than the regular teaching approach applied in English reading classes.

Al-Khasawneh and Huwari (2014) conducted a study to identify the effects of metacognitive strategy instruction on vocabulary learning. It was conducted in a Jordanian university for a ten weeks instruction program. To achieve this purpose, vocabulary tests based on Nation's (1990) vocabulary size test were used. 60 students with low proficiency in English language were randomly selected to participate in the study. The experimental group received explicit instruction on using metacognitive strategies. However, the control group did not receive any instruction. The instruction model was based on the Cognitive Academic Language Learning Approach (CALLA) by Chamot and O'Malley (1994). The findings of this study revealed that the explicit instruction on using metacognitive strategies proved to be effective. It means that using CALLA approach as strategy instruction could help learners to improve their vocabulary.

From the studies above, two significant findings are identified. First, using CALLA approach as strategy instruction is effective in language learning which includes vocabulary learning. That is, the use of CALLA model as strategy instruction enables teachers to introduce and train learners to apply strategies in their vocabulary learning. As compared to the usual method of vocabulary teaching, exposure to the use of different strategies brings positive effects on learners' strategies use. As a result, learners improve their vocabulary learning. Second, CALLA model focuses on the role of both teachers and learners in language learning. Teachers' responsibility is to introduce the strategies to the learners, which consists of two phases; prepare and present. Learners' responsibility is to master and employ suitable strategies in their learning; which include three phases, practice, evaluate, extend. According to Oxford (1990), teachers' attitude is among the factor that hinders the success of strategy training. Since teachers' vocabulary teaching practices is relevant to learners' strategies use in vocabulary learning, it is, thus, timely to gain an overall understanding of vocabulary teaching and learning in Malaysian primary schools. As such, the present study aims to investigate Malaysian primary school teachers' vocabulary teaching practices and determine Malaysian primary school students' strategies use in vocabulary learning. In summary, CALLA model is chosen as the theoretical framework for present study. The aspects of CALLA model will be addressed in the interview protocol and questionnaire in Chapter 3.

## 2.6    Chapter Summary

This chapter began with the discussion on language learning. Then, cognitivism was explored. Following that, Piaget's theory on cognitive development, information processing model and Anderson's Active Control of Thought Model were explained. Teachers' and learner's strategies in vocabulary learning were described. CALLA model was chosen as the theoretical framework. This chapter ended with reviews on CALLA model. The following chapter describes the methodology of the study.

# CHAPTER 3

# METHODOLOGY

## 3.1 Overview

This chapter begins with addressing the research design. The context of the study is provided which consists of detailed information about the sampling and participants. Next, the data collection methods are explained. Then, the data analysis of each method is explained. The chapter ends with a description of the triangulation process.

### 3.1.1 Research Design

The aim of the current study is to investigate Malaysian primary schools' vocabulary teaching and learning. In particular, the research questions of the present study are:

i. what are the primary school students' strategies for learning vocabulary?

ii. what are teachers' practices in teaching vocabulary at primary schools?

iii. why do the students use the strategies in vocabulary learning?

This research employed a mixed method design which involved both quantitative and qualitative approaches with the latter supporting the former. Both qualitative and quantitative research methods were employed in this study to investigate Malaysian primary schools' vocabulary teaching and learning. The focus of the study is to find out vocabulary teaching and learning in Malaysian primary schools, similar studies (Kavvadia, 2016; Thékes, 2017; Noprianto & Purnawarman, 2019) also used both qualitative and quantitative methods in finding out learners' strategies in vocabulary learning. Qualitative research focuses more on interpreting behaviour in the natural setting (Ary et al., 2003). Quantitative

evidence such as survey research focuses on how variables are spread across a population (Merriam, 2009). "Quantitative data will give you measurements to confirm each problem or opportunity and understand it" (Ahmad et al., 2019, p. 2830). Choy (2014) explained that every methodology has its inherent strength. In order to generalise findings to a population, this study starts with a survey. Then, it concentrates on qualitative to gather participants' detailed opinions (Creswell, 2014). Quantitative and qualitative approaches can enhance the findings when it is used collectively (Ahmad et al., 2019).

Based on the first research problem, primary school students in Malaysia have difficulty in learning vocabulary, they tend to forget what they have learned (Yee and Wahab, 2016). For the current study, researcher explored the primary school students' strategies in vocabulary learning through quantitative method. Quantitative research warrants the nature of research questions which requires exploration (Stake, 2000), to assist the researcher to gain a deeper understanding of the scenario (Patton, 1987). In short, the quantitative research method was used to identify the common patterns among the strategies used by Malaysian primary school students and to generalize it broadly. Therefore, a survey method was conducted to find out students' vocabulary learning strategies.

Based on the second research problem, there is a need to investigate teachers' vocabulary as there are different strategies that teachers could apply in their vocabulary teaching (Wang & Yamat, 2019; Nasaruddin & Kamalludeen, 2020; Tahir et al.,2020). This addresses the need to understand Malaysian primary school teachers' vocabulary teaching. A qualitative research method was employed to understand teachers' teaching practices. Vocabulary teaching occurs in the classrooms, according to Ary et al. (2003) the purpose of employing qualitative research is to examine a phenomenon as it is. A qualitative approach

was used to understand teachers' vocabulary teaching practices from the participants' perspective (Creswell, 2014). As such, observations and interviews were conducted to understand teachers' vocabulary teaching practices.

## 3.2    Context of the study

### 3.2.1    Sampling

This study concentrated on two urban areas National type primary schools. Primary school in Malaysia begins at an average seven years old and the duration of primary school education is six years. It consists of Level One (Year One to Year Three) and Level Two (Year Four to Year Six). The total instructional time per week in National Type of primary schools is 180 minutes for level two English (Curriculum Specification Division, 2015).

In Malaysia, there are two types of schools for the primary level, National Schools and National Type Schools. For the National Schools, the medium of instruction is Malay. For National Type Schools, Tamil or Chinese can be used as a medium of instruction (Phooi et al., 2017). Nonetheless, English is a compulsory subject at all school levels (Ministry of Education Malaysia, 2013).

The background information regarding the national type of Chinese-medium primary schools will be explained in the following. First, according to the Ministry of Education Malaysia (2020), there are a total of 7,780 primary schools in Malaysia, there are 1,299 National-type (Chinese) primary schools (16.7%). For this study, two national-type Chinese schools (SJKC) were chosen to participate in the study. As cited in Malaysian English Curriculum Specification (2015), National-type (Chinese) primary schools are included in primary schools in Malaysia, English language learning aims to provide students with

fundamental language abilities that will allow them to communicate effectively in different situations.

Second, the majority of National Type Chinese schools consist of a large Chinese student population. As for the National Schools, Chinese students are the minority (Tan et al., 2013). Similarly, Ting (2013) also mentioned that most Chinese in Malaysia prefer Chinese-medium schools. For instance, the school enrolment in Kuching in 2014 showed that there were 88% of Chinese students studying in National Type Chinese Schools and 12% were in National Schools (Phooi et al., 2017). This implies that the participants of this study were mostly Chinese students as compared to other ethics. However, all ethics and genders were included in this study.

This indicates that there is a need to look into vocabulary teaching and learning in National Type Chinese schools. The present study focuses on the national type of Chinese-medium primary schools. The participants for this study were Level Two, Year Five students and English teachers. Year 5 English teachers were observed and interviewed to understand their vocabulary teaching practices, whereas, the Year 5 students were given questionnaires. Year 5 students were chosen due to their knowledge and proficiency level in English vocabulary by referring to the word lists in the Curriculum Specification Division (2015), Year 5 students were expected to have enough vocabulary knowledge to comprehend the words and sentences in the questionnaires.

### 3.2.2   Participants

The participants for this study consist of two groups which were the students and the teachers. For the survey, as cited by Hair et.al (2018), generally 100 samples are sufficient for most research situations. Kavvadia (2016), Thékes (2017) used approximately 80 participants; whereas else, Noprianto and Purnawarman (2019) employed 116 participants in finding out learners' strategies in vocabulary learning. In summary, 132 Year 5 students from two National-type schools (SJKC) participated in this study. The age group of the students was 11 years old.

For qualitative research that focuses on exploring an issue, Patton (2002) proposed that a relatively, small sample, even one case is sufficient. This can be observed from the studies (Mutalib et al., 2014; Ahmad et al., 2016; Nie & Zhou, 2017) that when researchers use qualitative to explore an issue, less than 10 participants participated.  Therefore, four English teachers who taught Primary 5 English classes participated in the study.

The proficiency level of the participants was intermediate. Prior to the survey, the English teachers from each class selected their students to be the respondents based on the student's overall performance in their English classes. Both schools had a total of eight classes, which means 320 students. 132 students with intermediate proficiency levels were selected to participate in the survey.

132 Year Five students completed the questionnaire. All students were 11 years old. The majority of the participants were Chinese (n = 123, 93.2%). 5.3% of the participants were Dayak, which included Iban (n=3, 2.3%) and Bidayuh (n=4, 3%). Other ethnic groups were Indian (n= 1, 0.75%) and Kayan (n=1, 0.75%) also participated in the study. 53% of the participants were female (n = 70) and 47% of them were male (n=62).

These 132 students were grouped into four classes. The questionnaires were collected and labelled with numbers. Stratified random sampling was employed to choose the participants for the interview. Stratified random sampling was to guarantee that each stratum is fairly represented (Taherdoost, 2016). A systematic random sampling technique was used to assign a number to each student in each class. A student was selected from each class for an interview.

Four teachers were involved in the observations and interviews, they were English teachers of the Year 5 students involved in this study. Three of them are Chinese and one of them is Iban. They were all experienced teachers, two teachers with teaching experience of more than 10 years, one with more than 20 years of teaching experience and one teacher who has been teaching for more than 30 years. Three teachers came from English option background, they were trained in teaching English except for one teacher who was trained in teaching Science and Mathematics.

To ensure the anonymity of the participants, the names of the participants and the name of the schools were not mentioned. The schools, the teachers and the students were linked to the information by code numbers (Nachmias & Nachmias, 1992). The two schools were coded as School A and School B. Teachers from School A were Teacher A1 and Teacher A2, whereas, teachers from School B were Teacher B1 and Teacher B2. They were observed and interviewed. The classes of each teacher were named class A1, class A2, class B1 as well as class B2. The students from the four classes were the respondents to the questionnaires. The group type and code of the participants are shown in Table 3.1.

**Table 3.1:** Group type and code

|  | Participants that were observed and interviewed | Participants that were given questionnaires |
|---|---|---|
| School A | Teacher A1 | Class A1 |
|  | Teacher A2 | Class A2 |
| School B | Teacher B1 | Class B1 |
|  | Teacher B2 | Class B2 |

In summary, teacher A1 and A2 from school A as well as teacher B1 and B2 from school B were interviewed and observed. Students from class A1, A2, B1 and B2 were given questionnaires.

### 3.2.3  Data collection methods

### 3.2.4  Survey Method

Survey method is defined as "the collection of information from a sample of individuals through their responses to questions" (Check & Schutt, 2012, p. 160). The researcher used questionnaires to collect data from primary school students.

Learners employ different strategies to learn vocabulary. Vocabulary learning strategies are approaches used by language learners while acquiring new words. Learning strategies are influenced by individual characteristics (Nation, 2001; Gu, 2003). This can be observed from the studies (Ahmad et al., 2016; Kavvadia, 2016; Nie & Zhou, 2017; Thékes, 2017; Noprianto & Purnawarman, 2019), the questionnaire is being employed as an instrument in exploring learners' strategies in vocabulary learning. Hence, the questionnaire is an efficient tool for collecting data and delineating learners' strategies patterns (Oxford, 2016).

Thékes (2017) developed a vocabulary learning strategies instrument for young learners. The researcher adapted his questionnaire based on Stoffer's (1995), Schmitt's (1997) and Pavičič's (2008) questionnaire items from Oxford's SILL (1991). Khatib et al. (2011) mentioned that Stoffer (1995) designed the most comprehensive questionnaire on vocabulary learning strategies which consists of 53 items. Pavičič's questionnaire (2008) was employed to find out Croatian primary school students' vocabulary learning strategies. Al-Bidawi (2018) adopted Schmitt's (1997) Taxonomy of Vocabulary Learning Strategies (VLS) to find out Vocabulary Learning Strategies used by Saudi undergraduate English (EFL) students. Amirian and Hashemifar (2013) adapted the taxonomy of vocabulary learning strategies by Schmitt (1997) to identify vocabulary learning strategies among EFL university students at Hakim Sabzevari University in Iran. Rabadi (2016) employed Schmitt's (1997) Vocabulary Learning Strategies Questionnaire (VLSQ) to investigate Jordanian undergraduate students' vocabulary learning strategies. Besides, Dong et al. (2020) also used Schmitt's (1997) vocabulary learning strategies scale to investigate how different mediums of word explanation influence the use of English vocabulary strategies among Chinese Grade-7 students.

Consequently, the questionnaire from Thékes (2017) was adapted for this study. Thékes's vocabulary learning strategies questionnaire was employed in the study due to its relevance to the objective of the study, which is to determine Malaysian primary school learners' strategies in vocabulary learning.

The vocabulary learning strategies questionnaire for the present study was adapted accordingly by including the amendments. The items in the questionnaire were rephrased to make sure the respondents comprehended the meaning of each question (Newman, 2014).

The context of this study is Malaysian National Type Chinese schools and the majority of the students are Chinese (refer to 3.3.1). In addition, a study by Ng and Sappathy (2011) shows that word cards and translation were used as vocabulary teaching methods in Malaysian national type of primary schools. As such, the questions on word cards and translations were included in the questionnaire. First, the respondents came from Chinese background. Second, word cards as well as translation were employed in the students' vocabulary learning. Hence, the word "Hungarian" was changed to "Chinese" to suit the context of the respondents. Table 3.2 below shows the items which were rephrased.

**Table 3.2:** Examples of items that were replaced in the questionnaire

| Original questionnaire items | Words that were replaced |
| --- | --- |
| 2. I make English-Hungarian word cards. | I make English-**Chinese** word cards. |
| 22. I watch English movies with Hungarian subtitles. | I watch English movies with **Chinese** subtitles. |

The language for the items in the questionnaire was also simplified. To ensure the reliability of the questionnaire, respondents should comprehend the statements (Best & Kahn, 2003; Newman, 2014). Referring to the word list in Curriculum Specification Division (2015), year 5 students have yet to learn words such as "link", "infer", "synonymous". Therefore, academic words like "link" and "infer" were replaced with "connect" and "guess" to suit the language proficiency of the respondents. Table 3.3 below shows the items which were rephrased.

**Table 3.3:** Examples of items that were adapted in the questionnaire

| Original questionnaire items | Adaptation |
|---|---|
| 16. I link new word to one already known. | I **connect** new word to one already known. |
| 19. I infer the meaning of the new words from spoken English. | I **guess** the meaning of the new words from spoken English. |

The questionnaire can be referred to the Appendix A. The following section explains the pilot study that was conducted to test the feasibility of the questionnaire.

### 3.2.5 Pilot study

The pilot study and the reliability test are shown in Figure 3.1. The following subsection explains the details of the pilot study and the reliability of the instrument.
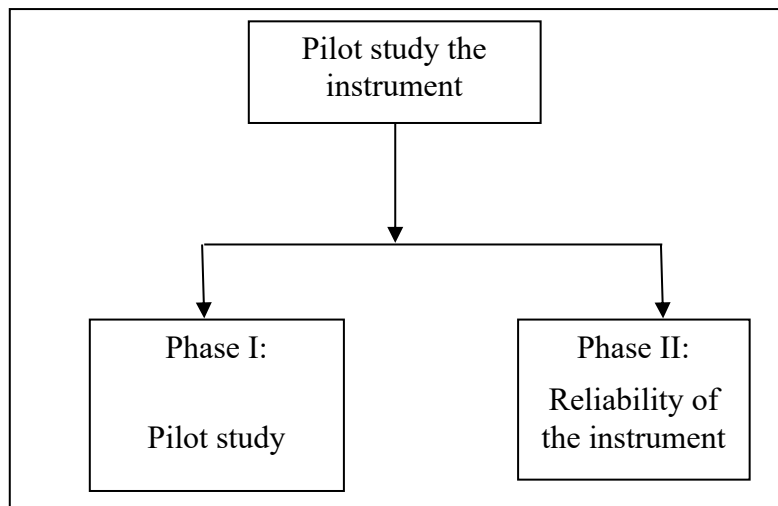


**Figure 3.1:** Procedure for pilot study

The purpose of conducting pilot study was to test the reliability of the questionnaire. Pilot study is used as "small scale version or trial run in preparation for a major study" (Polit

et al., 2001, p. 467). Furthermore, pilot study can be used to "identify ambiguities and difficult items in the questionnaire" (Peat et al., 2002, p .123).

The pilot study was conducted for two days. The pilot stage for this study involved 12 students. Polit and Beck (2004), Burns and Grove (2005) make no specific recommendations for the sample size of a pilot study. Nieswiadomy (2002) suggested obtaining approximately 10 participants, whereas, Lackey and Wingate (1998) recommended 10% of the final study size. Nonetheless, the final decision should base on cost and time constraints and also the size and variability of the population (Hertzog, 2008). Therefore, only 12 students were involved.

The students volunteered to participate in this pilot study. The survey was conducted face to-face, the researcher informed the participants about the objective of this study before the questionnaires were administered. The participants were also informed about the confidentiality of their responses. Their responses to the questionnaires would solely be used for this study. Each participant took 15- 20 minutes to complete the items in the questionnaires.

The researcher was with the participants during the pilot study.  It was observed that the participants experienced difficulty in understanding the word 'always'. Although words like 'seldom' and 'often' are comprehensible for the researcher, they might be confusing for 11 years old students (Singleton et al., 1993). As such, the word 'always' in the frequency scale of the final questionnaire was changed to 'everyday'.

Data collected from the pilot study was used to conduct a reliability test. Reliability test was employed to assess the quality of the research instrument (Conelly, 2008). According to Cuieford (1965), the Croanbach's a value of 0.7 shows high reliability of the

instrument. The reliability results from the pilot study shows that Cronbach's value of all the items in the questionnaire is 0.821. This indicates that the questionnaire has good reliability.

One item with zero standard deviation was omitted, all the students indicated 'always' in the statement 'I read English newspapers to learn words'. This item could not provide the research with information about the strategic use of reading English newspapers. As such, this item was removed from the final questionnaire.

Item analysis was carried out through corrected item-total correlations. "There is no clear consensus on the most appropriate labels to use to describe the values obtained when calculating alpha" (Taber, 2018 p.1278). Falus and Ollé (2008) conducted a study on 103 samples and the items with values under .194 were omitted. Similarly, in this study, items that fell under or near .194 were highlighted. It was identified that there were six negative scores in the corrected item-total correlation because a majority of the students chose 'never' as their answer. Besides, six questions fell near or under .194. This indicates that the questions could be misleading or ambiguous to the respondents. As such, 12 items that did not discriminate well were omitted from the questionnaire (Mohamad et al., 2015). As cited in Kopalle and Lehman (1997) omitting the item with a lower correlation increased Alpha values and internal consistency. The items whose item-correlation values were under or near the value of .194 are presented in the following tables. The items were categorized based on Schmitt's (1997) Vocabulary Learning Strategies, which are determination strategies, metacognitive strategies, memory strategies, cognitive strategies and social strategies.

Table 3.4 shows the questionnaire items under determination strategies which were omitted. One negative item and one item that fell near.194 were identified. Items were deleted to increase internal consistency (Kopalle & Lehman, 1997).

**Table 3.4:** Determination Strategies Item-correlation values that fell under or near the value of .194

| Question | | Scale Mean if Item Deleted | Scale Variance if Item Deleted | Corrected Item-Total Correlation | Squared Multiple Correlation | Cronbach's Alpha if Item Deleted |
|---|---|---|---|---|---|---|
| 13. | Look up the new word in a monolingual dictionary. | 83.75 | 165.48 | -.372 | . | .832 |
| 24. | I watch English films without subtitles | 82.83 | 155.79 | .093 | . | .825 |

Table 3.5 indicates the questionnaire items under metacognitive strategies which were omitted. It can be observed that there were three items that fell near to .194. Items were deleted to increase the alpha values (Kopalle & Lehman, 1997).

**Table 3.5:** Metacognitive Strategies Iten- Correlation Values that Fell Under or Near The Value of .194

| Question | | Scale Mean if Item Deleted | Scale Variance if Item Deleted | Corrected Item-Total Correlation | Squared Multiple Correlation | Cronbach's Alpha if Item Deleted |
|---|---|---|---|---|---|---|
| 26. | Play English video games. | 81.92 | 155.54 | .192 | . | .821 |
| **7.** | Read English labels on all kinds of products to learn new words. | 82.92 | 155.90 | .196 | . | .823 |
| **8.** | Take notes of the words when watching/listening to English programs. | 83.25 | 160.21 | .198 | . | .826 |

Table 3.6 indicates the questionnaire items under memory strategies which were omitted. The students chose "never" as the answers. Therefore, four items with negative values were deleted (Mohamad et al., 2015).

| Question | | Scale Mean if Item Deleted | Scale Variance if Item Deleted | Corrected Item-Total Correlation | Squared Multiple Correlation | Cronbach's Alpha if Item Deleted |
|---|---|---|---|---|---|---|
| 2. | Make English-Chinese word cards. | 83.92 | 162.45 | -.256 | . | .827 |
| 11. | Connect new word to one with same meaning | 83.25 | 160.75 | -.097 | . | .827 |
| 16. | Connect new word to one already known. | 83.25 | 157.48 | -.078 | . | .823 |
| 32. | Use a new word in speaking so as to remember it. | 82.75 | 158.57 | -.048 | . | .822 |

Table 3.7 indicates the questionnaire items under cognitive strategies which were omitted. One item that emphasised on rote learning which fell under .194 was deleted (Mohamad et al., 2015). Therefore, the alpha value increased to .830

**Table 3.7:** Cognitive Strategies Item-correlation values that fell under or near the value of .194

| Question | | Scale Mean if Item Deleted | Scale Variance if Item Deleted | Corrected Item-Total Correlation | Squared Multiple Correlation | Cronbach's Alpha if Item Deleted |
|---|---|---|---|---|---|---|
| 34. | I repeat the word to myself. | 82.33 | 160.79 | .091 | . | .830 |

Table 3.8 indicates the questionnaire items under social strategies which were omitted. Two items with negative values and values that fell under .194 were omitted (Mohamad et al., 2015). The alpha values of the items then increased to .832 as well as .823.

**Table 3.8:** Social Strategies Item-correlation values that fell under or near the value of .194

| Question | | Scale Mean if Item Deleted | Scale Variance if Item Deleted | Corrected Item-Total Correlation | Squared Multiple Correlation | Cronbach's Alpha if Item Deleted |
|---|---|---|---|---|---|---|
| 15. | I use skype to learn English words. | 84.00 | 166.00 | -.431 | . | .832 |
| 9. | I use Facebook to learn English words | 82.92 | 154.08 | .142 | . | .823 |

Another item analysis was conducted on the 25 items and the reliability results show that Cronbach's a value of all the items in the questionnaire increased to 0.882 from 0.821. Therefore, 12 questions were adapted, a total of 25 items were used in the final questionnaire, there was one section. Participants were provided with a four likert scale.  The final questionnaire can be referred to in Appendix B.

### 3.2.6  Interview

Informal interviews were conducted with the students after the survey (Meriam, 2009). Quantitative findings can be complemented by qualitative data. According to Kelinger (1970), interviews can be used to validate other methods. The researcher asked each of them two questions, the vocabulary learning strategies they used the most and the reasons.

### 3.2.7  Observation

Observation was used to find out teachers' vocabulary teaching practices. As cited in Meriam (1998), observation provides a direct interpretation of the situation based on the researcher's own knowledge and expertise. Observation can be used together with interviews as data collection method. The following two studies employed observation method to investigate teachers' teaching practices. For example, Muhammad and Kiely (2018) investigated two secondary school teachers' vocabulary teaching practices through observations and semi-structured interviews. Yahya et al. (2013) utilized a qualitative approach with case study method to explore teachers' vocabulary teaching practices in the autistic classroom, classroom observations and interviews were used as data collection. This indicates that the observation method can also be used to cross-validate the interview data. According to Cohen et al. (2000), it is methodological triangulation, which involves using

two different methods on the same object of study to solve the issue of "method boundedness" and to provide a holistic view of the outcomes. As such, observation was employed together with the interview as data collection methods for cross- validating.

However, according to Creswell (2002), observation will be affected if the researcher feels unaccustomed to the research site and faces difficulty in creating rapport with the participants. Besides, the researcher's values, feeling, attitudes and experience will also affect the observations (Best & Kahn, 2003). Therefore, the researcher developed a systematic procedure to collect observation data. The observation protocol for this study was adopted from Creswell (2002). An observation protocol allowed the researcher to record the information observed from the research site. There were four components in the observation protocol. First, the researcher recorded the information about the time, setting, place and observation role in the header. For the descriptive notes, the researcher recorded teachers' vocabulary teaching practices. In addition, the researcher sketched the site to remember it better. The reflective note was written on the right column, the researcher recorded the experiences, insights, and themes for analysis. The sample of the observation protocol can be referred to Appendix C.

Four observations were conducted. For this study, there were four teachers involved. As such, four non-participant classroom observations were conducted in two different schools, which means one observation for each teacher. Non-participant classroom observations were conducted to avoid manipulating the situation or subjects (Cohen et al, 2017). The reading texts that were used in the observations are "Captain Malaysia" and "Wan Siti Kembang" from the Year five English textbook (refer to Appendix F). The observations started from the moment the teachers entered the class and ended when they

left the classrooms, which was 60 minutes. Each recorded classroom interaction was recorded in the observation protocols and they were shown to the teachers for verification purposes. As mentioned previously, the purpose of the study is to investigate primary school teachers' vocabulary teaching practices. Therefore, only vocabulary teaching and learning were emphasized in the observations.

### 3.2.8 Interview

Bogdan and Biklen (2003) defined interview as "... interview is used to gather descriptive data in the subjects' own words so that the researcher can develop insights on how subjects interpret some piece of the world" (p.94). Interview as a data collection method enabled the researcher to concentrate on the issue that could not be observed from the observations, which means the information was more detailed. In addition, the researcher also had more control over the types of information received. Nonetheless, the interviewees may provide false information to the researcher, and the presence of the researcher may affect the responses (Creswell, 2002).

As such, the researcher conducted four interviews in two schools with four teachers to obtain diverse perspectives on the views of vocabulary teaching and learning. Then, the researcher asked about their perception of vocabulary learning. Asking the subject about their perception will reduce the problem of demand characteristics (Orne, 1969). Besides, the researcher also used the probing method during the interviews. Probes, as cited in Creswell (2002), are sub-questions that the researcher asks to obtain detailed information, which also enabled the researcher to expand on ideas and the interviewee to clarify their responses.

The researcher conducted semi-structured interviews with the teachers. Ryan et al. (2009, p.310), defined a semi-structured interview as "a more flexible approach to the interview process", it provides opportunities for the interviewer and interviewee to discuss some topics in more detail. For example, the interview questions for this study started with general questions such as asking the teachers about their teaching experiences and then relating their experiences to the objective of this study, which was to investigate Malaysian primary school teachers' vocabulary teaching practices. The questions were open-ended, which provided freedom for the researcher to probe for more information from the teachers.

The questions were adapted from Muhammad and Kiely (2018). The five interview questions are listed as follows:

a) How do you view the importance of vocabulary in language teaching and learning?

b) What is the best way to learn vocabulary?

c) How did you learn vocabulary as learners/teachers?

d) How do you normally teach vocabulary?

e) Which aspects of vocabulary do you normally focus on?

According to Merriam (2009), researchers should avoid multiple questions and leading questions. Therefore, two questions from Muhammad and Kiely (2018) were adapted.

First, the word "importance" is replaced with "the role" to avoid leading questions, leading questions coerce the interviewee to accept the researcher's point of view (Qu & Dumay, 2011). The adapted questions are shown in Table 3.9.

**Table 3.9:** Adaptation of the interview question to avoid leading question

| Questions from Muhammad and Kiely (2018) | Adaptation |
| --- | --- |
| **a**) How do you view the importance of vocabulary in language teaching and learning? | What do you think about the role of vocabulary in language teaching and learning? |

Second, the question is divided into two questions to avoid asking multiple question at once, multiple questions do not allow the interviewee to answer the questions one by one (Qu &  Darmy, 2011). The adapted questions are shown in Table 3.10.

**Table 3.10:** Adaptation of the interview question to avoid multiple questions

| Questions from Muhammad and Kiely (2018) | Adaptation |
| --- | --- |
| c) How did you learn vocabulary as learners/teachers? | From your experience as a learner, what are the strategies you used to find the meanings of words you don't understand? |
| | As a teacher, what strategies you used to help learners to recall the newly-learned vocabulary? |

These six interview questions were included in the interview protocol (refer to Appendix D).

a) What do you think about the role of vocabulary in language teaching and learning?

b) What is the best way to learn vocabulary?

c) From your experience as a learner, what are the strategies you used to find the meanings of words you don't understand?

d) As a teacher, what strategies you have used to help learners to recall the newly-learned vocabulary?

e) How does vocabulary learning occurs in your classroom?

The interview protocol is "a form designed by the researcher that contains the instruction for the process of the interview, the questions to be asked, and space to take notes on the responses from the interviewer" (Creswell, 2002 p.212). The components of the interview protocol are described as the following. First, headers such as the title of this study, date and time were included. The header was followed by the questions that would be asked. Space was provided between each question so that there was space for the researcher to take short notes during the interviews. There was a closing comment to remind the researcher to thank the participants and assure them of the confidentiality of the responses. There was also a column to guide the researcher to brief the participants about the objective, the details of the study, and confidentiality before the interview started.

Merriam (2009) proposed that it is necessary for the researcher to conduct pilot interviews. A pilot interview enables the researcher to identify the confusing questions. As such, the pilot interview was conducted with a teacher. The teacher could clearly understand the questions asked. Therefore, there was no modification performed on the interview questions. These questions would be utilized in the actual study.

For this study, the interviews were carried out after the observations. The objective of the interviews was to obtain some understanding of the perceptions of the teachers in vocabulary teaching and learning. Their rationale, methods, knowledge, and experience in vocabulary teaching and learning were discussed during the interviews. The transcripts were shown to the teachers for verification purposes. The interview data were analysed with content analysis.

## 3.3 Ethical Consideration

To protect the privacy of those involved, the teachers' names were replaced with pseudonyms, such as school teachers' names were replaced with 'Teacher A1, Teacher A2, 'Teacher B1 and Teacher B2'. Similarly, students' names were also substituted with pseudonyms. The research was conducted in the two schools. Prior to that, permission from Jabatan Pendidikan Negeri (JPN) was obtained (Appendix E) to enter the schools. The objectives and confidentiality of the research were explained to the headmasters, teachers, and students involved. Transcripts were shown to the teachers after the observations and interviews (Cohen et al, 2017).

### 3.3.1 Data analysis

### 3.3.2 Analysing questionnaire data

The data obtained from the questionnaire were analysed through means and standard deviation to identify the vocabulary learning strategies used by primary school students. According to Johnson and Christensen (2017), the mean score has the most precise measurement, it includes the magnitude of all scores.

Standard deviation (SD) shows the average amount of variability in the data set, standard deviation will be zero if all data are spread out equally (Brown, 1982). Variability

can be measured by standard deviation. The standard deviation shows how close data clustered around the mean, low standard deviation means the data is clustered closely. However, high standard deviation means the examples are spread apart (Brown, 1982). In short, the mean is used to find out the strategies that learners' used in their vocabulary learning, and the standard deviation is employed to identify how to spread out the data from the mean. A low standard deviation means that almost all students have obtained the same responses (Al- Saleh & Yousif, 2009).

Four points Likert scale (refer to Appendix B) was used to investigate the frequency used of each strategy. This indicates that the neutral option was removed. Gelman and Baillargeon (1983) believed that children think dichotomously, answering on a 5-point scale might be too difficult for them. Chambers and Johnston (2002) proposed that the Likert scale format varies based on what is being assessed. The survey conducted is to find out students' vocabulary learning strategies. To answer the items, the learners must interpret the question, relate to their memories, interpret the information then apply their answers to the Likert point. This indicates that the learners need to use their cognitive effort to think about the strategies they employed in their vocabulary learning. Students who were unmotivated to answer might choose the neutral option (Johns, 2005). However, by omitting the neutral option, the students would have to use their cognitive effort and relate to their true feelings on the subject (Garland, 1991). As such, using four- point scale is appropriate as it provided more insights into learners' strategies in vocabulary learning.

Kaya and Charkova's (2014) mean score interpretation was used to identify the frequency use of the strategies, the objective of their study is to find out the strategies that students use to build their vocabulary. The mean for regularly used strategies is from 3 to 4,

strategies that are rarely used have the mean between 1.1 to 1.99 and the mean for strategies

that have never been used is 1. Table 3.11 explains the interpretation of the mean scores.

**Table 3.11:** Kaya and Charkova (2014) mean score interpretation

| Frequency use | Mean |
|---|---|
| Regularly used strategies | 3.0 to 4.0 |
| Moderately used strategies | 2.0 to 2.99 |
| Rarely used strategies | 1.1 to 1.99 |
| Never been used strategies | 1 |

Students' vocabulary teaching and learning were themed based on Schmitt's (1997)

classification vocabulary learning strategies. Schmitt's classification of vocabulary learning

strategies includes both direct and (memory, cognitive, compensation) and indirect strategies

(metacognitive, social, affective). Schmitt's classification is the combination of Oxford

(1990) and O'Malley and Chamot (1990)'s learning strategies (Letchumanan et al., 2016).

As mentioned by Schmitt (1997), vocabulary learning strategies can be classified

into five categories such as cognitive, memory, metacognitive, determination and social. 1)

Cognitive strategies engage learners with mechanical means instead of mental processing,

2) memory strategies are strategies that link the new information with learners' prior

knowledge, 3) metacognitive strategies are strategies that learners use to monitor and review

the cognitive processes, 4) determination strategies are strategies that employed by the

learners to deal with the obstacles of discovering the meaning of a new word, 5) social

strategies involve learners' interaction with their environment.

### 3.3.3 Analysing observation and interview data

Creswell (2012) explained that the analysis of quantitative data requires the researcher to understand the text and images to answer the research questions. The observation and interview data for the second research question were analysed based on guidelines by Erlingsson and Brysiewicz (2017) which involved four stages, transcribing, interpreting, coding, and theming. The collection and analysis of data were guided by the research question.

Interview protocols were used to support the observation notes. The conversations were recorded using a recorder. The audio-taped interviews with the teachers were played several times to ensure the accuracy of the transcription, the conversations from the interviews were written down. Transcription served as a verification of the statement given by the participants. While listening to the audio-taped interview, the transcripts with the observation notes taken during the vocabulary teaching were cross- checked. The patterns were identified based on the similarities (Hatch, 2002).

The steps in analysing the data were: (1) Data were collected through observations and interviews. (2) Observation protocols and interview transcripts were coded and transcribed. (3) Repeated scans were performed to identify the recurring themes (Creswell & Poth, 2017). (4) Observation protocols and transcripts were compared to discover similarities. Theme is an implicit topic that organizes a series of recurring concepts, in relevant to the research question (Vaismoradi et al., 2016). The teachers' vocabulary teaching practices were categorized according to the steps in Chamot's (2009) Cognitive Academic Language Learning Approach (CALLA) guideline (refer to Chapter 2.5). Table 3.12 explains the data collection methods, instruments, and data analysis.

**Table 3.12:** Data collection methods, instruments and data analysis

| Research question | Data collection method | Instrument | Data analysis |
|---|---|---|---|
| 1. What are the teachers' practices on vocabulary teaching in primary school? | Observation | Observation protocol | Content analysis in relating to guidelines from Erlingsson and Brysiewicz (2017): |
| | Semi-structured interview | Interview protocol | 1. Transcribe the audio recordings.<br>2. Interpret the transcript.<br>3. Coding<br>4. Theming |
| 2. What are the primary school students' strategies in vocabulary learning? | Survey | Questionnaire | Descriptive statistics analysis using mean and standard deviation. |
| | Informal interview | Audio recorded | Content analysis in relating to guidelines from Erlingsson and Brysiewicz (2017):<br><br>1. Transcribe the audio recordings.<br>2. Interpret the transcript.<br>3. Coding<br>4. Theming |
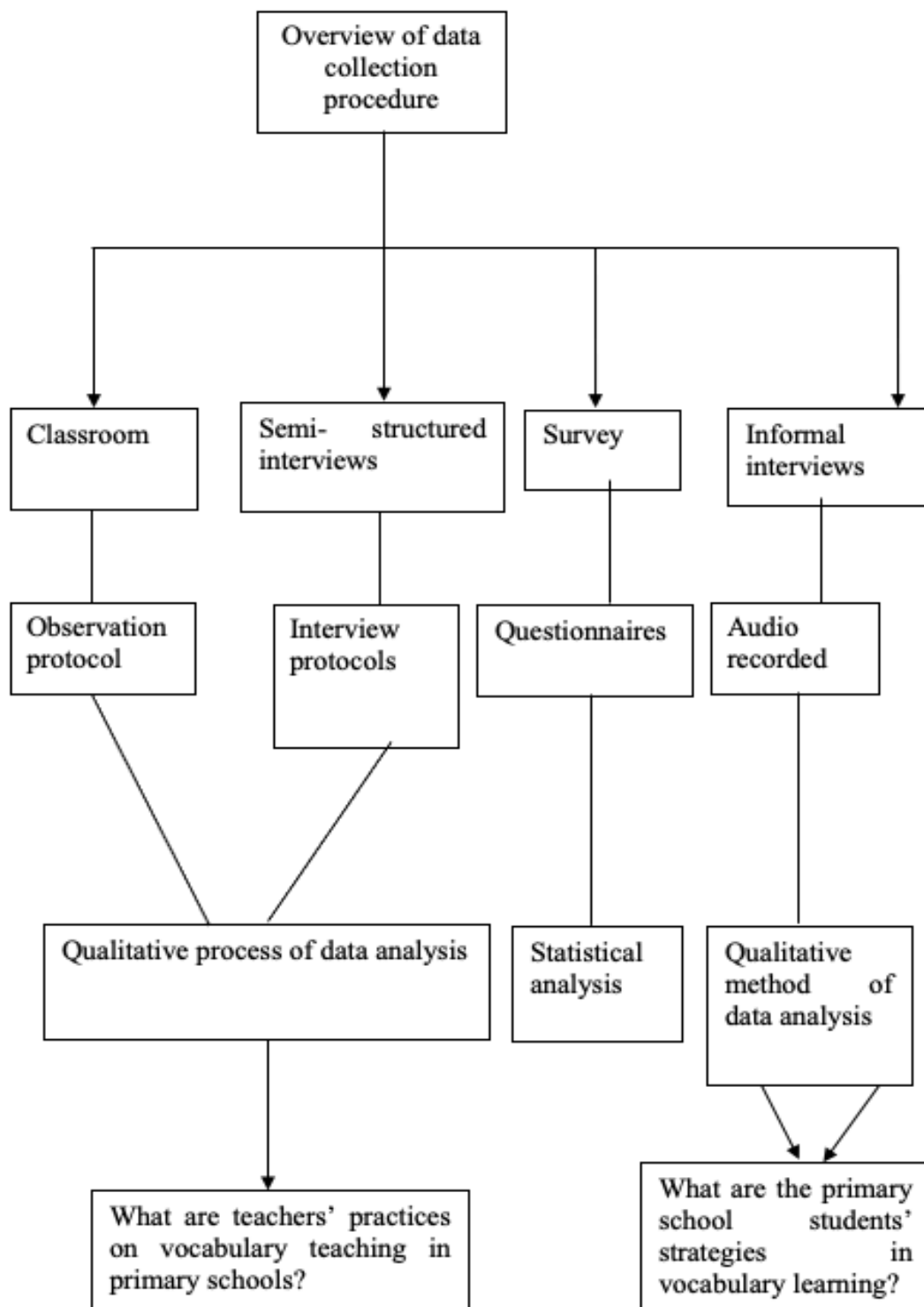
**Figure 3.2:** General overview of data collection procedure

## 3.4    Chapter summary

This section provides information on each research method such as the questionnaires, interviews and observation. Explanation on the construction and validity of the methods is provided in the data collection procedures. The next chapter discusses on the findings and the results of this study.

# CHAPTER 4

# FINDINGS

## 4.1    Overview

This chapter presents the results and findings of Malaysian primary school students and teachers' strategies in vocabulary teaching and learning. The results retrieved through survey, observations and interviews.

## 4.2    Students' strategies in vocabulary learning

This section presents the strategies that students used in vocabulary learning. As mentioned in Chapter 3, Section 3.4.1 the study utilized a set of questionnaire which was adapted from Thekes (2015). The questionnaire consisted of 25 items on learners' vocabulary learning strategies (refer to Appendix 1). Four Likert scale options "never", "once a month", "once a week", "always" were used to assess the degree in which the students used the learning strategies. Mean score has the most precise measurement as it includes the magnitude of all scores. As for standard deviation (SD), it shows how much variation or disperse from the average (Johnson & Christensen, 2017) (refer to Chapter 3.5.1). The mean for regularly used strategies is from 3 to 4, strategies that are rarely used have the mean between 1.1 to 1.99 and the mean for strategies that have never been used is 1 (refer to Chapter 3.5.1). The interpretation of mean scores is presented as follows:

**Table 4.1:** Kaya and Charkova (2014) mean score interpretation

| Frequency use | Mean |
|---|---|
| Regularly used strategies | 4.0 to 3.0 |
| Moderately used strategies | 2.99 to 2.0 |
| Rarely used strategies | 1.99 to 1.1 |
| Never been used strategies | 1 |

The questionnaire items are divided into five tables according to Schmitt's (1997) classification (refer to Chapter 3, Section 3.5.1). The results for each of the learning strategies (metacognitive, memory, cognitive, social, determination) of the students are discussed in the following subsections.

### 4.2.1 Cognitive strategy

Table 4.2 presents the result of cognitive strategies. Cognitive strategies are strategies that involves repetition and it focuses more on the mechanical means (Schmitt, 1997).

**Table 4.2:** The use of cognitive strategy

| Strategy | Mean | Standard deviation |
|---|---|---|
| Underline the important words. | 3.02 | 1.14 |
| Remember the Chinese equivalent of the new English word. | 2.91 | 1.15 |
| Circle the word | 2.79 | 1.24 |
| Rote-learn the words | 2.67 | 1.09 |
| Make word list | 2.45 | 0.98 |
| Average mean score | 2.77 | |

Cognitive strategies have the highest mean score, which is 2.77. It can be observed that students frequently underlined the important words in the process of learning vocabulary

(M= 3.02). Students used translation from Chinese to English in their vocabulary learning (M=2.91). Translation method and circle the word were used moderately among the students. Besides, based on the mean score of rote learning, 2.67 and standard deviation value, 1.09, it shows that students do use this strategy in their vocabulary learning but they do not apply it frequently in their vocabulary learning. The strategy with the lowest mean score in cognitive strategies is making word list (M=2.45). In short, under cognitive strategy, underlining, translating and circling the words were the strategies that students employed frequently and moderately in their vocabulary learning.

### 4.2.2 Metacognitive strategies

Table 4.3 presents the results of the five items that are related to metacognitive strategies. Metacognitive strategies involve learners to monitor, arrange, plan, and evaluate their language learning (Oxford, 1990) (refer to Chapter 2, section 2.2.5).

**Table 4.3:** The use of metacognitive strategy

| Strategy | Mean | Standard deviation |
|---|---|---|
| Read English books. | 3.01 | 0.92 |
| Listen to English songs | 2.71 | 1.21 |
| Watch English movies with Chinese subtitles. | 2.65 | 1.22 |
| Evaluate myself | 2.54 | 1.09 |
| Remember the page where I have seen the new word. | 2.29 | 1.17 |
| Average mean score | 2.64 | |

The second most used strategies are metacognitive strategies (M= 2.64). The strategy that is frequency used in the category of metacognitive strategy was reading English books. The mean score of extensive reading (M= 3.01) suggests that this strategy was being applied frequently in their vocabulary learning. Their second most used strategy in metacognitive

strategy was listening to English songs (M=2.71). The mean score for watching English movies with Chinese subtitles is 2.65. This indicates that the students used this strategy moderately in their vocabulary learning. Besides, students also evaluate themselves after learning new vocabulary (M=2.54). The strategy with the lowest mean score in metacognitive strategy is remembering the page where they have seen the new word (M=2.29). It can be concluded that using fun activities such as books, songs and movies to learn vocabulary are the strategies that students used frequently and moderately in their vocabulary learning.

### 4.2.3 Determination strategies

Determination strategies are strategies used by learners to discover the meaning of a new word, such as guessing from context, contextual clues, referring to dictionary, identify parts of the speech (Schmitt, 2000) (refer to Chapter 2, section 2.2.5). Table 4.4 explains the results of determination strategies.

**Table 4.4:** The use of determination strategies

| Strategy | Mean | Standard deviation |
|---|---|---|
| Guess the meaning of the new word from reading context | 2.89 | 1.11 |
| Learn new words by using own interpretation. | 2.85 | 1.06 |
| Guess the meaning of the word whenever I encounter words I don't comprehend. | 2.75 | 1.10 |
| Guess the meaning of the word from spoken English. | 2.73 | 1.16 |
| Bilingual dictionary. | 2.54 | 1.16 |
| Electronic dictionary. | 1.70 | 1.08 |
| Average mean score | 2.58 | |

The third most used strategies are determination strategies (M= 2.58). Based on the mean score (M=2.89), the most used strategy in the category of determination strategy was guessing the meaning of the word from the reading context. Students used their own interpretation to learn new words (M=2.85). Besides, students guessed the meanings whenever they encounter words they do not understand (M=2.75) as well as guessing the meanings from the spoken English (M=2.73). In short, guessing strategy is being used often in learners' vocabulary learning.

The mean score for referring to bilingual dictionary is 2.54. The strategy with the lowest mean score is using electronic dictionary (M=1.70). The mean scores show that students rarely used electronic dictionary in their vocabulary learning. From the mean scores of guessing strategies and dictionary use, it can be concluded that students used guessing strategy more frequent than referring to dictionary.

### 4.2.4   Memory strategy

Table 4.5 discusses the results of memory strategies. Memory strategies include mental processing, the new words can be linked to learners' prior knowledge through imagery, keywords, grouping, associating or semantic grids (Schmitt, 1997) (refer to Chapter 2, section 2.2.5).

**Table 4.5:** The use of memory strategy

| Strategy | Mean | Standard deviation |
|---|---|---|
| Use the newly-learned word in writing. | 3.19 | 0.94 |
| Learn new words to communicate. | 3.01 | 1.04 |
| Use new word in a sentence. | 2.77 | 0.96 |
| Word games | 2.65 | 0.95 |

**Table 4.5** continued

| | | |
|---|---|---|
| Use the newly-learned word in speaking | 2.40 | 1.20 |
| Analyze parts of the word | 2.14 | 1.09 |
| Make picture word cards | 1.75 | 1.07 |
| Average mean score | 2.56 | |

The total mean score for memory strategies is 2.56. From the mean score, it can be observed that the most used strategy in the category of memory strategy was using the newly-learned word in writing with the mean score of 3.19. The standard deviation value for this strategy is low (0.94), it shows that most of the students used the words they had learned in their writing. The mean score also initiates that students frequently used the new words to communicate (M=3.01). Using the newly- learned word in writing has the highest mean score.

Using new word in a sentence (M=2.77), word games (M=2.65), using the newly-learned word in speaking (M= 2.40) as well as analyzing the word parts (M= 2.14) were moderately used by the students. However, making picture word cards has the lowest mean score (M=1.75). This shows that using images to link the word to its meaning was rarely used in students' vocabulary learning. It can be summarized that practicing the words in writing, speaking were the strategies that students used frequently in their vocabulary learning.

### 4.2.5   Social strategies

Table 4.6 discusses the results of social strategies. Social strategies involve learners to ask questions, cooperate with others in their learning process (Oxford, 1990) (refer to Chapter 2, section 2.2.5).

**Table 4.6:** The use of social strategy

| Strategy | Mean | Standard deviation |
|---|---|---|
| Ask my classmates | 2.82 | 1.17 |
| Look for English speaking friends in the social media. | 2.23 | 1.31 |
| Average mean score | 2.53 | |

The least used strategies are social strategies (M=2.53). The mean scores show that social strategies were being used moderately in students' vocabulary learning. Asking their classmates in vocabulary learning has the mean score of 2.82. The mean score of looking for English speaking friends in the social media is 2.23. This shows that students refer to their classmates more often that referring to their friends in social media to learn vocabulary.

**Table 4.7:** Overall mean scores and standard deviation for students' vocabulary learning strategies in ascending order.

| Strategies | Overall mean score | Standard deviation |
|---|---|---|
| Cognitive strategies | 2.77 | 1.14 |
| Metacognitive strategies | 2.64 | 1.15 |
| Determination strategies | 2.58 | 1.18 |
| Memory strategies | 2.56 | 1.14 |
| Social strategies | 2.53 | 1.27 |

Based on the overall mean scores, it can be observed that the students used all the strategies moderately in their vocabulary learning. This indicates that they used strategies in their vocabulary learning but they did not apply the strategies frequently.

Cognitive strategies have the highest mean score, which is 2.77. It can be concluded that students used cognitive strategies in their vocabulary learning more frequent as compared to other strategies. The second most used strategies are metacognitive strategies

(M= 2.64). The third most used strategies are determination strategies (M= 2.58), followed by memory strategies (M= 2.56).  The least used strategies are social strategies (M=2.53). Social strategies have the highest standard deviation. This suggests that students who used social strategies differ greatly from those who did not employ this strategy in their vocabulary learning. Therefore, the standard deviation value is high.

### 4.2.6   Students' preferences in vocabulary learning strategies

The researcher also interviewed four students on their choice of strategies in vocabulary learning and reasons for their choices. The interview results indicate that there are three strategies that students mentioned they frequently used in their vocabulary learning, which were putting the newly- learned words in speaking and writing, underlining the important words as well as reading English books. First, the students believed that having the opportunity to practice using new words in writing and speaking helped them to remember the words. The following examples are taken from the interviews.

"Teacher teaches me words then I use them to write essays, I understand better."

(Student B)

"Using the words in my speaking and writing help me to remember better."

(Student C)

"I use the words in my essays so that I can remember."

(Student D)

Another strategy that the students believed to help them to learn their English vocabulary is underlining the important words.

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"Underlining the words helps me to pay more attention to them."

<div align="right">(Student B)</div>

"Underline and circle the new words help me to remember better."

<div align="right">(Student C)</div>

"I can refer back to the words easily when I study for exam."

<div align="right">(Student D)</div>

The third vocabulary learning strategy that students preferred is reading English books. They pointed out that reading provided them with plenty of chances to meet new words. Besides, the constant exposure to the new words enabled them to understand the words better.

"I read storybooks. I can learn new words from the books."

<div align="right">(Student A)</div>

"I learn a lot of words from the books I read."

<div align="right">(Student B)</div>

"I see new words from the storybooks and I learn them, I use them to write essays."

<div align="right">(Student C).</div>

"Some of words I don't learn from my teacher, I learn from reading books."

<div align="right">(Student D).</div>

The students also mentioned that they learned English words from playing computer games and dictionary apps.

"I learn English words when I play Fortnight."

<div align="right">(Student B)</div>

"I download the dictionary app and refer to it when there are words I don't understand"

<div align="right">(Student C)</div>

It can be concluded that the students used practicing the words, underlining the words, reading storybooks, computer games and dictionary apps frequently in their vocabulary learning. Based on Schmitt's (1997) vocabulary learning strategies, these strategies belong to the category of memory, cognitive, metacognitive and determination strategies. However, the students failed to mention about using social strategies in their vocabulary learning. That means students did not used or rarely employed social strategies in their vocabulary learning, and this resonates with the findings from the survey.Teachers' vocabulary teaching practices.

## 4.3    Teachers' vocabulary teaching practices

Findings for teachers' teaching practices were drawn from the observations and interviews. The following section will first report the findings of the observations. The observation data were organized based on steps in CALLA model which are prepare, present, practice, evaluate and extend as well as strategies employed in teachers' vocabulary teaching practices. Following these findings, the vocabulary strategies used by these teachers are described.

### 4.3.1 Observation with Teacher A1

The preparation phase involved teachers learning about their learners' existing knowledge and for learners to identify the strategies that already exist in their prior knowledge. In the observation, Teacher A1 started the one hour lesson by distributing the text on "Captain Malaysia". "Captain Malaysia" is a text in Year 5 textbook, it is under the theme "World of Family and Friends". The focus of the lesson was reading skill. In starting the lesson, the teacher introduced the lesson as follows,

> "This is the text "Captain Malaysia". Please read through the text. If there is anything you don't understand, you circle it."
>
> (Teacher A1)

From the excerpt, it can be observed that Teacher A1 started the lesson by asking the students to read the text. 10 minutes were allocated for the students to read and the teacher continued the lesson with discussion. Students were asked to circle the words they did not understand, Teacher A1 did not explain to the students about the strategy "circling the words". However, the meaning of the words was explained. This approach indicated that the teacher did not attempt to learn about these learners' existing knowledge which could have been done by organizing a class discussion about the strategies, doing a think aloud session, and/or completing questionnaires or checklist.

### 4.3.2 Observation with Teacher B2

Similarly, in another observation, Teacher B2 started the one-hour lesson by asking the students to read the text on "Captain Malaysia". The focus of the lesson was reading. Students were given 15 minutes before the discussion started. The teacher continued the lesson by saying,

"Class, let's discuss about the text. What is the text about? This text is about superhero."

(Teacher B2)

The excerpt indicates that Teacher B2 started the lesson by asking the students to read the text. 15 minutes were allocated for the students to read and the teacher proceeded with the lesson with discussion about the text. Similar to Teacher A1, Teacher B2 did not learn about learners' prior knowledge on the use of strategies, which is an important approach in the preparation stage. Instead, Teacher B2 started the lesson by asking students to read the text and continued the lesson with discussion. From the excerpts, vocabulary learning strategies such as reading and circling the new words were applied in the classroom. This indicates that Teacher B2 applied strategies in her vocabulary teaching practices. However, she did not assist the students on preparing the students' background knowledge about strategies on reading as well as circling the new words.

The presentation stage involved teachers to select a strategy in vocabulary learning and introduce to the learners. In the presentation stage of the lesson, Teacher B2 continued the lesson with discussion about the vocabulary. Students were given the opportunity to ask

the teacher about words they could not comprehend. One student asked about the meaning of the word "squat", Teacher B2 provided the following explanation,

"(Writes down the word on the board, does the action of squatting in front of the class.) You know you do when u go toilet this? (Demonstrates the action of squatting again)."

(Teacher B2)

This teacher's approach in presenting the meaning of the word "squat" by writing it on the board and doing the related action suggested that the teacher was trying to explain the meaning of the word "squat" by demonstrating the action and relate the vocabulary to learners' background knowledge. Teacher B2 provided the students with explanation twice and answered when she was asked about the meaning of the word, she was assisting the learners to comprehend the word. In the presentation phase, teachers need to present to the learners about the use of vocabulary learning strategies. Teacher B2 should have focused on the guessing strategy then explain and present to the learners about guessing strategy. Teacher B2 could discuss about the characteristics, the use, and applications of the guessing strategy explicitly by using examples. However, guessing strategy was not introduced to the students. Instead, Teacher B2 expected the students to understand the meaning of the word "squat" by demonstrating the action twice and she explained the vocabulary only when she was asked by the students. This indicates that teaching vocabulary was not the focus of the lesson.

### 4.3.3    Observation on Teacher A2

In another observation, Teacher A2 conducted a one hour lesson about writing. It was about a girl and her trip to the beach. Teacher A2 explained about the words given beside the picture. She explained about the word "gorgeous". Teacher A2 provided the following explanation,

> "For example, Alice is gorgeous. (Pointed at Alice) but Morgan is not gorgeous because Morgan is a boy. So what does it mean?"

> (Teacher A2)

Teacher A2 used an example to clarify the meaning "gorgeous", she employed a girl and a boy as examples and used their physical appearances to explain the meanings.

Teacher A2 wanted the students to guess the meaning of the word "gorgeous", she should have selected an approach to introduce to the learners about guessing strategy. Teacher A2 could present to the students about the characteristics, the use, and applications of guessing strategy, which also could have been done by organising a class discussion about the use of guessing strategy. Instead, Teacher A2 used students' physical appearance as examples, which could lead to different interpretations about the word "gorgeous". Consequently, students will rely on Teacher A2 for answers.

The practice stage involving teachers providing the learners an opportunity to practice the vocabulary learning strategies they have acquired in the presentation stage. In the practice stage, Teacher B2 first provided explanations on the vocabulary, then she proceeded with asking the students to complete exercises in the textbook. The teacher continued the lesson by saying,

"You can also refer to your dictionary. Hand in to me before bell rings. For those who can finish early, you can go play scrabble or read storybooks."

<div align="right">(Teacher B2)</div>

The teacher's approach in the practice phase was asking the students to refer to their dictionaries if there were words they could not understand. Students were required to hand in their works before the class ended. Teacher B2 encouraged learners to play games and read storybooks to learn vocabulary after they finished their work. Playing games and reading storybooks were not included in the practice phase. This approach indicated that the teacher did not attempt to provide learners with opportunity to practice the learning strategies with the text "Captain Malaysia" .

### 4.3.4   Observation with Teacher B1

In another observation with Teacher B1, Teacher B1 taught learners about the text "Captain Malaysia", the focus of the lesson was reading. In the practice stage, she wrote the vocabulary on the board and she proceeded the lesson by saying,

"Class, use your dictionary to find the meaning of these words and copy them into your exercise books."

<div align="right">(Teacher B1)</div>

From the excerpt, the teacher's approach in the practice phase was asking the students to refer to their dictionaries if there were words they could not understand. Teacher B1 encouraged learners to use dictionaries as an approach to learn vocabulary. Teacher B1 then explained to the learners about the meaning of the words, learners were asked to copy the vocabulary into their exercise books. Teacher B1 should have assigned the learners in

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groups or pairs to practice the strategy referring to the dictionary. Teacher A1 should have provided learners the opportunity for activities such as self- questioning, discussions after strategies practice. Instead, Teacher B1 neither introduced nor provided the learners opportunity to practice the strategy, referring to the dictionary. Teacher B1 expected the students to comprehend the use of the dictionary in vocabulary learning without providing them guidance and assistance. The excerpts indicate that Teacher B2 and Teacher B1 did not provide learners guidance and assistance as well as opportunity to practice the dictionary strategy. Consequently, students will not be able to learn and apply the dictionary strategy in different contexts.

The teachers observed in this study started the lesson by asking students to read the text. In this presentation phase, they provided the students with answers and explained the meaning of the words. At the practice phase, students were asked to refer to the dictionaries as an approach to learn vocabulary. As for the evaluate and extend phases, there was no information obtained in the classrooms of these teachers. These teachers did not provide the students the opportunity to learn and practice the strategies in their vocabulary learning. Instead, the teachers should have focused on a vocabulary learning strategy, introduced the student about the strategy, and guided the students using CALLA model which includes prepare, present and practice phases. Without guidance from the teachers, students were not able to progress to the evaluate and extend phases in their vocabulary learning. As a result, students were not able to be independent in their vocabulary learning.

## 4.4    Teachers' vocabulary teaching strategies

As for vocabulary strategies, these teachers were observed to have used determination, memory, and cognitive strategies. Teachers used strategies in their vocabulary teaching practices. However, teachers did not teach the strategies based on the steps in CALLA model.

### 4.4.1    Determination strategies

Determination strategies are strategies used by learners to discover the meaning of a new word, such as guessing from context, contextual clues, referring to dictionary, and identifying parts of the speech. Teacher A1 used guessing strategy, as follows,

"Do you still remember the word we learned yesterday? Rectangle? Ok, do you still remember it is like the shape, square but the two sides are longer. Still cannot remember? All right, (drew the shapes on the board), like this."

(Teacher A1)

From the excerpt, Teacher A1 first connects the word "rectangle" to students' background knowledge. Teacher A1 proceeded with connecting square to "rectangle". Teacher A1 provided learners with contextual clues about the word "rectangle".  Teacher A1 used the shape "square" for learners to establish the meaning "rectangle"  through illustration. However, Teacher A1 did not focus on teaching the students about the strategy. Instead, she focused on explaining the meaning of the word "rectangle" to the students. Therefore, students did not learn about guessing strategy.

Teacher B2 also employed guessing strategy. Teacher B2 asked the students to read the text "Captain Malaysia" at the beginning of the lesson and she proceeded the lesson by saying,

"This is the text "Captain Malaysia". Please read through the text. If there is anything you don't understand, you circle it."

(Teacher B2)

From the excerpt, Teacher B2 asked the students to read the text "Captain Malaysia" as students were reading the text, they had to guess the meaning of the words from the context and circle the words they could not comprehend. Students asked Teacher B2 about the words they could not understand, Teacher B2 explained the meaning of the words. Similar with Teacher A1, Teacher B2 encouraged the students to learn vocabulary by guessing the meaning of the words from the context. Guessing strategy enables learners to be self - regulated and independent in vocabulary learning. However, instead of teaching the learners about guessing strategy, Teacher B2 provided the students with the meaning.

Teacher B1 employed determination strategy. Teacher B1 encouraged the learners to learn new vocabulary by referring to the dictionary, reading storybooks, as mentioned in the following excerpt,

"You can refer to your dictionary. Once you have completed your work, you hand in to me. For those who can finish early, you go and read your storybooks."

(Teacher B1)

Teacher B1 focused on teaching the learners about the text "Captain Malaysia". In the practice stage, the teacher instructed the students to refer to their dictionaries if there were words they could not understand. Students could also read storybooks once they have completed their work. Dictionary is an effective tool to enhance vocabulary acquisition. However, Teacher B1 did not assist the students with the strategy, referring to the dictionary. Teacher B1 expected the students to understand the approach of using the dictionary to learn vocabulary. For the students with weaker English proficiency, they copied the meanings from their friends instead of referring to the dictionary. That means the students need guidance from the teacher to use the strategy effectively.

### 4.4.2   Memory strategies

Memory strategies are strategies that include mental processing, which means through memory strategies, new words can be linked to learners' prior knowledge through imagery, keywords, grouping, associating or semantics. Teacher B1 encouraged the learners to play scrabble after they finished their work, as the following excerpt shows,

"Class, you can play scrabble after you have finished with your work."

(Teacher B1)

From the excerpt, Teacher B1 used word games in her vocabulary teaching, students were reminded to play scrabble once their works were completed. Scrabble is a word game that includes mental processing and associating. Learning through games is effective in arousing students' learning interest, By playing scrabble, students are able to associate their knowledge with the vocabulary. Teacher B1 used scrabble to engage students with activities after the lesson and only students who had completed their work had the opportunity to play

scrabble. In this context, using scrabble for vocabulary learning was not an effective approach.

Similarly, Teacher A2 used memory strategy in her vocabulary practice. The focus of the lesson was writing and prior to that, new vocabulary were introduced to the students. Teacher A2 proceeded the lesson by saying,

> "Based on the vocabulary I explained just now, write three sentences in your exercise book."

> (Teacher A2)

Based on the excerpt, Teacher A2 asked the students to write sentences using the new words they have learned. Students had to associate and arrange the words into sentences which means students had to use mental processing and associating while completing the task. Consequently, students would learn how to apply the words in different contexts.

### 4.4.3 Cognitive strategies

Cognitive strategies are strategies that involves repetition and it focuses more on the mechanical means. Teacher A1 asked the students to use dictionary to find out the meaning of the words and copied the words into their exercise books, as the following excerpt shows,

> "Class, use your dictionary to find the meaning of these words and copy them into your exercise books."

> (Teacher A1)

From the excerpt, Teacher A1 employed cognitive strategy in her vocabulary teaching practice, copying the words from the dictionary is an act that involves repetition

and it focuses on mechanical means. Students were expected to learn about the spelling and the meaning of the words while copying the words into their exercise books. Taking notes enables learners to create their own way of remembering the newly learned words. However, students were not aware of the use of note-taking strategy as Teacher A1 did not explain to the students about the strategy.

Based on the observations, teachers utilized determination, memory and cognitive strategies in their vocabulary teaching practices. Social and metacognitive strategies were not employed by the teachers in their vocabulary teaching practices throughout the observations. However, teachers did not assist and guide the students on using the strategies. As a result, students could not apply the strategies in their vocabulary learning.

## 4.5 Interviews with the teachers on vocabulary learning strategies

### 4.5.1 Extensive reading

Three main vocabulary learning strategies were used in the classrooms. The strategies were extensive reading, referring to dictionary and using vocabulary notebook. First, the teachers agreed that reading is effective in improving students' vocabulary. The teachers explained it in the following excerpts:

"Reading helps the students to learn more vocabulary."

(Teacher A1)

"Reading is important to improve students' vocabulary."

(Teacher A2)

"I always encourage my students to read more English story books, I even set up a reading corner behind the class."

<div align="right">(Teacher B1)</div>

"It is important for students to read books to improve their vocabulary. Because when we read a lot, we meet a lot of words. Whenever they have finished their work I will ask them to read their books."

<div align="right">(Teacher B2)</div>

From the excerpts, it is found that the four teachers agreed that extensive reading is an effective vocabulary learning strategies. Teacher A1 explained that reading contributes to learners' vocabulary knowledge. Teacher B1 mentioned that she set up a reading corner in the class. Teacher A2, Teacher B2 emphasized that it is crucial for students to read books as a way to improve their vocabulary. Teacher B2 explained that students will be exposed to new words and repeated encounters with the words through reading, which enables them to remember the words better. Therefore, Teacher B2 asked the students to read books as an after class activity.

### 4.5.2    Memorization and repetition

The data from the study indicates that memory strategies such as memorization and repetition were considered to be effective strategies for vocabulary learning. As Teacher A1 and Teacher A2 mentioned in the following excerpts:

"I normally give the students spelling tests or dictation once a week. I think this is a good way to learn vocabulary."

"I give the students spelling tests or dictation. I think this is a good way to learn vocabulary. My students are weaker, they can't write sentences, using memorization technique helps them to write sentences. I don't use other strategies, I apply memorization technique the most because I think it suits my students' learning style."

(Teacher A2)

Teacher A1 perceived that spelling and dictation enable students to learn vocabulary efficiently. Therefore, spelling tests and dictation were conducted once a week. Teacher A2 mentioned that memorization technique suited her students' learning style as the students' English proficiency was weak. According to Teacher A2, by conducting spelling tests and dictation, the students could learn about building sentences. As a result, memorization technique was often applied in the classroom.

From the excerpts, the two teachers admitted that memorization technique is an useful approach to learn about vocabulary, which means both teachers provided the learners with the vocabulary as well as the meanings and the students were required to learn the vocabulary through repetition. Both teachers did not mention about using other strategies in teaching vocabulary. Instead, the words and meanings were provided for the students. Students had to memorize the vocabulary without understanding the steps to apply the strategy. Therefore, students would depend on the teachers for meanings and vocabulary. This also implies that the teachers teach based on their teaching experiences.

### 4.5.3 Vocabulary notebooks and referring to dictionary

In addition, there are other strategies that the teachers perceived to be effective for vocabulary learning such as note taking and dictionary use. The following are the comments:

"Besides, I will ask them to use vocabulary notebooks, they will copy down the words from the board and I will ask them to refer to the dictionaries and find the meanings. The dictionary they use are bilingual dictionaries."

(Teacher A1)

"In order to help students to remember the words that they have learned, I will ask them to use vocabulary notebooks, they will copy down the words from the board but instead of asking them to find the meanings by themselves I give them the meanings."

(Teacher A2)

"Yes, there are dictionaries behind the class. I will ask them to refer to them whenever they encounter words they don't understand."

(Teacher B1).

"I ask the students to get ready two exercise books, they will copy down the newly learned words into the exercise books and then I will explain to them the meanings of the words. For the upper primary I normally ask them to refer to the dictionary."

(Teacher B2)

Based on the excerpts, Teacher A1, Teacher B1 and Teacher B2 mentioned about referring to dictionary in their vocabulary teaching practices. Both teachers instructed the students to refer to dictionaries if the students encountered words they could not understand. Teacher A1, Teacher B1 and Teacher B2 further commented about asking the students to copy down the words into their vocabulary notebooks. Teacher A2 and Teacher B2 admitted that they provided the meaning of the words for the students. In short, teachers prefer to provide students with meaning of the words, asked students to refer to dictionaries and instructed the students to copy the words into their notebooks as an approach to learn vocabulary. Therefore, students could not apply vocabulary notebook strategy in their vocabulary learning.

The teachers interviewed in this study mentioned about strategies they used in their vocabulary teaching practices, such as reading books (determination strategy) followed by using dictionaries, note taking (determination strategies) as well as memorization (cognitive strategy). Social strategies and metacognitive strategies were not mentioned in the interviews.

Teachers could comprehend the importance of using vocabulary in language learning. They applied the strategies in their vocabulary teaching practices. However, these teachers did not mention about teaching the students about vocabulary learning strategies using CALLA approach or any approaches. Students were asked to refer to the dictionaries or the teachers provided meaning of the words, vocabulary were not the focus in their teaching practices. Two implications can be observed from the interviews. First, vocabulary teaching was not emphasized in the classrooms. Second, the teachers were lack of knowledge about the importance of teaching the students about vocabulary learning strategies.

**4.6     Chapter summary**

The results obtained from the students and teachers were presented in this chapter. Students prefer to use cognitive strategies in their vocabulary learning and the least used strategy was social strategies. Teachers employed metacognitive, memory, cognitive and determination strategies in the classroom and the least used strategy was social strategies. The following chapter will present the discussion of the study as well as recommendations for future study.

# CHAPTER 5

# DISCUSSION AND CONCLUSION

This chapter offers the overall discussion and conclusion of the study. It includes the findings for each research question. This is followed by the implications of the findings. The recommendations for future research are also provided. The chapter ends with a concluding remark.

## 5.1    Summary of the study

This study aimed to investigate vocabulary teaching and learning in Malaysian primary schools. Accordingly, the objectives are:

(i) determine Malaysian primary school students' strategies in learning vocabulary.

(ii) investigate Malaysian primary school teachers' vocabulary teaching practices.

(iii) investigate Malaysian primary school students' preferences in vocabulary learning strategies.

Based on these objectives, surveys, observations, and interviews were conducted. A total of 132 Year Five students and four Year Five English teachers from two national-type primary schools were involved. Questionnaires and interview protocols were used to collect data from primary school students. Observation and interviews were employed to find out teachers' vocabulary teaching practices. The data from the survey were analysed

quantitatively, whereas the data from the observations and interviews were analysed qualitatively.

For addressing the objectives of the study, the results were used to answer the research questions:

RQ1:   What are the primary school students' strategies in vocabulary learning?

RQ2:    What are teachers' practices in teaching vocabulary at primary school?

RQ3:   Why do the students use the strategies in vocabulary learning?

This section brings together all aspects of the findings from the study. The following sections present the discussions and answers to the research questions.

## 5.2      Students' strategies in vocabulary learning

Two main themes emerged from the findings about students' strategies in vocabulary learning. The themes of the findings about students' strategies are cognitive strategies as well as students' vocabulary learning strategies.

The first theme is cognitive strategies. Students used cognitive strategies frequently in their vocabulary learning, such as underlining the words, translating the words, and memorization. The students used all the strategies moderately in their vocabulary learning. In addition, students also utilized memory, metacognitive, and determination strategies in their vocabulary learning. Social strategies are the least used strategies. Insufficient English vocabulary could be a reason that obstructs the students from referring to their friends or classmates when they encountered words they could not comprehend (Kho et al., 2021). Frequent use of cognitive strategies indicates that the students considered the mechanical

approach as effective as it assists them to remember by underlining, translating, circling, memorising, and listing words. Teng (2016) suggested that form and meaning memorization is a convenient approach to learn vocabulary. Atasheneh and Naeimi (2015) stated that mechanical technique is effective in enhancing learners' vocabulary knowledge. Although determination strategies such as reading, referring to dictionaries, vocabulary notebooks were introduced to the students, the mechanical approach is still preferred among the students. Students' needs and preferences in vocabulary learning should be regarded to create effective learning (Ayin & Shah, 2020).

Another theme that emerged is students' vocabulary learning strategies. Students had insufficient knowledge of vocabulary learning strategies. During the lesson, students with good English proficiency levels could use the strategies in their vocabulary learning. For the students with weaker English proficiency, copied the meanings from their friends or did not have the opportunity to use the strategies. Regarding vocabulary learning strategies, these findings discovered that vocabulary learning strategies use among good English proficiency students are higher as compared to weak English proficiency students. This is in agreement with Nie and Zhou (2017) concerning students' strategies in vocabulary learning, which reveals that students with good English proficiency employ more strategies in their vocabulary learning. During the interview, the students mentioned cognitive strategies more frequently such as practicing the words, underlining the words and referring to dictionary app. This indicates that students' knowledge of vocabulary learning strategies is limited. Students with limited vocabulary learning strategies would encounter problems in acquiring English (Mutalib et al., 2014). This finding is in line with the finding by Misbal et al. (2017) concerning Malaysian students' vocabulary knowledge. The study revealed that primary school learners fail in their English UPSR exam because of vocabulary problems. This

finding further confirms the study by Husaini et al. (2016) which revealed that Malaysian students were found to have weak English vocabulary knowledge as well as a study by Wang and Yamat (2019) which identified the low vocabulary repertoire among Malaysian Year 5 pupils. As cited in Rahman and Shah (2016), successful English learners use more strategies in their vocabulary learning. This finding could motivate the teachers to employ strategies in their vocabulary teaching to address vocabulary problems among the students.

## 5.3     Teachers' practices in vocabulary teaching

Overall, three themes emerged from teachers' practices in teaching vocabulary. The themes are determination strategies, strategies in vocabulary teaching, and vocabulary instruction.

The first theme is determination strategies. Findings indicated that the four teachers used one strategy in common which was determination strategies. Determination strategies include strategies such as guessing from context, contextual clues, referring to a dictionary, and identifying parts of the speech. Based on the classroom observations, the teachers used contextual clues to teach vocabulary.  Teacher A1 drew the shape "rectangle" and explained the meaning, Teacher A1 provided contextual clues in pictures. Teacher A2 employed a girl and a boy as examples and used their physical appearances to explain the meaning of "gorgeous", contextual clues were provided through the discourse method. Teacher B2 asked the students to read the text "Captain Malaysia" as students were reading the text, they had to guess the meaning of the words from the context, Teacher B2 used textual context to assist the students to understand the vocabulary. Schmitt (1997) explained that textual context, pictures, spoken discourse, gestures or intonation that could give clues to meanings are included in contextual clues. Students would find out the meanings of words based on

context, structural knowledge, and reference material. Edward (2009) and Nation (2002b) perceived that guessing in a context assists learners to achieve long-term retention. In the interview, the teachers also explained that using strategies such as memorization, guessing, referring to a dictionary, vocabulary notebook was to assist learners to remember the vocabulary. In short, teachers used determination strategies so that students could achieve vocabulary retention. However, in the aspect of vocabulary retention, Wang and Yamat (2019) identified that Malaysian primary students have problem mastering the amount of vocabulary required by the Curriculum Specification (2015). According to Schmitt (1997), determination strategies enable students to discover the meanings of words based on context, structural knowledge and reference material, which means learners could discover the meanings of the words through material and context without assistance from the teachers. Further, Schmitt explained that textual context, pictures, spoken discourse, gestures or intonation that could give clues to meanings are included in contextual clues. Edward (2009) and Nation (2002b) perceived that guessing in a context assists learners to achieve long-term retention. Thornbury (2002) stated that words learned in context assist learners to focus on the word's collocations and grammatical structures. Moreover, Teacher A1 explained in the interview that she perceived that students must possess the sufficient vocabulary to write good sentences and when students master writing skills they can do well in their UPSR exam. Edward (2009) and Nation (2002) perceived that guessing in a context assists learners to achieve long-term retention. Therefore, based on the findings, the teachers preferred to use determination strategies often in their vocabulary teaching practices. Teachers should utilize various techniques such as multimedia tools in teaching vocabulary (Nasaruddin & Kamalludeen, 2020).

The second theme relates to strategies in vocabulary teaching. The teachers'

vocabulary teaching was based on their experiences as language teachers. In the interview,

Teacher A2 clarified that the purpose of using the memorization approach was due to the

students' weak proficiency level, which she perceived as a suitable approach in her

vocabulary teaching. Similarly, Teacher A1 mentioned that she gave the students spelling

tests or dictation as she perceived that memorization was a good way to learn vocabulary.

Teacher B2 also stated that she utilized picture cards which according to her, it was a suitable

method. As such, in the lessons, guidance about vocabulary learning strategies was not

provided by the teachers, students were expected to learn vocabulary when they used the

strategies. According to Blanton (1998) to initialize and use schema for learning, it is

significant for a learner to be "made aware of his background knowledge and exposed to

strategies to 'bridge' from pre-requisite skills to learning objectives" (p. 172). Halpern and

Hakel (2003) as well as Perry (2002) indicate that when learners are conscious of how they

think and learn, it will be easier for them to transfer the learning to new contexts. Instead,

meanings and explanations of the vocabulary were provided only when the students asked.

In relation to vocabulary teaching, teachers taught English based on their experience as

language teachers, which is similar to Muhammad and Kiely's findings (2018) concerning

Malaysian teachers' vocabulary teaching practices, which reveals that teachers teach

vocabulary within the spectrum of their pedagogical knowledge. The use of vocabulary

learning strategies was not addressed in the lessons. As such, students tend to forget the

vocabulary that they have learned in class due to lack of opportunity and limited hands-on

experience (Razali et al., 2017), the lack of vocabulary knowledge causes learners to fail to

mastering English (Misbal et al., 2017). Vocabulary retention is crucial as Nation and

Waring (1997) mentioned that second language learners would need 3,000 words and above

of high frequency words as a minimum requirement to comprehend a text. Therefore, teachers should expose learners to the use of vocabulary learning strategies for better vocabulary retention (Rahman & Shah, 2016).

The third theme is vocabulary instruction. Vocabulary learning was not the focus of the lesson. Teachers focused on teaching reading or writing skills, vocabulary learning was only part of the lessons. In the interviews, the teachers agreed that extensive reading could improve students' vocabulary knowledge. Teacher A1 and A2 employed dictation and spelling tests as approaches to help students to remember the vocabulary. The focus of the lesson was writing skills. Teacher B1 mentioned that she set up a reading corner in the class. Teacher B2 asked the students to read books as an after-class activity. The focus of the lesson was reading skills. For Teacher B1 and B2, vocabulary learning was employed as an after class activity to keep the students occupied. In relation to vocabulary teaching and learning, the findings revealed that the teachers perceived that students learned vocabulary as the students read the passages and wrote sentences. This seems in agreement with Sulaiman et al. (2015) as well as Tahir and Mohtar (2016) regarding Malaysian English language learning in which they revealed that English is introduced as a compulsory subject starting from primary school, students are required to master the four basic skills namely listening, speaking, reading, and writing skills; vocabulary learning is incorporated in the teaching of the four skills. On the contrary, Tahir (2020) who conducted a study on vocabulary learning suggested that explicit vocabulary instruction is necessary to assist learners' English language learning and teachers should select suitable approaches to teach vocabulary. Vocabulary knowledge is the basic aspect of language learning and language use (Nation, 2001) and should be given attention.

Teaching vocabulary based on the strategy instruction model, the CALLA model was not utilized in Malaysian teachers' vocabulary teaching practices. Based on the findings, the teachers emphasized more on language skills more in their English teaching, vocabulary was not the focus of their lessons. Similarly, Malaysian Curriculum Specification (2015) also focuses on equipping students with language skills, such as reading, writing, listening, and speaking skills. The teachers preferred to apply the strategies directly in their lessons, particularly guessing strategies. This seems to oppose Cobb's (2007) clarification that new vocabulary occurs at a ratio of 1:10. Therefore, for a typical learner with a vocabulary of 2,000-word families, it is impossible to guess the meaning successfully. Learners often recall only 1 out of every 12 tested words, or less than 1 word for every 1,000 words, after reading a text without a particular objective of learning new words (Dronjic, 2019). As a result, it is crucial to teach students the use of strategies using CALLA as a strategy instruction model. This is in agreement with Schunk (2008) that proposed learners require careful instructions to make good choices of learning strategies in their vocabulary learning and it can be applied through strategy instruction.

## 5.4    Implications of the findings

Apart from fulfilling the research objectives, the findings of this study also provide useful insights concerning Malaysian primary schools' vocabulary teaching and learning.

Firstly, the findings revealed the lack of strategies among Malaysian primary students' vocabulary learning. Such situations should be looked upon as learners tend to forget the vocabulary they learned due to the lack of strategies in their vocabulary learning. This finding contradicts the findings by Ayin and Shah (2020) that students applied various vocabulary learning strategies, students mostly applied cognitive strategies in their

vocabulary learning, which consists of rote learning, underling, and circling. Therefore, learners should use vocabulary learning strategies in their learning, proficient language learners employ different learning strategies (Ahmad et al., 2016; Nie & Zhou, 2017; Stavy et al., 2019).

Second, the findings provided insights into Malaysian teachers' English vocabulary teaching practices, in which teachers did not focus on teaching the students the use of vocabulary learning strategies. The lack of emphasis on strategies in teachers' vocabulary teaching practices contradicts the findings by Chu et al., (2019) that teachers should provide learners with explicit instruction in vocabulary learning strategies. Teachers' strategies use in vocabulary teaching practices will affect learners' vocabulary learning strategies (Kamile et al., 2012). As such, it is necessary that teachers employ strategies in their vocabulary teaching practices.

Third, the CALLA model (Chamot, 1999) is an appropriate model to be used as strategy instruction in Malaysian classrooms. The purpose of introducing the CALLA model which is to equip learners to be self-regulated in their language learning is in line with the aim of the Malaysian English Curriculum (2015). Besides, the CALLA model is an effective model for vocabulary learning. There are five steps in the CALLA model, present, prepare, practice, evaluate, and extend. However, the teachers prefer to present the vocabulary learning strategy directly to the students. This echoes the findings by Jerome and Samuel (2017) that teachers' pedagogical is influenced by their beliefs on language teaching and learning. Therefore, it is suggested that Malaysian teachers' beliefs on language teaching and learning should be taken into consideration while applying the CALLA model in Malaysian classrooms. Future CALLA model could consider adapting CALLA five steps

model into three steps model which emphasizes on present, practice, and evaluation. Teachers could present to the learners the use of vocabulary learning strategies, provide the students the opportunity to practice the strategies, then assist the learners to apply the strategies in suitable contexts.

## 5.5    Recommendations for future research

This study emphasizes more on investigating teachers' vocabulary teaching practices. Future studies should look at graphic organizers or learning models that could assist teachers to apply vocabulary learning strategies in English classrooms. Based on the Malaysian Curriculum Specification (2015), strategies in vocabulary learning are not being emphasized, graphic organizers such as Frayer Model (1969) should be introduced to the teachers to enhance learners' word learning.

The present study focused especially on students' strategies in vocabulary learning and teachers' practices in vocabulary teaching. Due to the absence of time, future studies might include a wider scope of vocabulary learning by looking into students' vocabulary learning styles. Further studies employing a vocabulary test can also be given to the respondents to provide deeper insights into the use of vocabulary learning strategies among the students.

The present study focused especially on primary schools around Kuching, Sarawak, which is considered an urban area. Future studies might include primary schools from the suburban, rural, and interior areas of Sarawak as well as other places in Malaysia.

## 5.6 Conclusion

The present study investigated vocabulary learning in Malaysian primary schools. The findings of this study have contributed to the understanding that the two most used strategies among Malaysian primary school students are repetition and mechanical strategies, which are under cognitive strategies. The students preferred to use cognitive strategies: translating, underlining, circling, and memorizing. In addition, the students used vocabulary learning strategies moderately in their vocabulary learning. The least used strategies are social strategies, as students could have limited English vocabulary to communicate with their peers. Therefore, it is suggested that students should be taught strategies for vocabulary learning.

The findings of the study also reveal that teachers employed determination strategies, which is guessing from the contextual clues in their vocabulary teaching. The interview data further confirms that teachers' vocabulary teaching was based on their experiences as language teachers. In the lessons, the teachers focused on teaching reading or writing skills, vocabulary learning was only part of the lessons. In the preparation stage, the teachers should have activated students' background knowledge of the rote learning strategy, presented to the students the strategy, and organized group discussions on how to apply the strategy in vocabulary learning, such as circling the vocabulary first, referring to the dictionary for meanings as well as highlighting the spelling and the meanings. In the presentation phase, teachers should have prepared the students with knowledge about the vocabulary notebooks strategy as well as provided them with the opportunity to practice the strategy. Teachers could have started by presenting the benefits of using the vocabulary notebook strategy, guided them on how to use the dictionary, provided the students with a template, and then taught them how to organize their notes. Instead, guidance from the teachers was not

provided. Besides, the teachers should have introduced the student to the strategies, teach the students about strategies using the steps in the CALLA model. Instead, students were left to apply the strategies without guidance from the teachers. The absence of teacher guidance in vocabulary learning strategies affects learners' vocabulary learning. Hence, students were not able to be self-regulated in their vocabulary learning. In the practice phase, the teachers could have organized the students in groups or pair to practice the strategy referring to the dictionary. Students could have discussed the new words with their peers, guess the meanings by using context cues and then refer to the dictionary. The teachers should have focused on referring to the dictionary strategy, guided the students on applying the strategy in their vocabulary learning. Instead, learners were asked to read storybooks, refer to the dictionaries and play games as approaches to learn vocabulary without assistance and guidance from the teacher. Students did not have the opportunity to evaluate the strategies employed in their vocabulary learning. The teachers acknowledged the benefits of extensive reading in vocabulary learning. The teachers should have informed the students about the benefits of reading in vocabulary learning and taught the students how to guess the meaning of the words from the context. Instead, the teachers mentioned the benefits of reading. the teachers did not mention the approach they used in teaching learners about reading strategy. This indicates that the teachers may not understand the importance of teaching the learners about strategies in vocabulary learning

This ultimately means that there is an apparent need for learning materials to encourage the use of vocabulary learning strategies in teachers' vocabulary teaching practices as teachers' vocabulary teaching practices will affect learners' vocabulary learning. The upcoming research could consider other variables such as employing English learning materials in teachers' teaching practices.

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**Appendix A**: Questionnaire

<div style="border:1px solid black">

**Questionnaire**

Vocabulary learning strategies employed by the Malaysian primary school students

</div>

Ethnic : _____

Age    : _____

Gender        :        Male/ Female

Rate the following vocabulary learning strategies that you use to learn new words according to the frequency scales below.

Circle the number in the box for your choice.

| No | Vocabulary learning strategies | How often do you do these activities to learn words? <br><br> 1- never <br><br> 2- once a month <br><br> 3- once a week <br><br> 4- always | | | |
|----|-------------------------------|---|---|---|---|
| 1. | I make a word list to remember the words. | 1 | 2 | 3 | 4 |
| 2. | I make English- Chinese word cards. | 1 | 2 | 3 | 4 |
| 3. | I underline the important words. | 1 | 2 | 3 | 4 |

| 4. | I circle the word that is important | 1 | 2 | 3 | 4 |
|---|---|---|---|---|---|
| 5. | I read English newspapers to learn words. | 1 | 2 | 3 | 4 |
| 6. | I remember the page where I have seen the new word. | 1 | 2 | 3 | 4 |
| 7. | I use the newly-learned word in speaking to remember it. | 1 | 2 | 3 | 4 |
| 8. | I use new word in a sentence. | 1 | 2 | 3 | 4 |
| 9. | I use Facebook to learn English words. | 1 | 2 | 3 | 4 |
| 10 | I play with word games | 1 | 2 | 3 | 4 |
| 11 | I connect new word to one with same meaning. | 1 | 2 | 3 | 4 |
| 12 | I look up the word in an electronic dictionary. | 1 | 2 | 3 | 4 |
| 13 | I look up the new word in a monolingual dictionary. | 1 | 2 | 3 | 4 |
| 14 | I ask my classmate in class what the new word means. | 1 | 2 | 3 | 4 |
| 15 | I use skype to learn English words. | 1 | 2 | 3 | 4 |
| 16 | I connect new word to one already known. | 1 | 2 | 3 | 4 |
| 17 | I evaluate if I have really learned the word. | 1 | 2 | 3 | 4 |
| 18 | I analyze parts of the word in order to find out its meaning. | 1 | 2 | 3 | 4 |
| 19 | I guess the meaning of the new words from spoken English. | 1 | 2 | 3 | 4 |
| 20 | I try to remember the Chinese equivalent of the new English word. | 1 | 2 | 3 | 4 |
| 21 | I learn new words to communicate better. | 1 | 2 | 3 | 4 |
| 22 | I watch English films with Chinese subtitles. | 1 | 2 | 3 | 4 |
| 23 | I listen to English music in order to learn new words. | 1 | 2 | 3 | 4 |

| 24 | I watch English films without subtitles | 1 | 2 | 3 | 4 |
|----|----------------------------------------|---|---|---|---|
| 25 | I read English books. | 1 | 2 | 3 | 4 |
| 26 | I play English video games. | 1 | 2 | 3 | 4 |
| 27 | I read English labels on all kinds of products to learn new words. | 1 | 2 | 3 | 4 |
| 28 | I guess the meaning of the new word from context when reading. | 1 | 2 | 3 | 4 |
| 29 | I look for English speaking friends in the social media. | 1 | 2 | 3 | 4 |
| 30 | I use the newly-learned word in writing. | 1 | 2 | 3 | 4 |
| 31 | I take notes of the words when watching/listening to English programs. | 1 | 2 | 3 | 4 |
| 32 | I use a new word in speaking so as to remember it. | 1 | 2 | 3 | 4 |
| 33 | I make picture word cards. | 1 | 2 | 3 | 4 |
| 34 | I repeat the word to myself. | 1 | 2 | 3 | 4 |
| 35 | I guess the meaning of the new words from spoken English. | 1 | 2 | 3 | 4 |
| 36 | I look up the meaning of the new words in a bilingual dictionary. | 1 | 2 | 3 | 4 |
| 37 | I learn new words from my own vocabulary. | 1 | 2 | 3 | 4 |
| 38 | I rote-learn the words | 1 | 2 | 3 | 4 |

---

**Questionnaire**

Vocabulary learning strategies employed by the Malaysian primary school students

---

Ethic : Chinese/ Malay/ Iban/ Bidayuh/ Others : _____

Age   : _____

Gender : Male/Female

Rate the following vocabulary learning strategies that you use to learn new words according to the frequency scales below.

Circle the number in the box for your choice.

| No | Vocabulary learning strategies | How often do you do these activities to learn words?  1 - never  2- once a month  3- once a week  4- everyday | | | |
|---|---|---|---|---|---|
| 1. | I make a word list to remember the words. | 1 | 2 | 3 | 4 |
| 2. | I underline the important words. | 1 | 2 | 3 | 4 |
| 3. | I circle the word that is important | 1 | 2 | 3 | 4 |
| 4. | I remember the page where I have seen the new word. | 1 | 2 | 3 | 4 |

| 5.  | I use the newly-learned word in speaking to remember it. | 1 | 2 | 3 | 4 |
|-----|----------------------------------------------------------|---|---|---|---|
| 6.  | I use new word in a sentence.                            | 1 | 2 | 3 | 4 |
| 7.  | I play with word games                                   | 1 | 2 | 3 | 4 |
| 8.  | I look up the word in an electronic dictionary.          | 1 | 2 | 3 | 4 |
| 9.  | I ask my classmate in class what the new word means.     | 1 | 2 | 3 | 4 |
| 10. | I evaluate if I have really learned the word.            | 1 | 2 | 3 | 4 |
| 11. | I analyze parts of the word in order to find out its meaning. | 1 | 2 | 3 | 4 |
| 12. | I guess the meaning of the new words from spoken English. | 1 | 2 | 3 | 4 |
| 13. | I try to remember the Chinese equivalent of the new English word. | 1 | 2 | 3 | 4 |
| 14. | I learn new words to communicate better.                 | 1 | 2 | 3 | 4 |
| 15. | I watch English films with Chinese subtitles.            | 1 | 2 | 3 | 4 |
| 16. | I listen to English music in order to learn new words.   | 1 | 2 | 3 | 4 |
| 17. | I read English books.                                    | 1 | 2 | 3 | 4 |
| 18. | I guess the meaning of the new word from context when reading. | 1 | 2 | 3 | 4 |
| 19. | I look for English speaking friends in the social media. | 1 | 2 | 3 | 4 |
| 20  | I use the newly-learned word in writing.                 | 1 | 2 | 3 | 4 |
| 21. | I make picture word cards.                               | 1 | 2 | 3 | 4 |
| 22. | I guess the meaning of the words whenever I encounter words I don't comprehend. | 1 | 2 | 3 | 4 |
| 23. | I look up the meaning of the new words in a bilingual dictionary. | 1 | 2 | 3 | 4 |

| 24. | I learn new words from my own vocabulary. | 1 | 2 | 3 | 4 |
| 25. | I rote-learn the words | 1 | 2 | 3 | 4 |

**Appendix C**: Observation Protocol

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**Observation protocol**

Setting/ individual observed:

Observer:

Role of the observer (Participant, non participant, other _____):


Time:

Place:

Length of Observation:


| **Descriptive notes** | **Reflective notes** |
|---|---|
| (Notes that describe what occurred at the site) | (Notes about observer experiences, hunches, insights, themes) |
| A description of what observed in chronological order: <br><br> (e.g., write about portraits of individuals, the physical setting, events, and activities) <br><br><br> (possibly draw the sketch of the site) | |

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Source : Creswell (2002)

**Appendix D**: Interview Protocols

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**Interview protocol**


Aim of the research:


Time of interview:

Date:

Place:

Interviewee:

Position of interviewee:



(Inform the teacher about the (a) the objective and aim of the research (b) individuals and sources of data being collected, (c) what will be done to the data to protect the confidentiality of the interviewee, (d) how long the interview will take.

Questions

 a) What do you think about the role of vocabulary in language teaching and learning?

 b) What is the best way to learn vocabulary?

 c) From your experience as a learner, what are the strategies you used to find the meanings of words you don't understand?

 d) As a teacher, what strategies you used to help learners to recall the newly-learned vocabulary?

 e) How does vocabulary learning occurs in your classroom?

 f) Which aspects of vocabulary do you normally focus on



(Thank the teacher for their cooperation. Assure them of the confidentiality of the responses.)

---

**Appendix E**: Permission letter from Kementerian Pendidikan Malaysia

KEMENTERIAN PENDIDIKAN MALAYSIA
Jabatan Pendidikan Negeri Sarawak
Jalan Diplomatik, Off Jalan Bako
Petra Jaya, 93050 Kuching, Sarawak

Tel : 082-473445
Faks : 082-473684
Emel : *unitlatihan007@gmail.com*

Ruj Kami : JPNSW.SKPP.LAT.600-1/1/1Jld5( 88 )
Tarikh : 3 Oktober 2019

Sharon Kho Fung Chien

929 Taman Stampin
Jalan Stampin Tengah
93350 Kuching
Sarawak

Puan,

**KEBENARAN UNTUK MENJALANKAN KAJIAN DI SEKOLAH-SEKOLAH, INSTITUT-INSTITUT PERGURUAN, JABATAN PENDIDIKAN DAN BAHAGIAN-BAHAGIAN DI BAWAH KEMENTERIAN PENDIDIKAN MALAYSIA**

Dengan hormatnya saya merujuk kepada perkara di atas.

2.      Sukacita dimaklumkan bahawa pada dasarnya Jabatan Pendidikan Negeri Sarawak **tiada halangan** untuk membenarkan puan menjalankan kajian bertajuk :

" **Students' Vocabulary Learning Strategies And Teachers' Practices In Malaysian Primary School English Language Classroom** "

3.      Diingatkan bahawa sepanjang tempoh kajian tersebut, puan adalah tertakluk kepada peraturan yang sedang berkuatkuasa dan menjalankan kajian seperti tajuk yang diluluskan oleh Bahagian Perancangan dan Penyelidikan Dasar Pendidikan, Kementerian Pendidikan Malaysia melalui surat bil. KPM.600-3/2/3-eras(5132) bertarikh 20 September 2019. Surat kelulusan ini sah digunakan bermula dari **24 September 2019 hingga 30 November 2019**.

4.      Jabatan ini memohon agar sesalinan laporan kajian dihantar ke Unit Pengurusan Bakat, Jabatan Pendidikan Negeri Sarawak sebaik sahaja selesai untuk tujuan rekod dan rujukan.

Sekian, terima kasih.

**"BERKHIDMAT UNTUK NEGARA"**

Saya yang menjalankan amanah,

(CHANG SZE PING)
Sektor Sumber Manusia
b.p. Pengarah Pendidikan
Jabatan Pendidikan Negeri Sarawak.

.../m/sa)an2019/-

"MENJULANG PENDIDIKAN NEGERI SARAWAK"
"FLY KENYALANG FLY, FLY HIGH"

**Appendix F:** Reading texts

<u>Captain Malaysia</u>

This is a story about a special man and

his mission to protect all the children in

Malaysia. He only wants to be known as

'Captain Malaysia. No one knows who he is

and where he lives. Only he himself has the

answers to the questions.

Many people admire him for his strength and willingness to help those

in need. His mission is to protect all the children around him from any

evil or danger. Whenever they need help, he will know through his supersensitive

hearing and bionic vision. He will be there to make sure every child is

safe and sound.

Captain Malaysia can run and fly as fast as lightning. He uses a titanium

shield to protect himself from enemy attacks. Some people say he acquired

his powers from the enemies he fought but no one really knows for

sure. It will remain a secret forever.

The children love Captain Malaysia as he is a kind and unselfish hero

He is willing to help any child without expecting any reward in return

He always reminds the children to take care of themselves. Despite being

famous, he is never boastful. His best friend is Master Kiddo who helps

him whenever needed.

<div align="center">(Adapted from English Year 5 Textbook KSSR Malaysia)</div>

<u>Siti Wan Kembang</u>

Once upon a time, the state of Kelantan was ruled by a female ruler. Her name was Cik Siti Wan Kembang. Her father passed away when she was only four years old. At the age of 30, she became the ruler of Kelantan.

Cik Siti Wan Kembang is a legendary figure for her beauty, courage, and wisdom. She made sure the land under her control was always safe from the enemies. She was respected as a warrior princess. She was brave to enter battles on a horseback with an army of female horse riders. Though admired by many for her beauty, she never got married.

<div align="center">(Adopted from English Year 5 Textbook)</div>