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Students' Vocabulary Learning Strategies of Discovery and Consolidation in Malaysian Primary School English Language Classrooms

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ABSTRACT

A good grasp of vocabulary enables language learners to articulate, comprehend and communicate ideas and concepts effectively. For learners whose first language is not English, mastering vocabulary knowledge in terms of the breadth and depth is challenging and needs to start at a young age through the use of various strategies. The lack of English language vocabulary knowledge would demotivate learners and even result in abandoning efforts to learn the language. Therefore, it is important that learners know and are able to use five strategies, which include determination, social, cognitive, memory, and metacognitive strategies to learn vocabulary. Determination and social strategies are in the discovery category, while social cognitive, memory, and metacognitive strategies are in the

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E-mail addresses: skshaeron@yahoo.com (Sharon Fung-Chien Kho) rjoseph@unimas.my (Joseph Ramanair) pambigapathy@unimas.my (Ambigapathy Pandian) *Corresponding author consolidation category. This study aims to determine the vocabulary learning strategies used by 132 Year Five primary school English language students in two urban National Type Chinese schools in Sarawak. It investigated the strategies these learners used, how frequently they used them, and their reasons for preferring particular strategies. Data were collected from two classrooms at each school through the use of questionnaire and individual interview. Questionnaire results were analysed descriptively in terms of mean scores and

standard deviation while interview responses were coded, categorised and analysed using thematic analysis. The findings suggest that while the students employed moderate use of all the five strategies, cognitive strategies which involved mechanical approaches were the most used while social strategies were not used by all students.

Keywords: English language learners, language learning, primary school, vocabulary knowledge, vocabulary learning strategies

INTRODUCTION

Vocabulary plays an important role in language learning. The knowledge of vocabulary is fundamental to language learning and use (Bakhsh, 2016; Nation, 2001). Language learners with large vocabulary are able to articulate, understand and communicate various ideas and concepts more effectively than those with limited vocabulary. With reference to learners whose first language is not English, learning the language requires knowledge of a very large number of lexical items (Schmitt, 2004; Wray, 2002) and this knowledge involves breadth (quantity of words) and depth (quality of words) (Nation, 1990). English language learners (ELLs) do not only need to know concepts, referents and associations but also spelling, pronunciation and word parts as well as functions, collocations and constraints of vocabulary (Nation, 2001). The ability to learn vocabulary determines success in learning (Gass & Selinker, 2008). According to Nation and Waring (2002) English language learners would need

more than 3,000 high frequency words to achieve success in language learning and as a minimum requirement for comprehension of text. Nation (2006) further recommends having knowledge of 34,660 words based on a vocabulary of 8000-word families while for Schmitt (2008), 8000-9000 word families are required for learners to read different texts that include knowledge of root forms, inflections and derivations of vocabulary. In terms of high frequency vocabulary Schmitt and Schmitt (2014) advocated an increase to the most frequent 3000 English word families which are maximally useful vocabulary and important for ELLs to master. For Collier (2016), at least 10000-word receptive vocabulary is needed for social interaction in the classroom. Therefore, ELLs need to have a range of between 3000 to 10000 words. The need for a large knowledge vocabulary in terms of breadth and depth necessitates that learning English language vocabulary needs to start at a very young age.

For ELLs, achieving oral proficiency takes three to five years whereas, academic English proficiency would require four to seven years to develop (Hakuta et al., 2000). Learning such a large number of lexical items as part of language proficiency could therefore be a daunting task for these learners (Laufer, 2000). While ELLs are able to comprehend the newly learned vocabulary, they often experience issues in remembering these words effectively (Khan et al., 2018) and are unable to apply newly learned vocabulary (Rafiah et al., 2016; Yee & Wahab, 2016). The challenge

to master vocabulary knowledge among young ELLs is even more complex as they lack abstract thinking (Dworetzky, 2002), have lower affective filters (Gürsoy & Akin, 2013), and lack purpose in learning the language (Gürsoy, 2012). A failure to master vocabulary knowledge that is required tends to demotivate or even cause ELLs to abandon learning the language (Karami & Bowles, 2019; Sari & Abdulrahman, 2019; Sundari, 2018).

Mastering vocabulary knowledge is also a challenge among young ELLs in the context of Malaysia (Husaini et al., 2016; Misbah et al., 2017) which is the focus of this research. English language is a compulsory subject starting from primary school and students are required to master the four basic skills namely listening, speaking, reading, and writing skills (Sulaiman et al., 2015). Vocabulary learning is incorporated in the teaching of the four skills (Tahir & Mohtar, 2016). Primary school ELLs learn the first 1,000 high frequency words and are then exposed to the next 2,000 high frequency words in secondary school (Letchumanan & Tan, 2012).

However, many Malaysian primary school ELLs remain weak in vocabulary knowledge due to a lack of practice and exposure (Ien et al., 2017; Prisla & Yunus, 2019), assessment driven approaches (Ali, 2003), and limited application opportunities in the classroom (Rafiah et al., 2016; Yee & Wahab, 2016). Such limitations can affect classroom social and academic interaction as well (Ab Rahman et al., 2020) and result in them being unable to master the English

language (Misbah et al., 2017). These drawbacks suggest that ELLs lack effective strategies that could support them to learn vocabulary effectively (Benson, 2001; Feng & Webb, 2020; Webb & Nation, 2017).

Therefore, this study aims to determine the vocabulary learning strategies (VLS) used by Year Five primary school students in two urban National Type Chinese schools in Sarawak, Malaysia.

Previous studies on Vocabulary Learning Strategies (VLS)

Applying appropriate strategies is important to learn vocabulary effectively. Studies have documented the use of VLS as supporting ELL's learning of vocabulary. ELLs are able to learn vocabulary by connecting words to synonyms and antonyms (Yazdi & Kafipour, 2014), use dictionaries, do guesswork and interact in the classroom (Mutalib et al., 2013), and communicate, read and listen to English songs (Nayan & Krishnasamy, 2015). However, a lack of exposure to VLS could hinder learners from performing well in vocabulary learning (Mutalib et al., 2013) and affect efforts for vocabulary retention (Dollah & Shah, 2016).

In the context of primary school English language learning, Kavvadia (2016) conducted a study investigating VLS used by 81 ELLs in a primary school in Greece. The learners from grade three to six participated by completing a questionnaire based on Schmitt's (1997) taxonomy of VLS. The findings from this study showed that these ELLs used pictures and translation

to discover meaning, and used songs, games, and stories as well as vocabulary notebooks that involved matching pictures with words and using words in sentences to consolidate vocabulary. As for their preferred VLS, the learners reported a tendency towards strategies that afforded them the "feel of free-time activities such as playing games, doing crossword puzzles, engaging in group-work activities, reading stories, listening to songs, guessing meaning from context/pictures" and the preferences for particular strategies varied according to grades (Kavvadia, 2016, p. 97). These VLS strategies point to categories of discovery and consolidation following Schmitt's VLS taxonomy. Discovery involves determination strategies such as discovering and guessing meaning, while consolidation includes cognitive strategies such as keeping vocabulary notebooks and memory strategies such as associating words with pictures. The author concluded that the practised and preferred strategies among these ELLs reflected their teachers' practices in the classroom, and that training learners in VLS from a young age enhanced their language learning performance.

Elsewhere, Thékes (2017) investigated the VLS used by 86 Hungarian sixth grade primary school ELLs using 52-item vocabulary learning strategies questionnaire as part of a pilot study. The results of this study indicated that they learned vocabulary frequently by writing words bilingually, receiving parental support for their learning, using either printed or

electronic dictionaries to look up words, reading English comics, listening to English songs, consulting the teacher, and writing words down repeatedly to remember them. Although these Hungarian ELLs were active social media users, they did not use these platforms to learn vocabulary and they did not see the need to evaluate their own learning. The outcome of this study also contributed to the author reducing the 52-item questionnaire to a total of 38 items.

In the context of Malaysia, Razali et al. (2017) conducted a study to explore how primary four ELLs could be supported to increase their memory retention of theme-based vocabulary through a game of cards. Data were collected through pre and post-tests at one primary school in Penang which consisted of a quiz. The findings based on the comparison of scores for both tests revealed that the ELLs were able to remember more words accurately having played the card game. The learners were also observed to be actively involved while playing the cards and they reported finding the experience enjoyable (Razali et al., 2017). Stavy et al. (2019) investigated the use of language games in supporting vocabulary retention among primary three ELLs in one rural school in Sarawak. This quasi-experimental research employed a one group pre-test and post-test design which used vocabulary retention tests. The results from this study indicated that the ELLs "scored better after learning vocabulary through language games than through conventional teaching" indicating that vocabulary retention can be supported through games (Stavy et al., 2019, p. 113).

The studies investigating the use of VLS highlight three main aspects. First, the use of VLS is crucial to support ELLs' vocabulary learning particularly in recalling learned vocabulary and also applying knowledge of vocabulary effectively. Conversely, an absence of such strategies is detrimental to vocabulary learning. Second, exposing ELLs to the VLS is important to ensure that students are provided with opportunities for practise as part of language learning. Such opportunities are evident in practices that involve classroom interaction, picture-based vocabulary learning, translation activities, and games. Third, studies investigating VLS particularly at the primary school context in Malaysia suggest that ELLs are aware of these strategies as their teachers have taught them through various classroom activities. However, there appears to be a lack of evidence as to whether the students frequently used the strategies learned when learning vocabulary. For VLS to be effective there is a need to determine what strategies ELLs use in learning vocabulary to obtain insights into how they could be strategically supported to use them in their learning. Determining the strategies is important in supporting young ELLs' vocabulary learning which needs to begin at a very young age to enable a mastery of the required amount of vocabulary.

Vocabulary Learning Strategies (VLS)

Schmitt (1997) advocates the need to expose language learners to a variety of

strategies to support their learning. Such exposure is important for ELLs to know the strategies that are available when learning vocabulary so as to determine what works for them. Schmitt offers a comprehensive inventory of VLS which was adopted in this study. It consists of two categories of strategies namely discovery and consolidation. While the discovery category consists of determination and social strategies, the consolidation category comprises the social, cognitive, memory and metacognitive strategies. Social strategies are found in both categories as Schmitt considers it as applicable for both. These VLS are described next.

The discovery category of VLS involves determination and social strategies. Determination strategies can be referred as strategies that are used by learners in their attempts to discover the new word on their own when they encounter problems in comprehending the word such as guessing from context, referring to dictionary and analysing the structure of the language such as the parts of speech. In contrast, social strategies are employed when learners are unable to proceed with discovering on their own and require assistance and support from others such as the teacher and/or their peers to help them discover the meaning of the words by asking questions and cooperating with others in the learning process.

As for the category of consolidation, it includes social, cognitive, memory and metacognitive strategies. Cognitive strategies are strategies that can be defined as "repetition, and using mechanical means

to study vocabulary including keeping vocabulary notebooks" (Schmitt, 2000, p. 136). They involve learners repeating vocabulary by reciting them aloud or silently or by writing them down on words cards or making a list of words. The focus is, however, not on mental processing. Memory strategies are strategies that connect new words to learners' prior knowledge. The new words can be linked to learners' prior knowledge through imagery, keywords, grouping, associating or semantic grids. Metacognitive strategies are concerned with learners consciously overviewing their learning process and employing the most suitable learning methods. These strategies involve learners managing their own vocabulary progress and assessing it through various methods such as a vocabulary test.

Various studies have employed Schmitt's (1997) VLS. Aisyah (2017) adapted Schmitt's inventory as part of the questionnaire used to investigate the vocabulary learning of junior high school Indonesian ELLs. Schmitt's inventory was also adapted by Kavaddia (2016) who used it as part of the questionnaire to investigate the vocabulary learning of young Greek ELLs as well as by Thékes (2017) for Hungarian primary school ELLs.

Rabadi (2016) employed Schmitt's VLS as an adapted questionnaire to investigate Jordanian undergraduates' VLS while Dong et al. (2020) employed a questionnaire developed from Schmitt's VLS scale to investigate Chinese Grade seven ELLs.

Materials and Methods

The main aim of this study was to determine the VLS used by Year Five primary school students in two urban National Type Chinese schools in Sarawak, Malaysia to learn English language vocabulary. This main aim was addressed by the following research questions:

- What VLS were used by these primary school ELLs?
- How frequent did these ELLs use VLS?
- What were the ELLs' reasons for preferring particular VLS?

The participants of this study consisted of 132 Year Five primary school ELLs drawn from two urban National Type Chinese schools in Sarawak, Malaysia. The two schools are characteristic of National Type Chinese primary schools where the main medium of instruction is Mandarin and being located in an urban area, the majority student population are of Chinese ethnicity. Each school has a total of four Year Five classrooms and students were recruited from two classes at each school. The teachers identified these students from each class based on their overall performance in the English language. These teachers consisted of two teachers per school and each teacher has been teaching English language for more than 10 years and is trained in the subject. The Year Five students aged eleven were chosen due to their level of intermediate knowledge and proficiency in English vocabulary based on the word lists for the level as described in the English language curriculum (Curriculum Development Division [CDD], 2015). At this level, these ELLs would have grasped a fair amount of English language vocabulary having experienced up to five years of learning the language at school. In Malaysia, there are two types of primary schools - National Schools where the medium of instruction is the national language which is Malay, and National Type Schools where either Tamil or Mandarin is used as the main instructional medium. In both the National and National Type primary schools, English language is a compulsory subject. The total instructional time per week for an English language class at the National Type Chinese primary school is 180 minutes (CDD, 2015).

This research employed a mixed method design which involved both quantitative and qualitative approaches with the latter supporting the former. The quantitative aspect of this study enabled the collection of numerical data from a large sample in an objective manner to provide statistical descriptions of the phenomenon that is being investigated (Aliaga & Gunderson, 2000; Babbie, 2010; Ranjit, 2011). For this study, the quantitative approach involved a survey method that employed a questionnaire to obtain a collection of information from the target population through their responses to a set of statements (Check & Schutt, 2012). The information obtained enabled the researchers to identify and to determine the VLS used by the ELLs to provide statistical descriptions.

The questionnaire used in this study was adapted from Thékes (2017) who developed

a vocabulary learning strategies instrument for young ELLs. This questionnaire was based on Schmitt's (1997) and Taka's (2008) questionnaire items from Oxford's (1990) Strategy Inventory for Language Learning (SILL). Thékes' questionnaire consisting of 38 statements was used and these items were further adapted by the researchers of this study to suit the context and objectives. Two main adaptations were made to Thékes' questionnaire items. The first adaption involved simplifying words which were unfamiliar to the context of ELLs in the two National Type Chinese schools. Words such as "link", "infer", "synonymous" were not found in the vocabulary list in the Curriculum Specification for Year Five (CDD, 2015) as they have yet to be exposed to them at this level. As such these words which were used in the original items in Thékes' questionnaire were simplified so as to enable the ELLs to understand them. The second adaption made was related to the context of this study. The context of this study was National Type Chinese schools where the majority of ELLs are of Chinese ethnicity and Mandarin is the medium of instruction. As such, items containing the word "Hungarian" as used in Thékes' questionnaire items were replaced with the word "Chinese" to reflect the context of this study. The examples of the two types of adaptations are shown in Table 1.

The adapted questionnaire consisted of two main sections. The first section consisted of demographic information i.e. ethnicity and gender. The second section consisted of the 38 items pertaining to the

Table 1

Examples of adapted items in the questionnaire

Type of adaptations	Item no	Original questionnaire items	Adapted items
Simplifying unfamiliar words	11	I link new word to one with synonymous meaning.	I connect new word to one with same meaning.
	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.
Context	2	I make English- Hungarian word cards.	I make English-Chinese word cards.
	20	I try to remember the Hungarian equivalent of the new English word	I try to remember the Chinese equivalent of the new English word.
	21	I watch English movies with Hungarian subtitles.	I watch English movies with Chinese subtitles.

VLS. This adapted questionnaire was then piloted to test for the reliability of items. A pilot study is used as a "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). A total of 12 students of similar characteristics - Year Five at a National Type Chinese school and eleven years old, volunteered to be pilot participants. These respondents took approximately 15-20 minutes to complete this questionnaire and during this session did not report experiencing any issues with the items in the questionnaire to the researchers who were present on site.

Data from the pilot study was analysed for reliability. Reliability test was employed to assess the quality of the data collection instrument (Mcleod, 2007). According to Ursachi et al. (2015), the Cronbach's a value of .7 shows high reliability of the instrument. The reliability results from the pilot study show that Cronbach's value of all the items in the questionnaire is .821. This indicates that the questionnaire has good reliability. However, there was one item -"I read English newspapers to learn words" which was rated as "Always" in terms of frequency by all pilot participants resulting in zero standard deviation. It was removed from the final questionnaire. Item-analysis was carried out through corrected item-total correlations. Six negative scores in corrected item total correlation were identified as most of the students chose 'never' as their answers and were omitted from inclusion in the final questionnaire. Six more items fell near or under the value of .194 for item

reliability, indicating that they could be misleading or ambiguous to the respondents. These items were also excluded from the final questionnaire. In total, of the 38 items in the pilot questionnaire 13 items were removed resulting in the final questionnaire consisting of 25 items. Also, the options for responses in terms of frequency based on a Likert scale was revised. In Thékes' questionnaire which was adapted for use in the pilot study a four-value frequency scale consisting of "never", "once a month", "once a week", and "always" were used. However, following Singleton et al. (1993), words such as "seldom", "often", "always"

which are commonly used to describe frequency in Likert scale ratings have been described as confusing to 11-year olds. As such, the word 'always' in the frequency scale of the questionnaire was replaced with the word "everyday" while the other indicators for frequency i.e. "never", "once a month", "once a week" remained. Sample items in the questionnaire are shown in Table 2.

This study also employed a qualitative approach to obtain deeper descriptive insights (Kerlinger, 1970; Neuman, 2014; Taylor et al. 2016) into the phenomenon from the data obtained quantitatively.

Table 2

Sample items in the questionnaire

Instruction: Circle the number in the box for your choice.

No	Vocabulary learning strategies	How often of words? 1 - never 2- once a r 3- once a v 4- everyda	veek	ese activitie	s to learn
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

It involved the use of the interview as a tool to obtain insights. Therefore, while the questionnaire was used to identify and to determine the VLS used by the ELLs to provide statistical descriptions, the interview provided insights into why particular strategies were preferred.

Permission to collect data was first obtained from the Ministry of Education Malaysia and then the State Education Department of Sarawak. Data collection began after approval was granted by the authorities of the two urban National Type (Chinese medium) primary schools. The main researcher carried out the data collection from two Year Five classrooms at each school on separate days and times as discussed and agreed with each school authority. The main researcher was present at each classroom in each school throughout the administration of the questionnaire to describe the purpose of the data collection, clarify and explain each item in the questionnaire, and assure participants on the confidentiality of their responses. The administration and collection of the completed questionnaires were for a duration of 40 minutes per classroom. The interview which involved four Year Five students was conducted two days after the administration of the questionnaire for each classroom. The interview lasted for 15 minutes for each student. In total, data collection consisting of questionnaire and interview from each classroom was for the duration of one week while the total duration for data collection for this study was four weeks.

Data Analysis

Data derived from the questionnaire were analysed through descriptive statistics, means and standard deviation to identify the vocabulary learning strategies used by the primary school students. Schmitt's (1997) taxonomy of VLS was used as a guideline. According to Johnson and Christensen (2017), mean score has the most precise measurement as it includes the magnitude of all scores. Standard deviation shows how much variation or dispersion from the average and has similar value with the original value and mean (Brown, 1982). Therefore, while the mean is used to find out the strategies these ELLs used in their vocabulary learning, the standard deviation is employed to identify how spread out the data were from the mean. Interview data were audio-recorded and transcribed verbatim. The researchers studied the transcribed data and compared them against the related objective to provide insights into the participants' preferred VLS. The analysed data were then assigned codes and categories which were further organised into themes that highlighted the preferred strategies.

RESULTS

The 25-item questionnaire was distributed and completed by all 132 participants from two urban National Type (Chinese medium) primary schools (School A and School B). The total participants from School A was 72 students from two Year Five classes while for School B they consisted of 60 students

from two Year Five classes as well. The participants consisted of 62 males (47%) and 70 females (53%). The majority of the participants were of Chinese ethnicity (n = 123, 93.2%) while the rest consisted of participants who are of indigenous Sarawak ethnicities (n = 8, 6.1%), and Indian ethnicity (n = 1, 0.7%).

The students' responses on the VLS used were analysed descriptively. It is reported as mean scores and standard deviation. Mean score has the most precise measurement to identify the frequency of use as it includes the magnitude of all scores. Kaya and Charkova's (2014) mean score interpretation were used for this purpose as shown in Table 3.

Table 3

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	1.0

As for standard deviation (SD), it shows how much variation or dispersion from the average (Johnson & Christensen, 2017). Standard deviation is used to show how close data was clustered around the mean. If the standard deviation value is low, it meant the data clustered close to the mean (expected value) but if the standard deviation value is high, it meant that the data spread out over a wider range (Walliman, 2017).

Overall, the results showed that that the students used all the strategies moderately in their vocabulary learning. The highest mean score was recorded for Cognitive strategies (M=2.77) followed by Metacognitive strategies (M=2.64). The third most used strategies were Determination (M= 2.58)

followed by Memory (M= 2.56). Social strategies recorded the lowest mean score for moderately used strategies (M=2.53) with the highest standard deviation (SD=1.27). The findings suggest that social strategies were the least moderately used. Table 4 describes the results of each category of the strategies (cognitive, metacognitive, determination, memory and social) in the order of the most used to the least used VLS.

The results of each VLS used by the participants and the frequency are reported based on the most used to the least used which are cognitive, metacognitive, determination, memory, and social.

Cognitive strategies include strategies that employ mechanical ways to learn vocabulary such as listing, underlining, circling, memorising, repeating, and remembering a list of words. Table 5 details the participants' responses to the related listed strategies.

It can be observed that underlining the important words was a regularly used vocabulary learning strategy (M= 3.02). Remembering the Chinese equivalent of the new English word was reported as moderately used (M=2.91) as was circling the word (M=2.79). Rote-learning was also a moderately used strategy (M=2.67) but not considered as a strategy used by most learners in learning vocabulary (SD=1.09). Making a word list recorded the lowest

mean score (M=2.45). For this cognitive strategy, all strategies were recorded as moderately used except for the underlining of important words which was a regularly used vocabulary learning strategy.

As for Metacognitive strategies, they consist of ELLs planning, managing, and evaluating their own vocabulary learning. These strategies include reading books in English, listening to English songs, watching English films with Chinese captions, evaluating themselves, and remember where they encountered the new word. The participants' responses to each strategy is shown in Table 6.

Table 4

The most used to the least used VLS

Strategies	Mean	SD
Cognitive	2.77	1.14
Metacognitive	2.64	1.15
Determination	2.58	1.18
Memory	2.56	1.14
Social	2.53	1.27

Table 5

The use of cognitive strategies

Strategies	Mean	SDS
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

Reading English books was reported as a regularly used strategy (M=3.01) and was practised by most of the students (SD=0.92). The remaining metacognitive strategies recorded moderate use - listening to English songs (M=2.71), watching English movies with Chinese subtitles (M=2.54), self-evaluation having learned new vocabulary (M=2.54) and remembering the page where the new word was seen (M=2.29). For these learners, reading English books is an often used strategy among them while other VLS involving songs, movies, self-evaluation and memory were fairly used in the metacognitive strategy.

Determination strategies are strategies used by learners as they make attempts at discovering new words on their own when they experience problems. These strategies include guessing from context, using contextual clues, or referring to a dictionary. Table 7 describes the responses of the learners to the listed strategies.

Based on the mean scores for determination strategies, guessing the meaning of the word from the reading context was reported as a moderately used strategy (M=2.89). Learning new words by using own interpretation was also reported as moderately used (M=2.85) along with guessing the meaning of a word

Table 6

The use of metacognitive strategy

Strategy	Mean	SD
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

Table 7

The use of determination strategies

Strategies	Mean	SD
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

which was not understood (M=2.75), and guessing the meaning of a word that was spoken (M=2.73). However, the least used strategy was using an electronic dictionary (M=1.70). This finding indicated that the guessing strategy appears to be moderately used by these learners when learning vocabulary. This finding suggests that these learners preferred to guess the meaning of words than refer to the electronic dictionary.

Memory strategies connect new words to learners' prior knowledge. The strategies involve ELLs applying the learning of new words in their writing, to communicate, using new words, playing word games, analysing parts of the word, and making picture word cards. Details of the learners' responses to each strategy are found in Table 8.

From the mean score, it can be observed that the regularly used strategy was using the newly-learned word in writing (M=3.19). The standard deviation value for this strategy is low (0.94), and it shows that most of the students used the words they had learned in their writing. Using new words to

communicate (M=3.01) was also reported as a regularly used strategy. Strategies of using new word in a sentence (M=2.77), playing word games (M=2.65), using the newly-learned word in speaking (M=2.40) as well as analysing the word parts (M=2.14) were reported as moderately used by the students. However, making picture word cards was a rarely used strategy (M=1.75). Therefore, when employing memory strategies these students often applied new words learned in their writing and communication when learning vocabulary.

When learners are not able to discover new words on their own, they employ social strategies in their learning of vocabulary. Social strategies involve learners asking their classmates or seeking out assistance from others to help them discover the meaning of the words. Table 9 documents these students' responses to the strategies under the social strategy.

The mean scores showed that social strategies were used moderately in students' vocabulary learning. Asking their classmates reported a mean score of 2.82. The mean

Table 8

The use of memory strategy

Strategy	Mean	SD
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
Playing word games	2.65	0.95
Use the newly-learned word in speaking	2.40	1.20
Analyse parts of the word	2.14	1.09
Make picture word cards	1.75	1.07

Table 9

The use of social strategies

Strategies	Mean	SD
Ask my classmates	2.82	1.17
Look for English speaking friends in social media	2.23	1.31

score of looking for English speaking friends in social media was 2.23. This showed that students referred to their classmates more often as compared to their friends in social media to learn vocabulary.

Four Year Five students volunteered to be interviewed by the main researcher. The interview was conducted once on an individual basis. Each student was asked to share their frequently used VLS and explain the reasons for using the strategies.

For these Year Five students, remembering the vocabulary they were learning was considered important. To help them remember the vocabulary they frequently employed three strategies, which were using the newly-learned words in speaking and writing, underlining the important words, and reading English books.

The students considered having the opportunity to practise using new words in writing and speaking as supporting them to remember the words. They demonstrated an appreciation for such opportunities in the classroom to aid comprehension as one student explained,

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

Another student acknowledged the opportunity to apply vocabulary for

productive skills as a way to enhance memory of new words. For this student,

"Using the words in my speaking and writing help me to remember better" (Student C).

The students also viewed underlining important words as a strategy that helped them to learn English vocabulary. They considered this strategy as helping them to focus on new words and to remember them as well. One student described this focus as follows

"Underlining the words helps me to pay more attention to them" (Student B).

One student regarded the underlining of important words as a strategy that was helpful when revising for the exams. According to this student,

"I underline the words. I can refer back to the words easily when I study for exam" (Student D).

As for reading English books, these students were of the opinion that this strategy exposed them to many words. From their own experiences of reading English books, they described how they encountered many new words. This exposure provided them with more opportunities to learn new words. One student who liked reading English storybooks because of the learning opportunity remarked,

"I read storybooks. I like it because I can learn new words from the books" (Student A).

For another student, the new vocabulary learned from reading English storybooks were used to write essays. According to this student,

"I see new words from the storybooks and I learn them, I use them to write essay" (Student C).

The responses these four students provided on their frequently used VLS indicated that applying newly learned vocabulary to write and speak not only helped them to learn but also remember the vocabulary. Placing emphasis on learning new vocabulary by underlining words was also an important strategy to help them focus and prepare for exams while reading storybooks provided them opportunities to learn and use new words. The strategies highlighted by these learners reflected the VLS related to memory, cognitive, metacognitive and determination categories. Interestingly, there was no reference to the use of social strategies suggesting that the related strategies were rarely employed by these students as reported in the quantitative based findings.

Discussion

The findings indicated that these Year Five primary school ELLs used all five strategies moderately when learning vocabulary. Among the five moderately used strategies, cognitive strategies recorded the highest moderate use while social strategies

reported the lowest moderate use. This finding suggests that the ELLs consider the mechanical approach as effective when learning vocabulary as it helps them to remember by underlining, translating, circling, memorising, and listing words. It is interesting to note that the mechanical approach was preferred despite the students being exposed to other VLS as indicated in the interview. Their preference for cognitive strategies implies the importance they place on memory retention when learning vocabulary (Razali et al., 2017; Stavy et al., 2019). This emphasis is possibly due to the lack of sufficient opportunities to learn vocabulary (Rafiah et al., 2016; Yee & Wahab, 2016).

The least used among the strategies although moderately used but not by most students was social strategies. The participants in this study did not seem to learn vocabulary by asking their friends meanings of words or interact with those from beyond their classroom. This finding supports studies that have reported similar results among young ELLs who did not show a preference to practise social strategies (Kavvadia, 2016; Thékes, 2017). It is possible that this strategy was not preferred by the participants in this study, as they may have lacked the vocabulary needed to interact with others (Ab Rahman et al., 2020; Collier, 2016). They had limited exposure and the opportunity to practice to enable them to use the vocabulary to interact with one another or others (Ien et al., 2017; Prisla & Yunus, 2019).

The findings from the interview further confirmed the results from the questionnaire. The findings pointed to a preference for the consolidation category of VLS which is cognitive strategies. Their main concern was to remember the words and they employed various means to achieve this purpose. The concern for memory retention appears to be characteristic of these ELLs as it would help them to remember words to use in writing essays and in the examination (Dollah & Shah, 2016; Dong et al., 2020; Razali et al, 2020). Assessment seems to be main motivation and it would mostly involve the use of words to write essays. Sufficient knowledge of vocabulary is therefore crucial to their performance in assessed work (Dong et al., 2020; Mutalib et al, 2013).

CONCLUSION

This study was aimed at determining the VLS used by Year Five primary school students in two urban National Type Chinese schools in Sarawak, Malaysia to learn English language vocabulary. A total of 132 students from two schools participated in this study by completing a 25-item questionnaire. Four students participated in an interview. Data were analysed using descriptive statistics and reported based on means and standard deviation.

The findings from the questionnaire data revealed that the participants employed all five strategies moderately for vocabulary learning. In terms of category, the two strategies related to the consolidation category namely cognitive and metacognitive were recorded as the two most used strategies which were moderately used. The least moderately used strategy is social strategies which are of both the consolidation and discovery categories. The interview data further supported the findings from the questionnaire as the students' responses indicated that they used all strategies with the least moderately used for social strategies.

The cognitive strategies consisting of mechanical approaches where the learners translate, circle, memorise, underline, and list words were reported as the moderately used strategies often used by these students. Such approaches were considered effective for purposes of memory retention. The lack of use of the social strategies suggested that they probably lacked the vocabulary to interact with their classmates or those from beyond their classroom to ask them the meaning of words they did not understand.

This study investigated VLS among Year Five primary school students from two schools using a questionnaire and interview. Future studies employing focus group interviews, implementing the questionnaire at a beginning and end point of vocabulary learning lessons, and using vocabulary tests could be employed to provide deeper insights into the various strategies ELLs use in the classroom.

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REFERENCES

- Ab Rahman, F., Sazali, N. H., & Veloo, A. (2020). Empowering children through circle time: An intervention to promote language interaction in primary ESL classroom in Malaysia. *Practitioner Research*, 1, 263-287.
- Aisyah, D. N. (2017). The vocabulary teaching and vocabulary learning: Perception, strategies, and influences on students' vocabulary mastery. *Jurnal Bahasa Lingua Scientia*, 9(2), 293-318. https://doi.org/10.21274/ls.2017.9.2.133-158
- Ali, M. S. (2003). English language teaching in primary schools: Policy and implementation concerns. *IPBA E-Journal*. 1-14. https://kajianberasaskansekolah.files.wordpress.com/2008/04/article70.pdf
- Aliaga, M., & Gunderson, B. (2000). *Introduction* to quantitative research. Doing quantitative research in education with SPSS. Sage.
- Babbie, E. (2010). *The practice of social research*. Nelson Education Ltd.
- Bakhsh, S. A. (2016). Using games as a tool in teaching vocabulary to young learners. *English language teaching*, 9(7), 120-128. https://doi.org/10.5539/elt.v9n7p120
- Benson, P. (2001). Teaching and researching autonomy in language learning. Longman.
- Brown, G. W. (1982). Standard deviation, standard error: Which 'standard' should we use? *American Journal of Diseases of Children*, 136(10), 937-941. https://doi.org/10.1001/archpedi.1982.03970460067015
- Check, J., & Schutt, R. K. (2012). Survey research. In J. Check, & R. K. Schutt (Eds.), Research methods in education (pp. 159-185). Sage Publications.

- Collier, C. (2016). Classroom language interaction checklist (CLIC): Administration manual and screening form. Cross-Cultural Developmental Education Services.
- Curriculum Development Division. (2015). Standard document of primary school curriculum: Basic core module of English Language for national schools English Year 5. Ministry of Education Malaysia.
- Dollah, R. A., & Shah, P. M. (2016). A comparison between vocabulary learning strategies employed by urban and rural schools students. *Journal of Education and Social Sciences*, 4, 114-121.
- Dong, Y., Tang, Y., Wu, S. X. Y., Dong, W. Y., & Li, Z. (2020). Longitudinal effects of mediums of word explanation on L2 vocabulary learning strategies among Chinese Grade-7 students. *Frontiers in Psychology*, 11, 702. https://doi.org/10.3389/ fpsyg.2020.00702
- Dworetzky, J. P. (2002). *Introduction to child development*. West Publishing Company.
- Feng, Y., & Webb, S. (2020). Learning vocabulary through reading, listening, and viewing: Which mode of input is most effective? *Studies in Second Language Acquisition*, 42(3), 499-523. https://doi.org/10.1017/s0272263119000494
- Gass, S. M., & Selinker, L. (2008). Second language acquisition: An introductory course (3rd ed.). Taylor & Francis.
- Gürsoy, E. (2012). Music and puppets. In Gürsoy, E. & Arikan, A. (Eds.), *Teaching English to young learners: An activity-based guide for prospective teachers.* Eğiten Kitap.
- Gürsoy, E., & Akin, F. (2013). Is younger really better? Anxiety about learning a foreign language in Turkish children. *Social Behavior and Personality: An International Journal*, 41(5), 827-842. https://doi.org/10.2224/sbp.2013.41.5.827

- Hakuta, K., Butler, Y. G., & Witt, D. (2000). How long does it take English learners to attain proficiency? The University of California Linguistic Minority Research Institute. https:// files.eric.ed.gov/fulltext/ED443275.pdf
- Husaini, I., Foong, L. M., & Suleiman, D. (2016). Improving Nigerian and Malaysian primary school students' vocabulary skills using flashcards. *International Journal of Research* and Reviews in Education, 3(7), 20-25.
- Ien, L. K., Yunus, M. M., & Embi, M. A. (2017). Build me up: Overcoming writing problems among pupils in a rural primary school in Belaga, Sarawak, Malaysia. *Jurnal Pendidikan Humaniora*, 5(1), 1-7. https://doi.org/10.17977/ um030v5i12017p001
- Johnson, R. B., & Christensen, L. (2017). Educational research: Quantitative, qualitative and mixed approaches (6th ed.). Sage Publication.
- Karami, A., & Bowles, F. (2019). Which strategy promotes retention? intentional vocabulary learning, incidental vocabulary learning, or a mixture of both? *Australian Journal of Teacher Education*, 44(9), 25-43. https://doi.org/10.14221/ajte.2019v44.n9.2
- Kavvadia, K. (2016). Investigating vocabulary learning strategies of EFL young learners in the Greek primary school. Research Papers in Language Teaching and Learning, 7(1), 88-104.
- Kaya, J., & Charkova, K. (2014). the most and least frequent vocabulary learning strategies of high school English language learners. *International Journal of English Language Education*, 2(2), 122-141. https://doi.org/10.5296/ijele.v2i2.6019
- Kerlinger, F. N. (1970). Foundations of behavioral research. Holt, Rinehart & Winston.
- Khan, R. M. I., Radzuan, N. R. M., Shahbaz, M., Ibrahim, A. H., & Mustafa, G. (2018). The role of vocabulary knowledge in speaking development of Saudi EFL learners. Arab World

- English Journal, 9(1), 406-418. https://doi.org/10.24093/awej/vol9no1.28
- Laufer, B. (2000). Task effect on instructed vocabulary learning: The hypothesis of 'involvement'. In *Selected Papers from AILA '99 Tokyo* (pp. 47-62). Waseda University Press.
- Letchumanan, K., & Tan, B. H. (2012). Using computer games to improve secondary school students' vocabulary acquisition in English. Pertanika Journal of Social Sciences & Humanities, 20(4), 1005-1018.
- McLeod, S. A. (2007). What is reliability? SimplyPsychology. www.simplypsychology. org/reliability.html
- Misbah, N. H., Mohamad, M., Yunus, M. M., & Ya'acob, A. (2017). Identifying the factors contributing to students' difficulties in the English language learning. *Creative Education*, 8(13), 1999-2008. https://doi. org/10.4236/ce.2017.813136
- Mutalib, A. H., Kadir, R. A., Robani, R., & Majid, F. (2013). Vocabulary learning strategies among Malaysian TEVT students in German-Malaysian Institute (GMI). *Social and Behavioral Sciences,* 123(2014), 361-368. https://doi.org/10.1016/j.sbspro.2014.01.1434
- Nation, I. S. P. (1990). *Teaching and learning vocabulary*. Heinle and Heinle.
- Nation, I. S. P. (2006). How large a vocabulary is needed for reading and listening? *Canadian Modern Language Review*, 63(1), 59-82. https://doi.org/10.3138/cmlr.63.1.59
- Nation, P. (2001). *Learning vocabulary in another language*. Cambridge University Press.
- Nation, P., & Waring, R. (2002). Vocabulary size, text coverage and word lists. In N. Schmitt & M. McCarthy (Eds.), *Vocabulary: Description,* acquisition and pedagogy (pp. 6-19). Cambridge University Press.

- Nayan, S., & Krishnasamy, H. N. (2015). A preliminary study on vocabulary learning strategies used by the students from the Faculty of Accountancy. *International Journal of Languages, Literature and Linguistics*, 1(1), 10-14. https://doi.org/10.7763/IJLLL.2015.V1.3
- Neuman, W. L. (2014). Social research methods: Qualitative and quantitative methods. Pearson.
- Oxford, R. L. (1990). Language learning strategies: What every teacher should know. Heinle & Heinle.
- Peat, J., Mellis, C., Williams, K., & Xuan, W. (2002). *Health science research: A handbook of quantitative methods*. Sage.
- Polit, D. F., Beck, C. T., & Hungler, B. P. (2001). Essentials of nursing research: Methods, appraisal, and utilization. Lippincott.
- Prisla, D. K., & Yunus, M. M. (2019). Blended CEFR in enhancing vocabulary among low proficiency students. *Arab World English Journal (AWEJ) Special Issue on CALL*, (5). https://doi.org/10.24093/awej/call5.11
- Rabadi, R. I. (2016). Vocabulary learning strategies employed by undergraduate EFL Jordanian students. *English Language and Literature Studies*, 6(1), 47-58. https://doi.org/10.5539/ells.v6n1p47
- Rafiah, A. R., Yee, B. C., & Kee, L. L. (2016). The use of e-pictionary in vocabulary instruction. *The English Teacher*, 45(3), 144-158.
- Ranjit, K. (2011). Research methodology: A step-bystep guide for beginners. SAGE.
- Razali, W. N., Amin, N. M., Kudus. N. V., & Musa, M. K. (2017). Using card game to improve vocabulary retention: A preliminary study. International Academic Research Journal of Social Science 3(1), 30-36. http://www.iarjournal.com/wp-content/uploads/IARJSS2017 1 30-36.pdf

- Sari, M., & Abdulrahman, T. R. (2019). Discovery learning (Dl) strategy on students reading comprehension in report text. *Lingua*, *15*(1), 19-26. http://doi.org/10.34005/lingua.v15i2.356
- Schmitt, N. (1997). Vocabulary learning strategies. In N. Schmitt, & N. Schmitt, & M. McCarthy (Eds.), *Vocabulary: Description, acquisition, and pedagogy* (pp. 199-227). Cambridge University Press.
- Schmitt, N. (2000). *Vocabulary in language teaching*. Cambridge University Press.
- Schmitt, N. (2004). Formulaic sequences: Acquisition, processing and use. John Benjamins.
- Schmitt, N. (2008). Review article: Instructed second language vocabulary learning. *Language Teaching Research*, 12(3), 329-363. https://doi.org/10.1177/1362168808089921
- Schmitt, N., & Schmitt, D. (2014). A reassessment of frequency and vocabulary size in L2 vocabulary teaching. *Language Teaching*, 47(4), 484-503. https://doi.org/10.1017/S0261444812000018
- Singleton, R. A., Straits, B. C., & Straits, M. M. (1993). *Approaches to Social Science* (2nd ed.). Oxford Press.
- Stavy, L. Z. D., Subon, F., & Unin, N. (2019). Using language games for vocabulary retention in a rural primary school in Sarawak. *International Journal of Service Management and Sustainability (IJSMS)*, 4(2), 1-18. https://doi.org/10.24191/ijsms.v4i2.8067
- Sulaiman, T., Ayub, A. F. M., & Sulaiman, S. (2015). Curriculum change in English language curriculum advocates higher order thinking skills and standards-based assessments in Malaysian primary schools. *Mediterranean Journal of Social Sciences*, 6(2), 494-494. http://dx.doi.org/10.5901/mjss.2015.v6n2p494
- Sundari, W. (2018). The difficulties of learning English for the beginner English learners. *Culturalistics:*Journal of Cultural, Literary, and Linguistic Studies, 2(1), 34-41.

- Tahir, M. H. M., & Mohtar, T. (2016). The effectiveness of using vocabulary exercises to teach vocabulary to ESL/EFL learners. *Pertanika Journal of Social Sciences & Humanities*, 24(4), 1651-1669.
- Taka, V. P. (2008). Vocabulary learning strategies and foreign language acquisition. Multilingual Matters.
- Taylor, S. J., Bogdan, R., & DeVault, M. J. (2016). Introduction to qualitative research methods: A guidebook and resource. JohnWiley & Sons.
- Thékes, I. (2017). An empirical study into Hungarian young learners' English as a foreign language learning strategies. *International Journal of Research Studies in Language Learning*, 6(1), 3-24. http://doi.org/10.5861/ijrsll.2016.1359
- Ursachi, G., Horodnic, I. A., & Zait, A. (2015). How reliable are measurement scales? External factors with indirect influence on reliability estimators. *Procedia Economics and Finance*, 20, 679-686. https://doi.org/10.1016/S2212-5671(15)00123-9

- Walliman, N. (2017). *Research methods: The basics*. Routledge.
- Webb, S., & Nation, I. S. P. (2017). *How vocabulary* is learned. Oxford University Press.
- Wray, A. (2002). Formulaic language and the lexicon. Cambridge University Press.
- Yazdi, M., & Kafipour, R. (2014). A qualitative study of vocabulary learning strategies applied by Iranian undergraduate EFL learners in real learning setting. *English Language Teaching*, 7(7), 1-7. https://doi.org/10.5539/elt.v7n7p1
- Yee, B. C., & Wahab, H. A. (2016). An action research of using vocabulary wheel to improve year 2 pupils' vocabulary in the Malaysian classroom. *Journal of English Education 1*(2), 77-83. https://doi.org/10.31327/jee.v1i2.150

