

**THE IMPACT OF IMAGES IN DEVELOPING THE
ESL VOCABULARY KNOWLEDGE OF
MALAYSIAN STANDARD 4 PUPILS**

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by

LOO XIN YING

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LIST OF ABBREVIATIONS

CAM	Concept Attainment Theory
CEFR	Common European Framework of Reference for Languages
DCT	Dual-Coding Theory
ELSQC	English Language Standards and Quality Councils
EPI	English Proficiency Index
ESL	English as a Second Language
HOTS	Higher Order Thinking Skills
IH	Interaction Hypothesis
L2	Second Language
LD	Learning Disabled
MOE	Ministry of Education
TAP	Transfer-Appropriate Processing Theory
TL	Teaching and Learning
PdPR	Home-Based Learning (Pengajaran dan Pembelajaran di Rumah)
PSE	Picture Superiority Effect
PWIM	Picture Word Inductive Model
SST	Sensory Semantic Theory

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IMPAK IMEJ DALAM MENGEMBANGKAN PENGETAHUAN KOSA KATA ESL DALAM KALANGAN PELAJAR MALAYSIA TAHUN 4

ABSTRAK

Kebelakangan ini, peranan kosa kata dalam menyumbang kepada kecekapan bahasa dan perkembangan literasi seseorang telah menjadi tumpuan dalam kajian pemerolehan bahasa, khususnya dalam bidang pemerolehan bahasa kedua. Di Malaysia, secara umumnya, para pelajar mengalami kesukaran dalam akademik mereka disebabkan oleh repositori kosa kata ESL mereka yang terhad. Kajian ini telah dijalankan untuk mengkaji tentang impak penggunaan imej-imej dalam kelas-kelas ESL di sebuah sekolah rendah kebangsaan di Malaysia mempengaruhi perkembangan pengetahuan kosa kata reseptif ESL melalui intervensi Model Induktif Kata Bergambar (PWIM). Dalam kajian ini, pemerolehan kosa kata reseptif ESL dalam kalangan murid Tahun Empat yang terlibat telah dikaji. Selain itu, proses mengingati (jangka pendek) dan kekal mengingati (jangka panjang) pengetahuan kosa kata reseptif ESL antara dua kumpulan utuh juga dibandingkan. Kedua-dua kumpulan utuh terdiri daripada murid-murid Tahun Empat. Keseluruhan program intervensi kajian ini telah berlangsung selama lebih kurang 26 minggu dengan setiap 140 orang peserta dalam kajian ini tertakluk kepada praujian, pascaujian, dan pascaujian tertunda menggunakan Ujian Pengetahuan Kosa Kata Reseptif ESL. Serentak itu, mereka dikehendaki menjawab soal selidik setelah mereka melengkapkan pascaujian tertunda. Dua sesi temu ramah separa berstruktur telah dijalankan bersama dua orang guru ESL yang terlibat dalam kajian ini, sesi pertama adalah sebelum intervensi dan sesi kedua adalah selepas intervensi untuk mengumpul gagasan dan cadangan mereka terhadap kajian ini. Data utama telah dikumpul daripada praujian, pascaujian, dan pascaujian tertunda. Data kedua

dikumpul berdasarkan jawapan soal selidik para peserta dan balasan temu ramah separa berstruktur yang dijalankan bersama dua guru ESL yang terlibat. Kedua-dua data utama dan kedua tertakluk kepada Ujian Kebolehpercayaan (*KR-20 Coefficient Reliability Test, Levene's Test for Homogeneity of Variances and Cronbach's Alpha Coefficient Reliability Test*) untuk memastikan ketekalan dan kesahan dalaman kajian ini. Data utama yang terkumpul seterusnya disintesis dan dianalisis secara statistik dan dinilai melalui perisian Pakej Statistik Untuk Sains Sosial (SPSS) (Versi 27). Perbandingan deskriptif dan inferensi secara statistik telah dibuat untuk memberi perhatian kepada persoalan serta hipotesis kajian yang telah dinyatakan. Dapatan kajian utama telah membuktikan bahawa penggunaan imej melalui strategi PWIM dalam pengajaran dan pembelajaran ESL dalam kalangan murid-murid Malaysia adalah efektif dalam perkembangan mengingati (jangka pendek) dan kekal mengingati (jangka panjang) pengetahuan kosa kata reseptif ESL. Dapatan kajian menunjukkan bahawa penggunaan imej dalam perkembangan pengetahuan kosa kata ESL dalam kalangan pelajar Malaysia Tahun 4 mempunyai perbezaan statistik yang ketara. Walaupun dapatan statistik kajian ini menunjukkan bahawa tiada perbezaan yang ketara antara kedua-dua kumpulan utuh, namun didapati bahawa skor mentah (purata) menunjukkan kemajuan. Cadangan untuk penyelidikan masa hadapan ialah kajian penggunaan imej melalui intervensi PWIM boleh dijalankan dalam perkembangan pengetahuan kedua-dua jenis kosa kata ESL, reseptif dan produktif murid-murid muda. Kajian ini akan lagi bermakna dan luhur jika persampelan kajian boleh diperluaskan kepada sampel umur dan kumpulan etnik yang berbeza. Tambahan pula, kajian ini boleh dijalankan atas pelajar muda yang kurang upaya pembelajaran (contohnya, disleksia, ADHD, diskalkulia, disgrafia, dan dispraksia) kerana tiada literatur yang berkaitan ditemui dalam konteks Malaysia.

**THE IMPACT OF IMAGES IN DEVELOPING THE ESL VOCABULARY
KNOWLEDGE OF MALAYSIAN STANDARD 4 PUPILS**

ABSTRACT

In recent years, the role of vocabulary plays in contributing to one's language competency and literacy development has been progressively eminent in language acquisition studies, especially within the domain of second language acquisition. In Malaysia, learners generally flounder in their academics, predominantly due to their rudimentary ESL vocabulary repository. This present research was conducted to study on how the use of images in a Malaysian national primary school's ESL classrooms affects the ESL receptive vocabulary knowledge development via the adapted Picture Word Inductive Model (PWIM) intervention. The recall (short term) and retention (long term) of the ESL receptive vocabulary knowledge of the two intact groups were also juxtaposed. The two intact groups consisted of Standard Four pupils. The whole intervention programme of the study lasted approximately 26 weeks, with each of the 140 participants subjected to a pre-test, post-test, and delayed post-test using the ESL Receptive Vocabulary Knowledge Test. Concurrently, they were required to answer the questionnaires once they had completed their delayed post-tests. Two semi-structured interview sessions were conducted with the two ESL teachers who partook in the study; the first session was prior to the intervention, while the second session was after the intervention to garner their thoughts and recommendations on the study. The primary data was garnered from pre-tests, post-tests, and delayed post-tests. The secondary data was collected based on the questionnaire responses of the participants and the responses from the semi-structured interviews carried out with the two

respective ESL teachers. Both the primary and secondary data were subjected to reliability tests (KR-20 Coefficient Reliability Test, Levene's Test for Homogeneity of Variances and Cronbach's Alpha Coefficient Reliability Test) to ensure its internal consistency and validity. The collected primary data was then synthesised, and statistically analysed and assessed via the Statistical Package for the Social Science (SPSS) software (Version 27). The descriptive and inferential statistical comparisons were made to address the research questions and hypotheses stated. The primary insight from this research findings is the effectiveness of the use of images via PWIM strategy among Malaysian young learners in developing their ESL receptive vocabulary knowledge recall and retention. The study findings shown that the use of images in developing the ESL receptive vocabulary knowledge of the *Experimental* group was statistically significant. However, for the recall and retention of ESL receptive vocabulary knowledge, despite statistically, there were no significant differences between group means, practically, there were improvements in terms of the raw (mean) scores. For future research, it is recommended to investigate how the use of images using the PWIM intervention develops both the ESL receptive and productive vocabulary knowledge of young learners. This study would be noble and meaningful to be further extended to different age and ethnic groups of samples, even to the learning-disabled young learners (namely, dyslexia, ADHD, dyscalculia, dysgraphia, and dyspraxia), as there is no relevant literature found within the Malaysian context.

CHAPTER 1

INTRODUCTION

1.1 Background of the Study

English is one of the world's most dominant global languages, which plays a pivotal part during this modern era. It acts as the bridge to connect people around the world coming from various fields, namely, diplomacy, business and trade, science and technology, engineering, information and technology, medicine, academia, media, arts, internet and employment (Rao, 2019). Thus, proficiency in English is vital, for it acts as the vehicle for knowledge acquisition and communication (Ting et al., 2017). A good command of English always provides one with better opportunities in life (Zainuddin et al., 2019). Kachru mentioned in his book "*The Alchemy of English*" that "knowing English is like possessing the fabled Aladdin's Lamp, which permits one to open to international business, technology, science and travel" (Kachru, 1986).

Mathematics and Science in English (PPSMI)

The English language affects one's academic performance in the long run – from primary to the tertiary level. The reason is that English is used as a vehicle in knowledge acquisition for several subjects, like Mathematics and Science, under the government's policy named *Mathematics and Science in English* or *Pengajaran dan Pembelajaran Sains dan Matematik dalam Bahasa Inggeris (PPSMI)* nationwide under Malaysian primary to tertiary education since 2003 (Foo & Richards, 2004). Nevertheless, the policy was phased out from 2012 onwards with the concern of rural pupils or vernacular school pupils comprehending the knowledge in English but not their mother tongue in the *Malaysia English Language Roadmap (2015-2025)*.

Malaysian Education Blueprint 2015-2025 (Higher Education)

In Malaysia, English has become even more prominent at the tertiary education level. The implementation of *The Education Act 1996* enabled English to be availed as the medium of instruction in every private higher education institution, with the goal of forging Malaysia into an international education hub. However, the local universities only started using English in their TL starting from the year 2005 onwards, and the change only occurred initially for certain major courses like business, science, mathematics and technology (Too, 2017). Presently, with the enactment of *Malaysian Education Blueprint 2015-2025 (Higher Education)*, English is being used in almost every subject taught in private and local universities and colleges. Hence, one needs to master the language to comprehend these English-related subjects and be able to express oneself fluently, be it orally or in writing, in relation to the subject context.

Furthermore, many countries in the world stress the evolution of the English language for their nation, and Malaysia is no exception too, with globalisation, there is a great weight of expectancies on the Malaysian education system to measure up to cosmopolitan standards to meet the global demands of the modern era. In 2022, a recent study conducted by an international education company, Education First (EF), found that the English Proficiency Index (EPI) of Malaysians among the 111 Asian countries has dropped from a high level of 13th in 2017 to 24th five years later. This worrisome, sharp deterioration has brought pressing attention to Malaysians' language proficiency and literacy development, particularly that of the country's young learners. The main culprit which has an adverse effect on the young learners' low English proficiency level is the meagre vocabulary repertoire of the young learners. On account of the sparse vocabulary knowledge of the young learners, it is paradoxical for the nation

to achieve top 20 EPI like in the past if no immediate remedy is applied to rectify the issues.

Malaysians who round off their formal education from preschool to university (undergraduate degree) have 14 to 15 years of English language education (Azman, 2016). Beginning from primary education up to tertiary education, English is set to be the core subject (Darmi & Albion, 2013). Yet, in 2016, the Economic Planning Unit (EPU) of Malaysia revealed that a close proximate of 60,000 graduates are jobless as they are unable to master a fair-to-middle level of competence in the language during adulthood. In spite of great efforts by the government, the problem has become critical to the extent that this is becoming a vexation to the nation's development goal.

New Primary School Curriculum (KBSR)

Throughout the years, the English language in Malaysia's educational system has gone through several major national education reformations. In 1982, the MOE effectuated the *Integrated English Language Syllabus for Primary Schools* in tandem with the *New Primary School Curriculum* or *Kurikulum Baru Sekolah Rendah* (KBSR), whereby the *Communicative Language Teaching* (CLT) was assimilated. This approach is accentuated on communicative purposes rather than linguistic competence (Sahib & Stapa, 2021). It was a radical haul from a teacher-centred approach to a student-centred stratagem (Azman, 2016). The expected learning outcomes of ELT in KBSR comprised the four language skills - reading, listening, speaking, and writing. The CLT-based English Language Curriculum failed to achieve its intended outcomes in the ground reality, as most Malaysian teachers could not adapt and adopt CLT in their teaching as they eventually reverted to their established teaching methodology - *rote learning* (structural approach) (Aziz & Kashinathan, 2021; Mohd-Asraf et al.,

2019; Wu 2020).

English for Teaching Mathematics and Science (ETeMS)

In early 2003, *Content-Based Instruction* (CBI) was instituted at both primary and secondary levels by the growing furtherance in the discipline of science and technology in the age of globalisation (Rashid et al., 2017). CBI is an integration of ESL instruction and content instruction (teaching and learning of Science and Mathematics). This approach also leads to the reform policy, *English for Teaching Mathematics and Science* (ETeMS). The prime objective of this policy was to corroborate that the young generation could stay competitive globally with the mastery of the world's most significant *lingua franca*. The approach successfully gained the pupils' interest in learning the related subjects (Maasum et al., 2012). With the integrated content themes in the ESL context, the learners could easily grasp the meaning input and comprehend the concept of the subject matter while expanding their English vocabulary bank.

Upholding the Malay language and Strengthening the English language policy (MBMMBI)

Nonetheless, in 2012, MOE decided to abolish the policy and revert to its after 1961 landscape - teaching all subjects using Bahasa Malaysia while English was accentuated. A policy *Memartabatkan Bahasa Malaysia, Mengukuhkan Bahasa Inggeris* or Upholding the Malay language and Strengthening the English language (MBMMBI), was executed to replace the former. The propagated MBMMBI policy was designed to sustain *Bahasa Malaysia* as the official national language and the medium of unity and solidarity, concomitantly elevating Malaysians' standard of English to stay competitive nationally and globally (Darmi & Albion, 2013;

Thirusanku & Yunus, 2012). Hence, additional contact hours for Malay and English were allocated, and English is a *must-pass* subject in the examination of *Sijil Pelajaran Malaysia* or Malaysian Certificate of Education (SPM) since then (R. A. Rashid et al., 2017).

Primary Standards-Based Curriculum (KSSR)

In the same year, MOE launched the new education reform, Malaysia Education Blueprint 2013-2025. The ratification of the MEB brought to the instigation of the *Primary Standards-Based Curriculum* (KSSR) as well as the English Language Education Roadmap 2015-2025 (ELER). The reform primarily aims to stipulate the praxis of 21st-century curriculum and assessment in ELT. Ensuing, the ELER also led to the assimilation of English literacy in the Literacy and Numeracy Screening (LINUS) program (Azman, 2016). The cardinal aspiration of the programme is to corroborate that by the end of Primary Level 1, which is Standard Three, all the primary school pupils are literate in Bahasa Malaysia, and a minimum of 90% of primary school pupils are literate in English language (Luyee et al., 2015). Literacy and Numeracy Screening (LINUS).

The LINUS programme is in tandem with the commencement of School-Based Assessment (SBA). Since 2011, the SBA has effectuated in phases for primary and secondary education. Public examinations (e.g., UPSR and PT3) are gradually abolished and replaced by constant assessments concocted by their corresponding school English language instructors during the ELT process (Rashid et al., 2017). The mediums and instruments of the formative and summative school-based assessments are devised at the discretion of the teachers based on the Performance Standard set provided by MOE.

Standards-Based English Language Curriculum (SBELC)

Besides, with the emergence of KSSR and guidelines of international Cambridge English language standards listed in the *Common European Framework of Reference (CEFR)*, the *Standards-Based English Language Curriculum (SBELC)* was sprung. SBELC serves as the blueprint of the English language curriculum for the expansion of target English proficiency levels of Malaysian pupils (from preschool to secondary levels) (English Language Management Guidebook, 2019, p. 2). Beginning in 2011, the Standard 1 cohort was first subjected to SBELC (Sahib & Stapa, 2021). The curriculum is devised in a modular structure to cultivate pupils' higher-order thinking skills (HOTS), which comprise critical and creative thinking skills as well as reasoning skills. SBELC is organised into distinctive modules – *listening, speaking, reading, writing, and grammar and language arts (LA)* revolving around the three broad themes stated in the curriculum: (1) World of Self, Family, and Friends; (2) World of Stories; (3) World of Knowledge (Ministry of Education, 2019). It is also mentioned in SBELC that the KSSR English language syllabus employs Standard British English for pronunciation, grammar, and spelling.

SBELC also documents the curriculum target levels on CEFR, which elucidates the expected CEFR levels to be achieved by Malaysian pupils at each learning stage (from Preschool to Form Five) concerning their age. Referring to Table 1.1, there are an aggregate of 2 main levels, A and B, throughout the entire primary and secondary school levels of the Malaysian education system. At the primary school level, the Standard 4 pupils are anticipated to reach a high beginner level, A1, when they are at the transition from stage 1 to stage 2 level. At this level, the pupils are expected to be able to converse the English language in their daily lives with frequently used expressions and elementary vocabulary.

Primary						Secondary				
Stage 1			Stage 2			Stage 3			Stage 4	
1	2	3	4	5	6	1	2	3	4	5
Working towards A1	A1 low	A1 mild	A1 high	A2 low	A2 mild	Revise A2	A2 high	B1 low	B1 mild	B1 high
Basic user			Basic user			Basic user			Independent user	

Table 1.1 Curriculum Target Levels on CEFR

Note: This table is adopted from *English Language Management Guidebook* (2019, p. 3).

1.2 Statement of the Problem

Our former Prime Minister, Tun Dr. Mahathir Mohamad, inaugurated *Vision 2020* during the tabling of the Sixth Malaysian Plan in 1991. With the aspiration to develop a self-sufficient industrialised nation by 2020, human capital development in the higher education sector is underscored (Afip et al., 2019). Nevertheless, as 2020 has passed, our nation's English competencies are still a long way from a satisfactory level, which becomes one of the challenges to surmount for the country to gain its competitive capabilities as a fully developed country. It is alarming that even after decades of being the nation's second language and English classes being compulsory, Malaysian primary school pupils still lack ESL receptive vocabulary knowledge, a predicament that translates to unsatisfactory linguistic proficiency.

The statistics from *Pelaporan Pentaksiran Sekolah Rendah (PPSR)* 2019 (refer to Figure 1.1) show that the population of primary national school pupils of 329 021, 45.8% of them scored D (40-49 marks) and E (0-39 marks) for English Comprehension.

Meanwhile, for English Writing, more than half the population is in the lowest two grades (36.18% and 25.45%). For primary national type pupils, among the population of 98 144 pupils, 34.69% scored D and E for English Comprehension, and 44.52% scored D and E for English Writing. The results underline the urgency for remedial help for the Malaysian national school primary pupils as the statistics obviously show that nearly half the population of the pupils scored D and E for English comprehension, and more than half of the population scored D and E for English Writing.

Kod & Nama Mata Pelajaran	Tahun	Peratus						Bilangan Calon
		A	B	C	D	Mencapai (A – D)	E	
011 - Bahasa Melayu-Pemahaman	2019	26.91	30.29	26.66	12.74	96.60	3.40	332,610
	2018	26.99	29.95	25.68	13.28	95.90	4.10	328,939
012 - Bahasa Melayu-Penulisan	2019	29.39	32.27	20.60	13.07	95.33	4.67	332,694
	2018	25.96	31.44	24.10	13.14	94.64	5.36	328,990
013 - Bahasa Inggeris-Pemahaman	2019	11.56	19.68	23.19	30.70	85.13	14.87	332,660
	2018	12.55	19.32	22.33	28.91	83.11	16.89	329,021
014 - Bahasa Inggeris-Penulisan	2019	11.54	8.86	21.04	35.22	76.66	23.34	332,648
	2018	11.18	7.02	20.17	36.18	74.55	25.45	329,024
015+025+035 - Matematik	2019	19.43	16.84	16.63	30.23	83.13	16.87	431,610
	2018	18.22	15.52	16.96	29.80	80.50	19.50	427,126
018+028+038 - Sains	2019	9.76	30.53	35.95	20.33	96.57	3.43	431,635
	2018	10.31	31.25	33.77	20.79	96.12	3.88	427,151
021 & 031 - Bahasa Melayu-Pemahaman	2019	14.77	24.02	24.00	26.90	89.69	10.31	99,059
	2018	17.71	24.35	23.06	24.69	89.81	10.19	98,108
022 & 032 - Bahasa Melayu-Penulisan	2019	25.39	16.04	28.84	17.47	87.74	12.26	99,058
	2018	23.36	17.24	28.41	17.20	86.21	13.79	98,113
023 & 033 - Bahasa Inggeris-Pemahaman	2019	20.69	21.84	23.11	21.42	87.06	12.94	99,086
	2018	20.10	23.56	21.65	23.05	88.36	11.64	98,142
024 & 034 - Bahasa Inggeris-Penulisan	2019	15.51	17.53	23.80	25.40	82.24	17.76	99,088
	2018	14.86	16.45	24.17	24.08	79.56	20.44	98,144
026 - Bahasa Cina-Pemahaman	2019	17.26	31.07	22.83	19.34	90.50	9.50	85,632
	2018	15.85	32.48	21.03	20.03	89.39	10.61	84,876
027 - Bahasa Cina-Penulisan	2019	28.88	23.60	26.34	11.24	90.06	9.94	85,633
	2018	25.93	24.34	28.17	13.54	91.98	8.02	84,876
036 - Bahasa Tamil-Pemahaman	2019	22.81	33.19	19.75	14.24	89.99	10.01	13,448
	2018	19.71	33.42	18.48	16.06	87.67	12.33	13,252
037 - Bahasa Tamil-Penulisan	2019	31.22	34.11	18.69	8.51	92.53	7.47	13,448
	2018	31.54	34.73	18.42	7.70	92.39	7.61	13,255

Figure 1.1 PPSR 2019 Results

Note: This is a snapshot from *Pelaporan Pentaksiran Sekolah Rendah* (2019, p. 43).

Consequently, the main factor behind this is the meagre vocabulary of the young ESL learners, which challenges them to acquire the four core language skills: reading, writing, listening, and speaking. Hence, they are incapable of neither comprehending the words that they are reading nor understanding and following the

given instructions or answering the comprehension questions (Alexiou & Milton, 2020). This answers the notion stated by Laufer and Nation (1999) and Beglar and Nation (2013), as well as Susanto (2017), that lexical knowledge is central to language proficiency. This notion is further supported by the research findings by Bullah and Yunus (2019) that the lack of lexical competencies in English causes pupils to have difficulties to acquire and grasp the concepts of these English-relevant subjects, namely, Science and Mathematics. Focus on vocabulary growth is a requisite for word knowledge, and overall language mastery skills are strongly correlated, otherwise, poor performance in other English-relevant subjects is subjected (Nation, 2001).

The Programme for International Student Assessment (PISA) 2022 scores depict that Malaysia has the biggest drop, 6.26%, from rank 431 in 2018 to rank 404 in 2022, compared to the other ASEAN countries as the learning loss occurred due to the Covid-19 pandemic and subsequent nationwide school closures as the Movement Control Order (MCO) was enforced. Dr. Muhammad Noor Abdul Aziz, the senior lecturer from the School of Education, Universiti Utara Malaysia College of Arts and Sciences, posits that the changes in the school curriculum and modifications to the academic calendar have affected the student's learning progress as they shifted to home-based teaching and learning method (PdPR). The pupils were unable to catch up with their lessons (not paying attention, not attending the online lessons altogether), resulting in the worst reading scores in the record.

In 2018, Malaysia was ranked 415 and dropped to 388 four years later in the Programme for International Student Assessment (PISA) for Reading Literacy (refer to Figure 1.2 and Figure 1.3). The main reason behind the decline in Malaysian reading scores is due to the pupils' lack of ability to read in other words, the pupils' vocabulary

knowledge is deficient.

Malaysia, OECD average and selected comparison countries

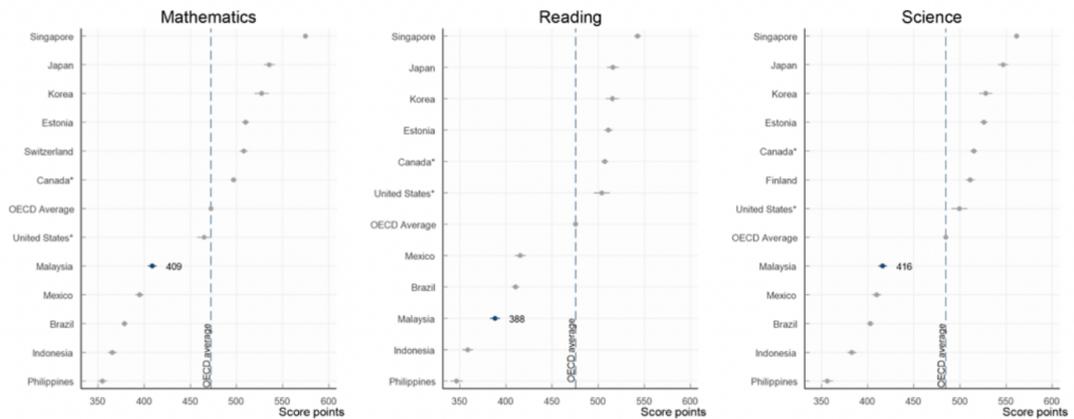


Figure 1.2 Malaysian Reading Score of Malaysia among other countries, including the top six countries in each subject and the five countries with the largest population of 15-year-old pupils in PISA 2022

Note: This is sourced from the Organization for Economic Cooperation and Development (OECD), PISA Database (2022).

How well did 15-year-old students in Malaysia do on the test?

Trends in mathematics, reading and science performance

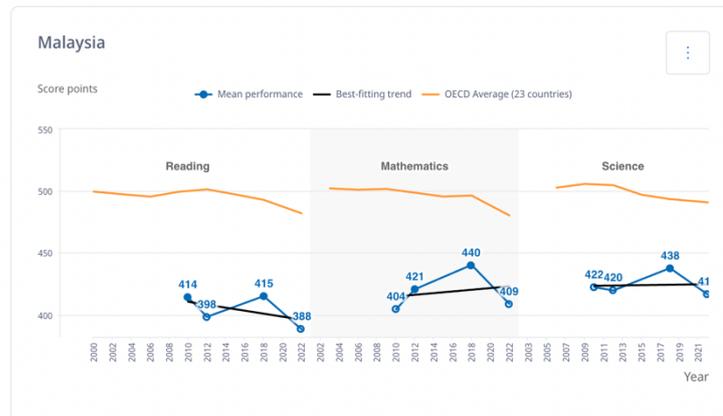


Figure 1.3 Malaysia's Reading Proficiency Levels in PISA 2022

Note: This is sourced from the Organization for Economic Cooperation and Development (OECD), PISA Database (2022).

The stipulation of English, be it oral or written, is indispensable in tertiary education. The underlying rationale is that the documented or written knowledge used

in higher education is primarily in the English language (Ali, 2014; Musaet al., 2012). The intellectuals also avow that the primary school system should take the responsibility in ensuring the English proficiency of the pupils is strong before they proceed to the next education level rather than, in reality, the university has to *re-educate* the product of the school system. With vocabulary deficiencies, pupils would not have the competence to comprehend the contents of their reading materials (Kaur et al., 2017; Mokhtar et al., 2010). Therefore, their learning would be impeded. Additionally, the lack of vocabulary size among the undergraduates hinders them from expressing their thoughts. Thus, at the primary school level, English language teaching ought to be improved as a means to give the pupils a solid rudiment of English since young.

An extensive deal of research regarding vocabulary acquisition methodologies has been conducted by academicians. For the past century, vocabulary has received scant attention in L2 instruction, with grammar being the major focus of English learning (Folse, 2004; Meara, 1980). Having said that, there is only a limited repertoire of research on the application of pictures in vocabulary acquisition among young learners could be found (Bates & Son, 2020; Wright, 2010). Therefore, the findings from this study could fruitfully feed into the practice of vocabulary teaching via the use of pictures for the benefit of young learners and other stakeholders. The rationale behind this is that by implementing efficient vocabulary learning strategies, pupils can optimise the efficacy of their English language education (Gu & Johnson, 1996; Tahir et al., 2020), which differentiates them from unsuccessful learners.

Although multiple reforms have been made to English language teaching (ELT) in Malaysia, an effective vocabulary learning process is yet to occur in ESL

classrooms (Bush et al., 2023). Effective ESL vocabulary instruction is disregarded because the focus of the authority is always on policymaking and the pupils' English proficiencies, but with little or no attention placed on constructive vocabulary learning and teaching pedagogy. Thus, the lack of specific guidelines for effective ESL vocabulary instruction in the classroom results in ESL teachers employing rote learning and memorisation in their vocabulary teaching (F. Wang & Yamat, 2019). In contemplation of the poor ESL vocabulary instruction, ESL teachers are neither primed nor provided with adequate and ongoing support to conduct effective ESL vocabulary instruction (Hashim, 2021). Therefore, ESL vocabulary learning in the current education system usually takes place intrinsically (Selvaraj, 2010).

Withal, several studies on ESL language learning spelt out that the language teaching policy and curriculum remain dormant as the approach of ESL language learning in Malaysian schools still has a very strong inclination towards an examination-orientated mindset (Raman & Yamat, 2014) even with the implementation of school-based assessment (SBA) (Hashim et al., 2013; Joachim & Hashim, 2021). Pupils are conventionally guided with the four main language skills which will be tested: speaking, reading, listening, and writing to fulfil the examination needs (Azman, 2016). In addition, schoolteachers are attached to their typical teaching method, which emphasises the grammar-translation method, grammar drill and memorisation ((R. A. Rashid et al., 2017; Selvaraj, 2010) instead of placing their focus on the roots of the language, *vocabulary*. Therefore, the lexical paralysis of young learners has impeded them from reading, listening, writing, and speaking competently in English.

Given this, there is a pressing demand for effective ESL vocabulary knowledge development strategies to improve young learners' lexical competence.

Regrettably, the PWIM strategy does not seem to be widely known by primary school teachers and other stakeholders, although generally, people know that the use of images in the vocabulary acquisition process is beneficial (Lee et al., 2019, 2020; Tan et al., 2020, 2023). The present research underlines the development of young learners' ESL receptive vocabulary through the use of images. The efficacy of the adapted PWIM strategy, an inquiry-oriented language arts strategy involving various cognitivetheories and social theories, is compared against the conventional *chalk-and-talk* rote learning method. There is no published research to date deploying the PWIM strategy at the Primary 2 level, particularly Standard Four pupils. Within the Malaysian context, the scope of a substantial number of existing literature in the publication is confined to Malaysian Standard 1 pupils. Furthermore, apart from emphasising the ESL receptive vocabulary knowledge acquisition, the present research also delves into the short-term retention (recall) and long-term retention of ESL vocabulary gains.

1.3 Research Objectives

Broadly, the research examines the use of images via the adapted PWIM strategy in ESL classrooms of a Malaysian primary national school in terms of its outturns on pupils' ESL receptive vocabulary knowledge development. The pupils' pre-test, post-test and delayed post-test scores were compared to determine the performance levels between groups.

The research was conducted using Malaysian Standard Four pupils. The pupils were elected from a public national primary school whereby they were homogenous

in terms of demographic, socioeconomic status, age, race and native language. Two groups of participants were involved - the *Experimental* group (the pupils' ESL receptive vocabulary knowledge was instructed using the adapted PWIM strategy) and the *Control* group (the pupils were instructed using the *chalk-and-talk* rote learning method). The objectives of the research are as detailed below:

RO 1: To evaluate the effectiveness of the use of images in developing the ESL receptive vocabulary knowledge of Malaysian Standard Four Pupils.

RO 2: To measure the ESL receptive vocabulary knowledge *recall* (short-term retention) differences between the *Experimental* group and the *Control* group.

RO 3: To measure the ESL receptive vocabulary knowledge *retention* (retention over time) differences between the *Experimental* group and the *Control* group.

1.4 Research Questions and Null Hypotheses

This study addressed the following research questions:

RQ 1: How effective is the use of images in developing the ESL receptive vocabulary knowledge of the *Experimental* group?

H₀1: The use of images is not effective in developing the ESL receptive vocabulary knowledge of the *Experimental* group.

RQ 2: What is the difference, in terms of ESL receptive vocabulary knowledge *recall* (short-term retention), between the *Experimental* group and the *Control* group?

H₀2: There is no difference, in terms of ESL receptive vocabulary knowledge *recall* (short-term retention), between the *Experimental* group and the *Control* group.

RQ 3: What is the difference, in terms of ESL receptive vocabulary knowledge *retention* (retention over time), between the *Experimental* group and the *Control* group?

H₀3: There is no difference, in terms of ESL receptive vocabulary knowledge *retention* (retention over time), between the *Experimental* group and the *Control* group.

1.5 Research Significance

The information gathered from this study provides important insights to bring benefits not only to immediate stakeholders but also to the domain of second or foreign language acquisition in the headway of vocabulary knowledge development. The instructions used in this research complement well with the newly introduced curriculum, which stresses the 21st-Century Learning Method (PAK-21). The alteration of the rote learning approach to a more creative and interactive approach stimulates pupils' critical thinking. Nevertheless, this requires openness and willingness from the teachers to broaden their horizons and explore the efficacy of the use of visuals in impacting the development of their pupils' vocabulary knowledge acquisition.

The praxis of PAK-21 in this research mainly focuses on more interactive teaching-learning processes as juxtaposed to the orthodox *chalk-and-talk* teaching method exercised formerly. The findings from the research would support the national

policy, *Memartabatkan Bahasa Malaysia, Mengukuhkan Bahasa Inggeris* (MBMMBI). Besides that, it also provides direction for schoolteachers, policymakers, curriculum designers and others for a better and more effective vocabulary acquisition process. In addition, the research may give insights to teachers from the special education field as well. Researchers may also extend this research to find out if the intervention could help the pupils with developmental and cognitive challenges.

1.6 Definition of Major Terms

The purpose of this section is to provide readers with a general apprehension of the major terms used in this study.

Picture Word Inductive Model (PWIM)

Under the *Models of Teaching*, the Picture Word Inductive Model (PWIM) is one of the eight models from the Information Processing Family (Joyce et al., 2015). Emily Calhoun developed the model “as an inquiry-oriented language arts strategy that elicits words from children’s listening and speaking vocabularies using images containing known objects and actions found in their daily lives.” (Calhoun, 1999, p. 21).

Receptive vocabulary knowledge

Receptive (passive) vocabulary knowledge is elucidated as the knowledge of the *form*, said otherwise, the ability to *comprehend* a word while listening or reading and retrieving its meaning or the language input. It comprises a transformation process from *form* to *meaning*. Receptive vocabulary knowledge is also proclaimed as the *breadth* of the vocabulary size (Nation, 2001).

Form	Spoken	Receptive	What does the word sound like?
		Productive	How is the word pronounced?
	Written	Receptive	What does the word look like?
		Productive	How is the word spelled?
Word parts	Receptive	What parts can we recognize in this word?	
	Productive	What word parts are needed to express meaning?	
Meaning	Form and meaning	Receptive	What meaning does this form signal?
		Productive	What word form can be used to express this meaning?
	Concept and referents	Receptive	What is included in this concept?
		Productive	What items does the concept refer to?
	Associations	Receptive	What other words does this make us think of?
		Productive	What other words are possible to use instead of this one?
Use	Grammatical functions	Receptive	In what patterns does this word occur?
		Productive	In what patterns is this word required to use?
	Collocations	Receptive	What other words or types of words occur with this one?
		Productive	What words or types of words must we use with this one?
	Constraints on use (register, frequency, etc.)	Receptive	Where, when, and how often would we expect to encounter this word?
		Productive	Where, when, and how often can we use this word?

Figure 1.4 Description of “What is Involved in Knowing a Word”

Note: The snapshot is taken from Nation (2001, p. 27).

Vocabulary knowledge recall

Vocabulary knowledge recall is also known as short-term retention, for the vocabulary items could be immediately repeated back once temporal or phonemic cues are given to the learners after the intervention of vocabulary acquisition (Cowan, 2014; Craik & Lockhart, 1972; Craik & Tulving, 1975; González-Fernández & Schmitt, 2020; Laufer & Aviad-Levitzky, 2017). In the context of this research, the post-test is implemented briefly after the intervention period to measure the recall of ESL receptive vocabulary knowledge of young learners.

Vocabulary knowledge retention

In contrast with vocabulary knowledge recall, vocabulary knowledge retention is the learners' ability to retain, and retrieve learned lexical items facilitated by manipulation of time using the spacing effect (period in between the intervention and delayed post-test which occurs after post-test) (Buchsbaum, 2016; Craik & Lockhart, 1972; Gray et al., 2017; Jones & Macken, 2017; Lee et al., 2021). Regarding this research, during the delayed post-test, the learners' receptive and productive vocabulary knowledge retention is measured to gauge the effectiveness of the pictures as the visual cues in their visual semantic associative learning (Baddeley, 2010).

1.7 Summary

This chapter underlines the impact of images via the adapted PWIM strategy in ESL classrooms of a Malaysian primary national school receptive vocabulary knowledge in developing the pupils' ESL receptive vocabulary knowledge, recall and retention. This chapter begins by emphasising the significance of ESL vocabulary on Malaysian young learners' ESL language development as the country has undergone several major curriculum reforms in the policies of English language education. Next, the chapter ensued with the statement of the problem, the nation's English incompetencies and how it affects the overall academic success of young learners and their future was discussed. A brief research methodology, research objectives, research questions and hypotheses, as well as research significance were presented. The chapter ends with a definition of major terms concerning the present study. In the upcoming chapter, Chapter 2, the literature review on the significance of ESL receptive vocabulary, ESL vocabulary acquisition strategies, PWIM, cognitive constructs,

theoretical framework and structure of the present study will be delineated to present a background for the relevant theories and variables of the study.

CHAPTER 2

LITERATURE REVIEW

2.1 Introduction

Conventionally, it is widely cognised that lexical development plays an important role in mastering a second or foreign language (Nation, 2013; Schmitt, 2008), especially in literacy development in young learners (Garton & Copland, 2019). Over the years, researchers have expressed concerns about the issue of the Malaysian upper primary pupils' low proficiency in the English language (Shing et al., 2020). Regarding that, this present research pivots on the first and foremost of the learning of a language, vocabulary learning among young learners.

2.2 The Significance of Vocabulary

A few scholars have mentioned in their academic papers that, for a long time, the acquisition of vocabulary has always been a neglected area in applied linguistics research (Alqahtani, 2015; Jiang, 2020; Meara, 1980, 1996b) and the school curriculum (Folse, 2004). There is a lack of eclectic theory of vocabulary acquisition still footing today (Schmitt, 2010). In light of this matter, the role that vocabulary plays in language competence and literacy buildout has been growingly sanctioned in language acquisition studies, especially so within the domain of second or foreign language acquisition research, despite vocabulary was once deemed a notch below grammar (Pérez & Alvira, 2017; Schmitt, 2008).

Language Proficiency

In reality, language learners themselves consider mastery of vocabulary knowledge to be highly coveted. Vocabulary knowledge being the study discipline, lexical words are the basic building blocks of language, and they function as the units of meaning from which the larger structures of language akin to sentences, paragraphs, and whole text are constructed (Read, 2012; Schmitt & Schmitt, 2020b). Hence, it is one of the most crucial tasks for English learners to acquire English vocabulary (August et al., 2005). Often times, the learners believe that many of their adversities in both receptive and productive language use are prompted by vocabulary deficits (Asgari & Mustapha, 2012; Qian & Lin, 2020).

According to scholars, Nation (1995) and Alemi & Tayebi (2011), any individual who has learnt a second or foreign language will perceive that vocabulary knowledge is a prerequisite for the development of any form of language adroitness as the language proficiency level is significantly related to how profound the learners' vocabulary knowledge (Nation, 2001). Similarly, Meara (1996a) propounds that the triumph of learners in the employability of language skills is highly dependent on their vocabulary knowledge, "learners with large vocabularies are more adroit in a wide range of language skills than learners with scanty vocabularies".

Reading Ability and Comprehension

On top of that, unequivocally, vocabulary knowledge is utilised as a conspicuous predictor of young learners' reading ability and comprehension (Biemiller, 2012b; Cunningham & Stanovich, 1997), as struggle with vocabulary strongly affects text readability (Stahl, 2003). Only pupils with expansive vocabulary

knowledge could have the ability to decipher the words regarding the context while reading the written text accurately and fluently (Biemiller, 2012b; Moghadam et al., 2012; Nation et al., 1990).

Hence, it is shown that there is a vigorous correlation between L2 vocabulary knowledge and L2 reading propensity and apprehension skills (Clarke et al., 2010). Therefore, with doubtful language input (listening or reading) due to the many unknown words, no learning input could be acquired and comprehended (Folse, 2004). There is numerous evidence, substantial correlations, several causal studies, and a robust theoretical framework that demonstrates that vocabulary is closely related to reading comprehension across the age span, explicitly in primary grades (Baker et al., 2012). Lower SES children perceive around half as much vocabulary as higher SES children in first grade (Graves et al., 1982; Graves & Slater, 1987). For example, Allington (1983) delineated that first-grade vigorous readers scrutinise three times as many words during reading instruction compared to weak readers. Hijazi (2018) also postulates that pupils will not be able to flourish if they are unable to read appropriately, comprehend and synthesis.

Key to communication

A large vocabulary repertoire facilitates a person to communicate and express themselves through the use of words and sentences to convey ideas and information. As Folse (2004, p. 2) asserts, “Lack of grammar knowledge can demarcate conversation; lack of vocabulary knowledge can cease conversation.”. Therefore, vocabulary is indeed the most rudimentary element. In other words, without vocabulary, communication is impossible. Researchers like (Nation, 2011; Read et al., 2000) agree that vocabulary becomes imperative especially to the acquisition and

implementation of English as a second language and communicative competence, and it plays an essential duty in all language fitnesses as well. By the same token, a scant vocabulary inhibits successful communication (Alqahtani, 2015), be it speaking or writing.

Key to academic success

It is crystal clear that an affluent vocabulary is the hallmark of a high scorer from an academic standpoint. A large and rich vocabulary repertoire smooths the path of a learner in becoming an educated person as vocabulary knowledge interrelates with reading proficiency, hence achieving academic excellence in the long run (Hijazi, 2018). In addition, Andrew Biemiller mentioned in *Teaching Vocabulary in Primary Grades: Vocabulary Instruction Needed* (2012a, p. 34), “vocabulary, not reading mechanics (decoding print into words), is the primary limiting barrier for the majority children starting from grade 3”.

The deprivation of vocabulary could be a weighty factor underlying destituted pupils with their underdeveloped literacy skills (Lesaux et al., 2014; Murnane et al., 2012). Particularly those who are from lower socioeconomic status (SES) families (Fernald et al., 2012). These disadvantaged pupils are ten to one to have rather scanty vocabularies than their more advantaged peers (Biemiller, 2001; Fernald et al., 2012; Hart & Risley, 2003).

2.3 Vocabulary Knowledge

Different scholars have varying views on knowing a word. Essentially, vocabulary is knowledge of words (Laufer et al., 2004; Milton, 2009; Nation, 1990, 2001), multiple word knowledge components (Nation, 2013; Schmitt, 2014), word meanings (Biemiller & Boote, 2006; Miller, 1999; White et al., 1990) and its elements of use (Miller, 1999; Nation, 2001). Vocabulary includes receptive vocabulary (words perceived upon others' use) and productive vocabulary (words on one's use in speech or writing) (Graves, 2016; Miller, 1999; Milton, 2013; Nation, 2001); vocabulary knowledge is a continuum comprising several degrees of knowledge and also the basis for all content area learning (Hiebert & Kamil, 2005; Nagy et al., 2012); vocabulary comes in two forms: (a) oral vocabulary (words that one identifies and use in listening and speaking) and (b) print vocabulary (words that one identifies and use reading and writing) (Hiebert & Kamil, 2005).

On the other hand, Henriksen (1999) classifies vocabulary knowledge into three categories, namely, a partial-to-precise knowledge dimension, a depth-of-knowledge dimension and a receptive-productive dimension. A partial-to-precise knowledge dimension bespeaks as the levels of knowledge are measured in degrees of apprehension, while the depth-of-knowledge dimension alludes to the copious aspects of the word's nature and extends to a word's syntagmatic and paradigmatic relations with other words. Lastly, the receptive-productive dimension connotes the mastery of the lexical knowledge level in light of the learners' comprehension and productive ability.

Beck and McKeown (1991) consider vocabulary knowledge development to