

Article



<http://doi.org/10.52696/GPDV2998>

Reprints and permission:

The Malaysian English Language Teaching Association

✉ Siti Farhah Fazira Shamsudin sitifarahfazira25@gmail.com

A Systematic Review of Vocabulary Teaching Approaches in Malaysia Pre-And-Post CEFR Implementation (2011–2024)

Siti Farhah Fazira Shamsudin

Academy of Language Studies,
Universiti Teknologi MARA,
Kota Bharu, Kelantan, Malaysia

Warid Mihat

Academy of Language Studies,
Universiti Teknologi MARA,
Kota Bharu, Kelantan, Malaysia

Csaba Z Szabo

Moray House School of Education and Sport,
University of Edinburgh,
Scotland

Muhammad Saiful Anuar Yusoff

Academy of Language Studies,
Universiti Teknologi MARA,
Kota Bharu, Kelantan, Malaysia

Wong Wei Lun

Faculty of Education,
Universiti Kebangsaan Malaysia,
Malaysia

ABSTRACT

Vocabulary is a crucial component in second language acquisition, and in Malaysia its instructional approaches have shifted significantly since the adoption of the Common European Framework of Reference for Languages (CEFR). Before CEFR, vocabulary teaching was often underemphasised and lacked standardisation, raising concerns about consistency and effectiveness across education levels. Yet, limited synthesis exists on how instructional approaches have evolved following CEFR implementation. This systematic literature review (SLR) examines vocabulary teaching practices in Malaysian secondary and tertiary contexts between 2011 and 2024, comparing trends before and after

CEFR adoption. Guided by PRISMA 2020 protocols, 24 peer-reviewed articles were identified from Scopus and Web of Science. Inclusion criteria focused on open-access, English-language studies conducted in Malaysia, particularly those addressing CEFR B1/B2 learners. Findings indicate a marked methodological and pedagogical shift. Pre-CEFR studies (n=6) emphasised strategy-based approaches, including morphemic analysis and contextual guessing, with minimal integration of technology. In contrast, post-CEFR studies (n=18) show increased use of technology-mediated instruction, gamification, and explicit vocabulary teaching. Nonetheless, research remains disproportionately focused on tertiary learners, with secondary contexts underexplored. Through this systematic literature review, this study highlights the need for a framework to guide ELT teachers in Malaysia in designing meaningful vocabulary lessons with their students.

KEYWORDS: Vocabulary Teaching, Vocabulary Learning, CEFR Malaysia, Systematic Literature Review, ESL Learner

INTRODUCTION

Vocabulary is a central component of English language learning as it underpins the four key skills of listening, speaking, reading, and writing (Milton, 2009; Schmitt, 2010). Given the strong relationship between vocabulary knowledge and overall language proficiency, learners must develop vocabulary in order to communicate effectively (Chai et al., 2020). Vocabulary forms the foundation for both receptive and productive skills (Choo & Ng, 2024), and learners require an adequate range of words as well as the ability to apply them appropriately in order to achieve communicative competence (Ni et al., 2020; John et al., 2021). Without sufficient vocabulary knowledge, learners encounter considerable challenges in understanding meaning, conveying information, and engaging in meaningful interaction (Chai et al., 2020). As many scholars have noted, vocabulary knowledge is therefore the basic skill on which comprehension and communication are built; without it, language learning cannot be fully achieved (Milton, 2009; Schmitt, 2010; Har et al., 2019).

Despite recognising its importance, many learners struggle to acquire and retain new vocabulary, particularly when words are complex, infrequent, or unfamiliar in form (Ni et al., 2020; Har et al., 2019). This difficulty aligns with Nation's (2001) observation that ESL learners often experience challenges when acquiring words that differ morphologically or phonologically from their first language. Consequently, the effectiveness of vocabulary learning depends not only on the materials used but also on learners' strategies and teachers' pedagogical approaches (Har et al., 2019). While vocabulary learning may appear to be a straightforward process, in reality it is a complex aspect of language acquisition (Choo & Ng, 2024; Har et al., 2019). Within the Malaysian education system, vocabulary instruction begins at Primary 1, with textbooks serving as the principal resource (Ministry of Education, 2017). B1/B2 levels represent official proficiency benchmarks for upper secondary and tertiary learners as outlined in the English Language Roadmap (Ministry of Education, 2015). Teachers' ability to guide learners effectively is therefore closely linked to their pedagogical understanding of vocabulary acquisition (Chai et al., 2020).

Although the CEFR-aligned Standard-Based English Language Curriculum (SBELC) acknowledges the importance of vocabulary, it provides limited instructional guidance beyond word lists which consequently led vocabulary instruction to be often embedded indirectly in teaching other language skills (Hassan & Gao, 2021; Wong et al., 2023). Vocabulary instruction is sometimes also treated as a

supplementary activity rather than an integral part of language learning. Consequently, teachers may resort to surface-level instruction, such as rote memorisation or isolated word lists, rather than approaches that promote more profound vocabulary knowledge and retention making it difficult to assess how systematically vocabulary is taught (Manap et al., 2025). Much of the existing scholarship emphasises the general importance of vocabulary, yet few studies offer a systematic account of whether vocabulary instruction has evolved or remained traditional within the Malaysian CEFR context. A systematic literature review (SLR) is therefore needed to synthesise existing findings, map key trends, and identify research gaps. Such an approach not only provides clarity on how vocabulary research in Malaysia has developed over time but also offers evidence-based insights to guide future pedagogical practice and policy.

LITERATURE REVIEW

Vocabulary teaching in the context of Malaysian English language education has undergone a policy-driven curriculum reform within Malaysia's English Language Teaching (ELT) system, especially following the implementation of the Common European Framework of Reference for Languages (CEFR) under the English Language Education Reform Roadmap (2015–2025). This reform aimed to align Malaysian English Language Teaching (ELT) practices with international standards, particularly in curriculum, materials, pedagogy, and assessment (Ministry of Education Malaysia, 2015). CEFR descriptors serve as benchmarks for vocabulary load, difficulty, and context, guiding teachers in selecting appropriate lexical items for each proficiency band (Mohd Alias et al., 2021; Ibrahim et al., 2017). This introduction provides a broad overview of the reform; the following subsections (2.1–2.3) further review the key changes in ELT materials, vocabulary activities, and teaching approaches relevant to this study.

Changes in ELT Materials

In the pre-CEFR era (before 2017), Malaysian English language textbooks were primarily localized to reflect the sociocultural diversity of the nation. They were developed to support national identity formation and promote social cohesion, often embedding cultural representation and moral values (Mukundan, 2023). With the introduction of CEFR, the CEFR-aligned curriculum introduced new teaching materials, including textbooks such as Pulse 2 for Form 1 and 2, Close Up for Form 3, Full Blast for Form 4 and English Download for Form 5 students. While these resources provide CEFR-referenced content, their cultural relevance has been questioned. Teachers expressed concern over the imported nature of the materials, citing a lack of contextual fit and the need for adaptation to local cultural norms and student needs (Ahamat et al., 2024; Singh et al., 2024; Abdul Aziz & Makhtar, 2021). Additionally, in the CEFR-aligned syllabus, Malaysian upper primary ESL learners encounter vocabulary list that reflects real-life contexts where the list is embedded across all four language skills, with new lexical items introduced in each unit through listening or reading tasks (Fadzli & Ismail, 2023). In summary, the introduction of CEFR-aligned textbooks has had mixed effects. While these resources provide structured vocabulary input mapped to CEFR levels, they often include content that lacks local cultural relevance. Teachers report the need to adapt these materials to ensure they are relatable and accessible to Malaysian learners (Ahamat et al., 2024; Singh et al., 2024).

Evolution of Vocabulary Activities

Vocabulary was not treated as a skill in its own right but rather as a supporting component for reading or writing instruction (Lim et al., 2023). According to Mohd Tahir et al., (2020), when teaching vocabulary, teachers often resort to using cognitive strategies to reinforce the meaning of the words that students have already encountered. These strategies are mainly memory-based and involve rote memorization techniques such as reading out loud, repeating words verbally, and focusing on pronunciation. Teachers began referring to CEFR descriptors for guidance in designing vocabulary tasks appropriate to targeted proficiency bands (Mukhtar et al., 2019). This was accompanied by increased use of technology-enhanced tools such as Quizizz and Quizlet, which gamified vocabulary learning and fostered greater engagement among learners (Mukhtar et al., 2019). Despite these advancements, several challenges persist. Teachers, particularly in rural areas, continue to face barriers such as poor internet access, lack of devices, and insufficient professional development on how to effectively implement audio-visual vocabulary techniques (Lim et al., 2023).

In addition, vocabulary teaching has become more aligned with formative assessment techniques and differentiation. Teachers are also encouraged to incorporate vocabulary-focused activities that support both receptive and productive language use. However, studies have shown that the transition to CEFR-aligned methods has not been without difficulty. Many teachers still struggle to fully implement formative assessment as these teachers cited time constraints, classroom enrolment, heavy workload, and lack of training as their main challenges against the effective implementation of the CEFR-aligned school-based assessment (SBA) (Sidhu et al., 2018). Furthermore, according to three teachers that participated in the study done by Lim et al. (2023), the CEFR-aligned resources that present foreign cultures can be confusing to both teachers and students, which makes adaption in the local classroom challenging. Accordingly, the teachers in the study had to deal with the difficulties of cultural unfamiliarity and unfamiliarity with accentedness due to a lack of localised context (Lim et al., 2023).

Shift in Assessment Practices

Prior to the adoption of CEFR, language assessment in Malaysia was primarily based on local standards and criteria, which may have varied significantly across different institutions and education levels. There was no unified framework to describe language proficiency consistently. In addition, vocabulary was assessed primarily through summative methods, including standardized tests focusing on definitions, synonyms, and multiple-choice items (Sidhu et al., 2018). These assessments emphasized rote memorization rather than communicative competence. With the adoption of CEFR, there has been a move towards a more standardized approach to language assessment. This includes aligning local tests with CEFR scales, which provides a common basis for describing language competencies (Ibrahim et al., 2017; Baharum et al., 2021). However, studies indicate that many educators are still grappling with the application of these methods effectively in their classrooms (Mohd Alias et al., 2021; Sidhu et al., 2018).

While the CEFR descriptors have been widely adopted as reference points for curriculum and assessment alignment, scholars caution against their over-standardisation. Originally conceived as illustrative, context-adaptable guidelines to stimulate pedagogical reflection (North, 2014), the descriptors were never intended to function as prescriptive benchmarks. However, in practice, many education systems—including Malaysia's CEFR-aligned English Language Reform—have tended to operationalise them as rigid standards for teaching and assessment (Aziz & Uri, 2017). Although the CEFR was introduced to promote consistency and communicative competence across language

education systems, its descriptors—originally designed as flexible, illustrative tools—have often been interpreted as rigid benchmarks in practice. This tension between intended purpose and actual application has generated extensive scholarly debate (North, 2014; McNamara et al., 2018; Savski, 2019). Hence, it is crucial to engage critically with how CEFR descriptors are adapted, contextualised, or misapplied, particularly when examining vocabulary teaching and assessment under the CEFR framework in Malaysia.

Thus, despite these progressive changes in materials, activities, and assessment methods, the extent to which CEFR has been effectively integrated into vocabulary teaching remains underexplored. A preliminary scan of Malaysian literature reveals fragmented findings, with few studies offering a comprehensive picture of how vocabulary instruction has evolved over time in response to CEFR. This gap highlights the need for a systematic literature review that can trace the trends, focus areas, and methodological patterns in vocabulary-related research both prior to and after the CEFR implementation in Malaysia. Therefore, by conducting a comparative review of studies spanning from 2011 to 2024, this paper aims to provide a clearer understanding of how vocabulary teaching and learning has been conceptualized, implemented, and evaluated in secondary and tertiary educational settings. Such a synthesis is intended to not only offers insights for future research but also informs policy makers, curriculum developers, and educators seeking to enhance vocabulary instruction in line with CEFR principles. Specifically, this review aims to: 1) identify the publication trends, target learner groups and types of research designs in vocabulary studies conducted in Malaysia from 2011 to 2024, 2) examine the vocabulary teaching approaches commonly used before the implementation of CEFR in the Malaysian context, 3) analyse the changes in vocabulary teaching strategies after the CEFR implementation.

RESEARCH QUESTIONS

In order to achieve these objectives, these research questions are generated:

1. What are the publication trends, target learner groups and research designs used in vocabulary research in Malaysia from 2011 to 2024?
2. What were the dominant vocabulary teaching approaches used before CEFR implementation in Malaysia?
3. How have vocabulary teaching strategies changed after CEFR was introduced?

METHODOLOGY

The purpose of this review was to analyze vocabulary research trends in Malaysian educational contexts before and after the implementation of the Common European Framework of Reference (CEFR).

Databases and Search Strategy

The search for relevant articles was conducted using two major databases: Scopus and Web of Science (WoS). These platforms were selected for their reputability and broad coverage of high-quality peer-reviewed research. The keywords used in the search included combinations of the following terms:

“vocabulary”, “vocabulary learning”, “vocabulary teaching”, “Malaysia”, “ESL”, and “CEFR”. Boolean operators (AND, OR) and quotation marks were employed to refine the search strings.

Eligibility Criteria

A set of inclusion and exclusion criteria was developed based on the research objectives:

Table 1: *Inclusion and exclusion criteria*

Criterion	Inclusion	Exclusion
Publication Year	Published between 2011–2024	Articles published outside this period
Geographical Scope	Studies conducted in Malaysia	Studies conducted outside Malaysia
Language Skill	Focus on vocabulary learning and teaching	Focus on other skills (e.g., speaking, writing, listening)
Learner Group	Secondary and tertiary students (to reflect CEFR B1/B2 relevance)	Pre-school, primary or adult learners not in formal education
Article Type	Open-access, peer-reviewed journal articles	Conference papers, book chapters, unpublished theses
Language of Publication	Articles written in English	Articles written in other languages

Selection Process

The initial search yielded a total of 15,142 records (Scopus = 7749; WoS = 7393). Mendeley Reference Manager was used for organising, screening, and duplicate removal, supported by manual verification. After removing 6 duplicate entries, 14,554 records were filtered out using automation tools based on ineligibility (e.g., non-journal types, irrelevant topics). This resulted in 582 records for screening. Screening was conducted by title and abstract initially, followed by full-text review to confirm eligibility for inclusion. Titles and abstracts were screened manually, excluding 458 studies that did not meet inclusion criteria. Automation filtering excluded clearly irrelevant categories such as non-education fields and unrelated linguistics studies (e.g., computational linguistics, corpus modelling). 124 full-text articles were sought, of which 52 were not retrievable or did not meet access requirements. The reasons for this exclusion specified in the methodology section, lack of CEFR alignment, or inadequate vocabulary focus. Excluded studies included those addressing general language skills without vocabulary outcomes or non-peer-reviewed works. 72 reports were assessed for eligibility through full reading.

A total of 48 reports were excluded based on the following reasons:

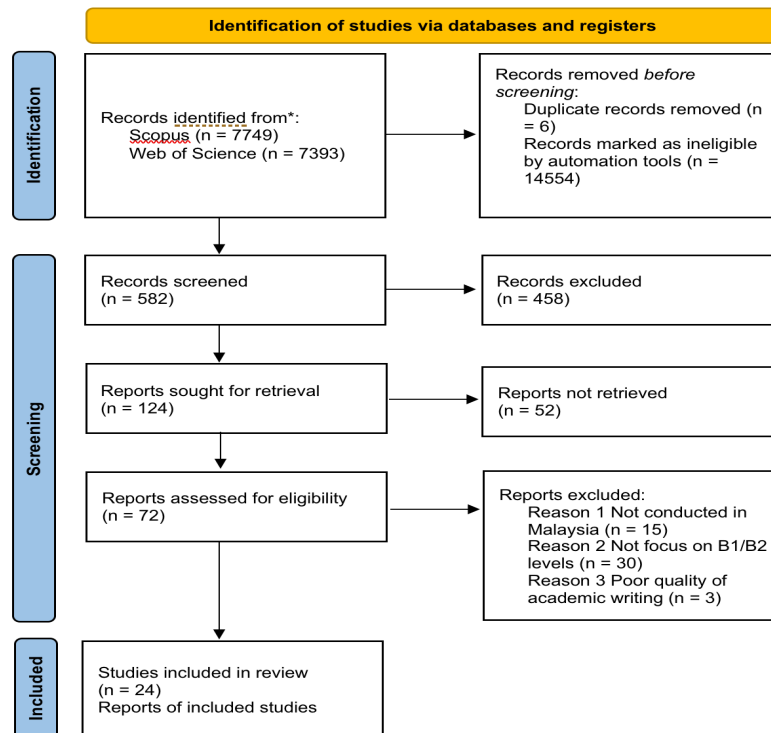
- Not conducted in Malaysia (n = 15),
- Not focused on CEFR B1/B2 levels or vocabulary (n = 30),
- Poor quality of academic writing (n = 3). Quality assurance based on journal indexing in Scopus or Web of Science; predatory and non-indexed sources were excluded.

Ultimately, 24 studies were included in the review. These studies represented vocabulary-related research aligned with CEFR B1/B2 levels within Malaysian secondary and tertiary education contexts.

PRISMA Flow Diagram

The search and selection process is illustrated in the PRISMA 2020 flow diagram (Figure 1), which highlights the number of records at each stage of the review, from identification to final inclusion.

Figure 1
PRISMA Flow Diagram



Vocabulary Research Articles

A review of studies published between 2011 and 2024 reveals a diverse range of methodologies and participant groups exploring vocabulary teaching and learning in Malaysia. Data were coded thematically using Excel spreadsheets under categories of year, learner group, research design, and teaching approach, ensuring consistency across reviewers. Early studies tended to emphasise traditional strategies such as storytelling, translation, and morphemic analysis, while later research increasingly incorporated technology-enhanced approaches, including mobile-assisted learning, gamification, MOOCs, and automated writing evaluation tools. Findings consistently highlight the effectiveness of explicit instruction, creative pedagogies, and digital interventions in enhancing vocabulary acquisition, retention, and learner motivation. However, most studies remain concentrated at tertiary level, with fewer addressing secondary learners, and gaps persist in areas such as incidental learning and sustained vocabulary development. Collectively, these studies illustrate both continuity and innovation in Malaysian vocabulary research, reflecting the gradual shift towards more learner-centred and CEFR-aligned practices. The summary of all finalized vocabulary research articles is presented in Table 2.

Table 2*Summary of Included Vocabulary Research Articles*

<i>Author (Year)</i>	<i>Article Title</i>	<i>Methodology</i>	<i>Participants</i>	<i>Main Findings</i>
Mokhtar et al. (2011)	The Effectiveness of Storytelling in Enhancing Communicative Skills	Mixed Methods	Foundation English students (MUET Bands 1 and 2) at UKM	Storytelling improved students' vocabulary and communication skills by providing a meaningful language environment.
Ali et al. (2012)	Second Language Learners' Attitudes towards the Methods of Learning Vocabulary	Quantitative (Survey & ANOVA)	123 first-year UMP students	Students showed the most positive attitudes toward CALL, which aligned better with their learning preferences.
Yusuf et al. (2014)	Student's Proficiency and Textual Computer Gloss Use in Facilitating Vocabulary Knowledge	Quantitative	99 ESL diploma students	Computer-based glosses helped in short-term vocabulary gains, especially among high-proficiency students, though gains weren't sustained over time.
Wong & Attan (2014)	Comparing Intentional Vocabulary Learning Strategies of Rote-Copying Versus Read-Plus	Quantitative experimental (pre-test/post-test)	35 Form 1 Malaysian secondary school learners	Both strategies improved vocabulary; Read-Plus showed larger gains; students preferred Read-Plus
Paiman et al. (2015)	Effectiveness of Morphemic Analysis of Graeco-Latin Word Parts as a Vocabulary Learning Strategy among ESL Learners	Quantitative	Three intact classes of undergraduates majoring in health sciences	Graeco-Latin morphemic analysis was the most effective strategy, improving overall vocabulary size significantly compared to general morphemic and contextual strategies.
Shamsudin & Ab Rahman (2015)	The Effects of Learning from Word Pairs on Word Knowledge	Quantitative	120 secondary school students (4 groups of 30)	All four types of word pairs enhanced aspects of word knowledge. Malay Definition group had the highest gains, followed by Malay Translation, English Translation, and English Definition.
Mohd Asraf & Supian (2017)	Metacognition and Mobile-Assisted Vocabulary Learning	Qualitative (Phenomenological single case study)	21 undergraduates (freshmen, Malaysia)	Learners commonly used mobile tools to support self-directed vocabulary learning and metacognitive development.

Dorairaju & Jambulingam (2017)	The Role of Music and M-Learning in English: Vocabulary Gain Among Tertiary Students	Quantitative (Pre-test, Post-test, Survey)	Tertiary students (private university, Malaysia)	There was an increase in the students' vocabulary knowledge and students were enthusiastic to learn vocabulary. Music and mobile devices enhance vocabulary learning.
Govindasamy et al. (2019)	Mobile Assisted Vocabulary Learning: Examining the Effects on Students' Vocabulary Enhancement	Quantitative	50 Form 5 students (arts stream)	Mobile-assisted learning is more effective than printed dictionary for vocabulary learning; aided pronunciation and retention.
Yaacob et al. (2019)	Learning Strategies Through Secondary Students at Saudi School in Malaysia	Quantitative	105 Saudi secondary students at Saudi School Malaysia (SSM)	Students used all five categories of VLS at medium and close range levels.
Asaad et al. (2020)	The Relationship between Morphological Awareness and Vocabulary Errors among L2 Postgraduate Students	Quantitative	26 ESL postgraduate students in Malaysia	Higher morphological awareness linked to fewer vocabulary errors; misformation most problematic area.
Mohd Tahir et al. (2020)	The Effects of Explicit Vocabulary Instructions on Secondary ESL Students' Vocabulary Learning	Mixed Methods	60 Form Four secondary school students in Perak	Explicit instruction effective in improving vocabulary; experimental group showed significant gains. Recommends longitudinal study.
Subon & Unin (2021)	The Efficacies of an Explicit Vocabulary Instruction Model on ESL Learners' Vocabulary Size and Writing Skills	Quantitative	143 Grade 8 students (3 proficiency levels: low, intermediate, high)	Contextualised Word Family (CWF) Model significantly increased vocabulary size across all proficiency levels. High proficiency group showed significant writing improvement; low proficiency group declined in writing scores despite vocabulary gains.
John et al. (2021)	The Perceptions of Tertiary Level Learners on the Use of Mobile App	Mixed Methods	125 Iban tertiary learners	A useful online game tool as it enhanced learner's learning ability to solve

	“Balloon Vocabulary” in Improving Vocabulary for Reading Comprehension Learning English Vocabulary via Computer Gaming			problems in vocabulary learning.
Lee-Luan & Raghbir (2021)		Qualitative	4 Malaysian ESL players (aged 24 and 25) playing Guild Wars 2	Players employed various vocabulary learning strategies (e.g., meaning-making, dictionary use, contextualization). Gu & Johnson's VLS categorisation was adapted for game context.
Reddy et al. (2021)	The Role of Motivation in Incidental Vocabulary Learning through Academic Videos	Quantitative	56 ESL pre-university students in an English-medium Malaysian university	Students showed incidental vocabulary gains from academic videos. However, no significant correlation between motivation level and vocabulary gain was found.
Ali et al. (2022)	Students' Attitudes to the Implementation of Vocabulary Learning Strategies in Writing Task	Quantitative	71 diploma engineering students from a technical university in Malaysia	Students had moderately high attitude in writing but moderately low VLS scores. No significant differences based on gender or English grades.
Husin et al. (2022)	Preferred Vocabulary Learning Strategies among Malaysian Students	Quantitative	320 Malaysian ESL students (secondary and tertiary levels)	Both groups preferred metacognitive strategies. Gender differences observed in metacognitive and cognitive VLS use. Secondary students preferred dictionary use; tertiary students preferred meta-cognitive regulation.
Mohd Said et al. (2022)	Exploring English Descriptive Writing Vocabulary Acquisition through Creative Pedagogical Strategies	Qualitative	Upper secondary school ESL learners (single case study)	Creative pedagogical strategies improved vocabulary use in descriptive writing. Five themes emerged: improved picture description, new vocabulary, richer adjectives and verbs, emotional expression, and precision in meaning.
Sulaiman & Salehuddin (2022)	The Effects of Input Enhancement on Incidental Academic Word Learning	Quantitative	79 Malaysian ESL undergraduates (proficient and less proficient)	Input enhancement techniques increased recognition of target academic words, with proficient learners

				demonstrating greater gains than less proficient learners.
Ariffin et al. (2023)	Acquiring Vocabulary in English in Content and Language Integrated Learning Programme: The Questions of Strategies and Academic Performance	Quantitative	Engineering students in a Malaysian CLIL programme	Metacognitive strategies were most used, cognitive least used; internet access influenced strategy preferences. Vocabulary strategy choice linked to academic performance.
Choo & Ng (2024)	Effects of MOOC and Video Conferencing Deliveries on Vocabulary Usage and Learning Strategies	Quantitative	94 pre-intermediate ESL learners (50 MOOC, 44 Microsoft Teams)	There was a significant increase of usage in all categories of the Vocabulary Learning Strategies (VLS) after the course for both groups.
Mat et al. (2024)	Automated Writing Evaluation: User's Perception and Expectations	Quantitative	72 university students exposed to AWE over 10 weeks	AWE tools helped with vocabulary use, spelling, grammar, and punctuation, but less effective for content organization.
Yaacob et al. (2024)	Effectiveness of Taboo Word Game on Augmenting Business Vocabulary Competency Through Reflective Action Research	Mixed Methods	23 diploma-level ESL students in business English course	Taboo game improved vocabulary and engagement; students reported better recall and motivation.

FINDINGS

RQ1: What are the publication trends, target learner groups and research designs used in vocabulary research in Malaysia from 2011 to 2024?

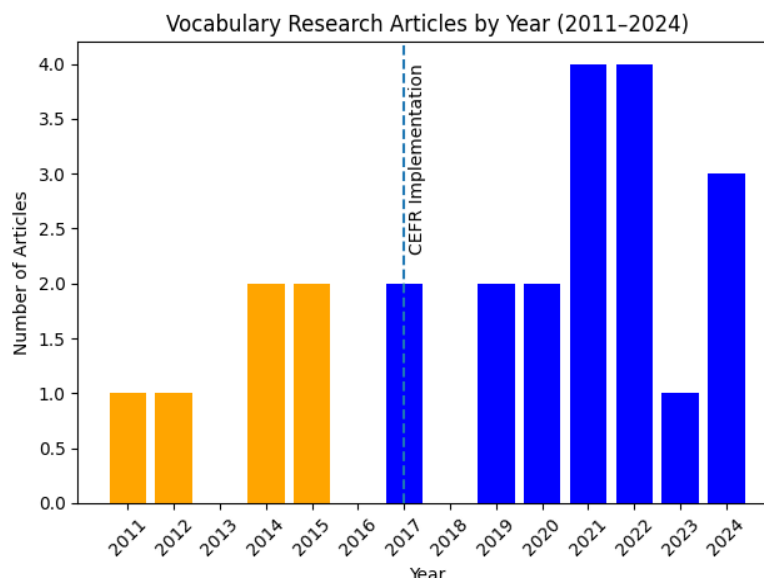
Figure 2*Number of Published Articles by Year*

Figure 2 shows the reviewed vocabulary research articles published by year from 2011–2024. The analysis of publication years reveals a steady growth in vocabulary research over the 14-year span, especially in the post-2017 period. This trend aligns with the timeline of CEFR’s phased implementation in Malaysia, which began around 2013–2015 and gained full traction in curriculum and assessment practices from 2017 onwards, the same year CEFR implementation was officially introduced in Malaysian schools through curriculum alignment and teacher training initiatives. However, this growth does not attribute solely to CEFR as it is also noted that global research trends and increased national funding post-2019 also contributed to publication rise.

The articles published between 2011 and 2016 are classified as pre-CEFR, as CEFR-aligned curriculum documents and assessments were only enforced beginning 2017. Based on this timeline, a total of 6 articles were identified as pre-CEFR (eg: Mokhtar et al., 2011; Ali et al., 2012), while 18 articles were classified as post-CEFR (2017–2024) (eg., Yaacob et al., 2019; Mohd Tahir et al., 2020; Asaad et al., 2020). Before CEFR, publication activity remained relatively low and consistent, averaging 1 to 2 articles per year. However, after CEFR implementation, the number of publications grew steadily, producing 4 articles in both 2021 and 2022.

This steady trend suggests that CEFR could be one of the elements that may have catalysed increased scholarly engagement with vocabulary instruction, reflecting Malaysia’s broader education reform and renewed emphasis on communicative competence, B1/B2 proficiency descriptors, and learner-centred pedagogies. This can be seen as only a few studies were conducted before 2016, reflecting limited emphasis on vocabulary as a standalone research focus. However, since CEFR was introduced at policy level in 2013 and operationalised in schools from 2017, post-2017, there is increased attention on vocabulary development strategies, technology integration, and CEFR-aligned instruction, indicating a shift in both educational priorities and research funding direction. This trend does not only reflect the influence of CEFR but also the expanding role of vocabulary as a critical component in language proficiency, curriculum design, and learner assessment within the Malaysian ESL context.

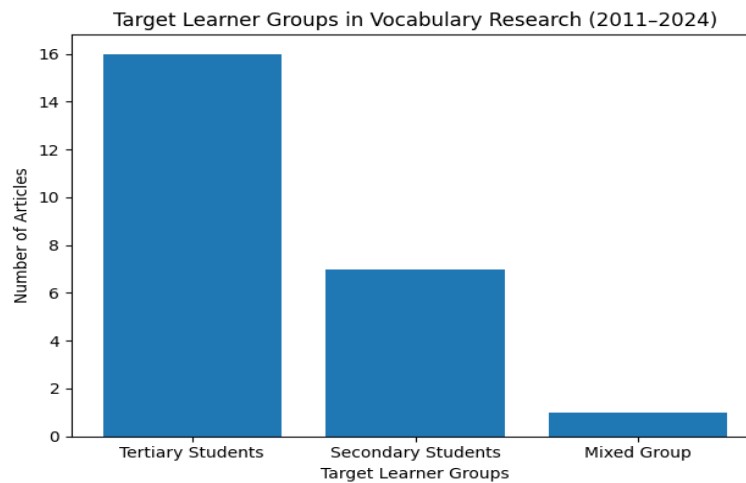
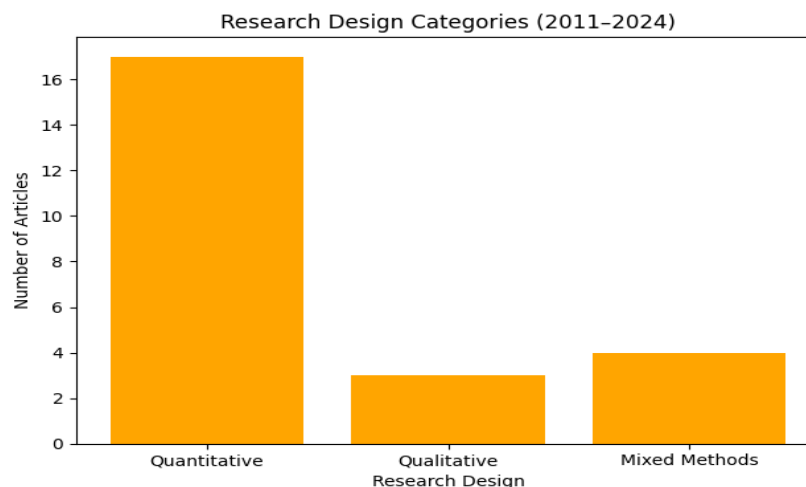
Figure 3*Target Learner Groups*

Figure 3 above displays the distribution of learner groups in the selected 24 reviewed articles of vocabulary research conducted in Malaysia between 2011 and 2024. The majority of studies (n=16) focused on tertiary learners, encompassing undergraduates, diploma, and postgraduate students while only 7 studies investigated secondary school students, and 1 study involved a mixed group comprising both levels (Husin et al., 2022).

This shows a significant imbalance between tertiary and secondary education levels. This finding suggests a strong research inclination towards university and college-level learners, which probably due to easier access to participants and institutional research culture. In contrast, the secondary school population remains under-researched, despite being a critical stage for vocabulary development and the primary target of CEFR B1 and B2 descriptors within the Malaysian education system. The lack of vocabulary research at the secondary level raises important concerns about whether current classroom practices, learning strategies, and CEFR-aligned interventions are being sufficiently explored for this learner group.

While CEFR implementation in Malaysia is designed to cover all schooling levels, the lack of vocabulary-focused studies at the secondary level raises concerns about whether instructional approaches and vocabulary needs of adolescent learners are being adequately addressed in current research. These findings emphasize the need to redirect research efforts towards secondary education, where CEFR's B1/B2 descriptors are most actively applied, but less investigated in empirical vocabulary research.

Figure 4
Research Design



As visualized in Figure 4, the review of 24 selected studies from 2011 to 2024 reveals that the majority of vocabulary research in Malaysia employed a quantitative design ($n=17$), followed by mixed methods ($n=4$) and qualitative ($n=3$) approaches. Quantitative designs typically involved pre- and post-tests, surveys, or controlled experiments. For instance, Mohd Tahir et al. (2020) implemented a pre-post intervention to assess the effectiveness of explicit vocabulary instruction, while Yusuf et al. (2014) tested the impact of glosses on vocabulary retention. Qualitative studies, though fewer, provided deep insights into learner attitudes and classroom practices. An example is Mohd Said et al. (2022), who used focus group interviews, written tests, and evaluation of students' written work. Mixed methods approach, such as John et al. (2021), combined both survey data and interview reflections to evaluate gamified vocabulary learning.

The emphasis on quantitative methods may stem from their alignment with education policy evaluation tools, standardized assessments, and the need to demonstrate tangible improvements in language performance especially in the context of CEFR-aligned vocabulary proficiency benchmarks. Moreover, quantitative studies are often perceived as more objective and generalizable, making them suitable for institutional decision-making and curriculum reform efforts. However, the lower frequency of qualitative and mixed-methods studies also indicates a potential research gap in understanding the deeper pedagogical processes, learner perceptions, and contextual factors influencing vocabulary learning in Malaysian classrooms. It should also be noted that while Malaysia mirrors global quantitative trends, mixed-method expansion could deepen contextual understanding without devaluing quantitative contributions.

RQ2: What were the dominant vocabulary teaching approaches used before CEFR implementation in Malaysia?

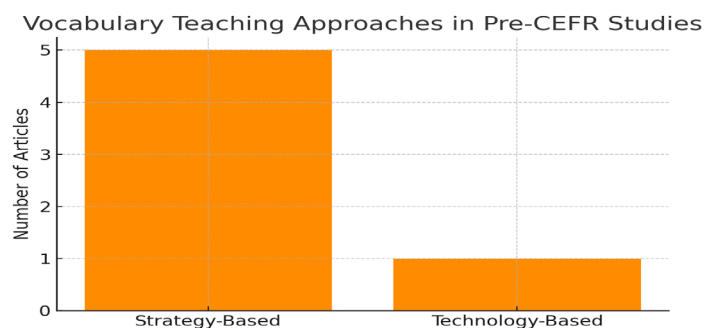
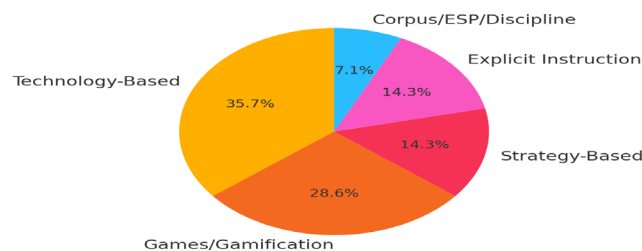
Figure 5*Vocabulary Instruction Before the Implementation of CEFR*

Figure 5 shows the analysis of six pre-CEFR articles which reveals that strategy-based approaches were the most dominant method employed in vocabulary instruction. These strategies included morphemic analysis, contextual clues, and explicit vocabulary learning strategies. For example, Paiman et al. (2015) examined the effectiveness of Graeco-Latin root analysis in enhancing vocabulary knowledge among undergraduates. Similarly, Wong & Attan (2014) adopted a strategy-based approach, focusing on intentional vocabulary learning strategies. Mokhtar et al. (2011) employed storytelling as a creative contextual strategy to improve communicative and vocabulary skills among Foundation students. In contrast, technology-based approaches were almost absent, with only one study namely Ali et al. (2012), briefly referencing CALL as one of the vocabulary learning strategies investigated. Other modern approaches, such as gamification, explicit instruction, or corpus-based learning, were completely absent in pre-CEFR research. Even though so, it should be clarified that absence in published research does not equate to absence in practice.

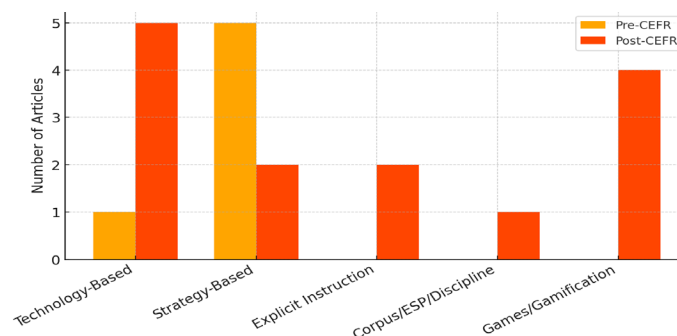
This finding highlights that prior to the CEFR implementation, vocabulary instruction in Malaysia leaned heavily on traditional pedagogical strategies, such as memory techniques, contextual guessing, or semantic mapping. This may reflect the limited integration of digital tools in classrooms at that time, possibly due to infrastructure constraints or lack of training among educators. The minimal use of technology also suggests that vocabulary learning was not yet aligned with 21st-century learning goals, which emphasize digital literacy and learner autonomy. This gap indicates an opportunity for post-CEFR research to explore more innovative, tech-integrated vocabulary teaching methods that align with the CEFR's communicative and learner-centered orientation. However, it is safe to say that this finding may not represent all classroom contexts nationwide.

RQ3: How have vocabulary teaching strategies changed after CEFR was introduced?

Figure 6*Vocabulary Teaching Approaches Post-CEFR*

Based on Figure 6, post-CEFR studies (n=18) demonstrate a noticeable diversification of instructional strategies. Technology-based approaches emerged as a dominant theme (5 studies), including mobile learning, digital platforms, and CALL-based instruction. For instance, John et al. (2021) implemented a gamified mobile app for Iban tertiary learners, reporting improvements in both vocabulary retention and reading motivation. Likewise, Lee-Luan & Raghbir (2021)) employed online tools to facilitate interaction.

Explicit vocabulary instruction also became more visible. Mohd Tahir et al. (2020) found that explicit teaching of targeted vocabulary resulted in significant improvement in students' retention. Gamification appeared in four studies, underscoring its value in increasing learner engagement. In contrast, strategy-based approaches were mentioned in only two post-CEFR articles, reflecting a shift towards guided or interactive vocabulary teaching models.

Figure 7*The Comparison of Vocabulary Teaching Approaches (Pre and Post CEFR)*

To further illustrate the shift in vocabulary teaching strategies brought about by CEFR implementation, Figure 7 presents a comparative analysis between pre- and post-CEFR studies. The chart clearly shows a notable increase in the use of technology-based and game-based approaches after CEFR was introduced. While strategy-based instruction dominated the pre-CEFR era (5 out of 6 studies), its application declined in more recent research, with more emphasis placed on interactive, digital, and learner-driven methods.

This shift reflects a broader pedagogical realignment with CEFR's principles, particularly the emphasis on authentic communication, learner autonomy, and multimodal engagement. The rise of

gamified learning and mobile applications in post-CEFR studies suggests a growing responsiveness to 21st-century learning needs, aligning well with CEFR's communicative and task-based descriptors, especially at the B1/B2 proficiency levels.

DISCUSSION

The findings from this review reveal significant shifts in vocabulary teaching approaches in Malaysia from 2011 to 2024, particularly in relation to the implementation of the CEFR framework. Prior to CEFR, instruction largely revolved around traditional strategies such as morphemic analysis, bilingual explication, and dictionary-based learning. These methods, while useful for specific purposes, often treated vocabulary as a supplementary skill rather than as a core component of communicative competence. In contrast, post-CEFR studies demonstrate an increased emphasis on explicit vocabulary instruction, technology-enhanced learning, and gamification. These approaches align more closely with CEFR's learner-centred orientation and its focus on measurable language outcomes.

Despite these advancements, several gaps remain evident. First, the reviewed studies show a clear imbalance in target populations: most research focuses on tertiary learners, while secondary school students who are the main recipients of CEFR B1 and B2 descriptors remain underrepresented. This under-research at the school level raises concerns about whether CEFR principles are being translated effectively into secondary classrooms. Second, although technology and explicit instruction are increasingly present, they are often employed in isolation, without a unifying framework to guide their integration with communicative use and fluency development. Consequently, vocabulary learning risks becoming fragmented rather than holistic. Third, many studies highlight the challenges teachers face in adapting imported CEFR-aligned textbooks, implementing formative assessments, and contextualising materials for local learners. Without systematic guidance, teachers' practices remain highly variable, leading to inconsistencies across educational settings.

Taken together, these gaps underscore the pressing need for a comprehensive framework that not only aligns with CEFR but also responds to the specific needs of Malaysian classrooms. Such a framework should integrate meaning-focused input and output, explicit language-focused learning, and fluency development in a recursive and interconnected manner. It would provide teachers with practical pathways to design meaningful vocabulary lessons that are both internationally benchmarked and locally relevant. In this way, a principled framework becomes a critical bridge between CEFR policy ambitions and classroom realities.

IMPLICATIONS OF THE REVIEW

The synthesis of findings from this review provides several important implications for teachers, curriculum planners, researchers, and policymakers in Malaysia.

For teachers, the growing use of explicit instruction and technology-assisted strategies highlights the need for professional development that is grounded in a coherent framework. Rather than adopting tools and techniques in isolation, teachers require structured guidance on how to balance digital innovations with communicative practice and vocabulary recycling. A principled framework would enable them to plan vocabulary lessons that are systematic, sustainable, and aligned with CEFR B1/B2 benchmarks.

For curriculum planners, the findings point to the limitations of relying on imported CEFR-aligned textbooks, which often lack cultural and contextual resonance. A framework tailored to Malaysian learners can serve as a reference point for adapting or supplementing these materials to ensure that vocabulary input is meaningful, engaging, and culturally relevant, while still maintaining alignment with international standards.

For researchers, the imbalance in the distribution of studies across learner groups indicates the need for more empirical investigations at the secondary level, where CEFR descriptors are most actively applied but remain underexplored. A comprehensive framework offers a foundation for systematic inquiry, enabling researchers to evaluate its effectiveness across contexts and learner populations.

For policymakers, the review highlights the gap between CEFR's intended goals and the realities of classroom practice. In order to achieve the objectives outlined in the English Language Education Roadmap (2015–2025), there is a need for an evidence-based structure that guides teachers in operationalising CEFR in vocabulary teaching. A robust framework would not only support teacher implementation but also ensure consistency and equity across diverse educational settings in Malaysia.

In summary, the findings of this review demonstrate that while CEFR has catalysed positive changes in vocabulary teaching, the absence of an integrative, context-sensitive framework continues to limit its full potential. Developing such a framework is therefore both timely and necessary to ensure that vocabulary instruction in Malaysia becomes more principled, holistic, and impactful.

LIMITATIONS OF THE REVIEW

Along with positive implications of the review, it also has several limitations that should be acknowledged. First, the scope was limited to open-access, peer-reviewed studies indexed in Scopus and Web of Science, which may have excluded subscription-based publications of comparable quality. Second, most included studies were conducted in tertiary contexts, creating a potential sampling bias that restricts the generalisability of findings to secondary classroom. Third, although efforts were made to ensure comprehensive coverage, the search strategy and timeframe (2011–2024) may have omitted unpublished or ongoing CEFR-related research. Finally, the review was descriptive rather than evaluative in nature; therefore, causal relationships between CEFR implementation and changes in vocabulary pedagogy cannot be inferred.

CONCLUSION

This systematic review examined 24 studies on vocabulary teaching in Malaysia between 2011 and 2024, highlighting significant shifts in instructional practices before and after CEFR implementation. The findings show that pre-CEFR research largely relied on traditional strategies such as morphemic analysis, dictionary use, and contextual guessing, while post-CEFR studies increasingly incorporated explicit instruction, gamification, and technology-enhanced learning. These developments reflect CEFR's communicative and learner-centred orientation. However, key gaps persist. Research remains concentrated at the tertiary level, leaving secondary school learners who are the main targets of CEFR B1/B2 descriptors underrepresented. Instructional practices also appear fragmented, as technology and

explicit instruction are often used in isolation without a coherent framework. Teachers continue to face challenges in adapting imported materials, implementing formative assessments, and contextualising content for Malaysian classrooms.

These findings point to the urgent need for a principled vocabulary learning framework that integrates meaning-focused input and output, explicit language-focused learning, and fluency-building in a recursive and interconnected manner. Such a framework would offer teachers practical guidance to design meaningful and CEFR-aligned vocabulary lessons that are both systematic and locally relevant. Future research should therefore prioritise the design, development, and evaluation of such a framework in Malaysian classrooms, particularly at the secondary level. Studies could also investigate how the framework supports teacher decision-making, enhances learner engagement, and adapts to different school contexts, including rural and under-resourced settings. By advancing this line of research, the proposed framework can serve not only as a pedagogical tool but also as a bridge between CEFR policy and classroom realities ensuring that vocabulary instruction in Malaysia becomes more holistic, equitable, and sustainable while providing ESL learners with a more meaningful vocabulary experience.

ACKNOWLEDGEMENT

This research was funded by the Ministry of Higher Education Malaysia under the Fundamental Research Grant Scheme (FRGS), FRGS/1/2025/SSI09/UITM/02/1. The support provided aims to advance understanding of key issues within the subject area, contributing to the overall success of the grant project.

REFERENCES

- Abdul Aziz, A., & Makhtar, R. (2021). TESL in-service teachers' experiences when evaluating an oral history workbook. *3L: The Southeast Asian Journal of English Language Studies*, 27(3), 56–72. <https://doi.org/10.17576/31-2021-2703-04>
- Ahamat, M. I., Widiati, U., & Kabilan, M. K. (2024). The appropriacy of an imported English language textbook: Malaysian teachers' experiences. *International Journal of Language Studies*, 18(4). <https://doi.org/10.5281/zenodo.13956376>
- Ali, Z., Mehr, S. A., Tilwani, S. A., Mohd Razali, N. N. F., Md Nor, A. N., & Abu Bakar, N. (2022). Students' attitudes to the implementation of vocabulary learning strategies in writing tasks. *World Journal of English Language*, 12(7), 106–116. <https://doi.org/10.5430/wjel.v12n7p106>
- Ali, Z., Mukundan, J., Baki, R., & Mohd Ayub, A. F. (2012). Second language learners' attitudes towards the methods of learning vocabulary. *English Language Teaching*, 5(4), 24–36. <https://doi.org/10.5539/elt.v5n4p24>
- Ariffin, K., Mohd Noor, N. A., & Alias, A. (2023). Acquiring vocabulary in English in a content and language integrated learning programme: The questions of strategies and academic performance. *Asian Journal of University Education*, 19(3), 474–485. <https://doi.org/10.24191/ajue.v19i3.23329>
- Asaad, H. Q. M., & Shabdin, A. A. (2020). The relationship between morphological awareness and vocabulary errors among L2 postgraduate students. *Journal of AsiaTEFL*, 17(3), 1006–1015. <https://doi.org/10.18823/asiatefl.2020.17.3.17.1006>

- Aziz, M. S. A., & Uri, N. F. M. (2017). CEFR in Malaysia: Current issues and challenges in the implementation of the framework. In *Proceeding of the 3rd International Conference on Language Testing and Assessment, Shanghai, China* (pp. 1-12). https://www.researchgate.net/publication/327980406_CEFR_in_Malaysia_Current_issues_and_challenges_in_the_implementation_of_the_framework
- Baharum, N. N., Ismail, L., Nordin, N., & Razali, A. B. (2021). Aligning a university English language proficiency measurement tool with the CEFR: A case in Malaysia. *Pertanika Journal of Social Sciences and Humanities*, 29(S3). <https://doi.org/10.47836/pjssh.29.s3.09>
- Chai, Z. F., Swanto, S., & Din, W. A. (2020). Variants of cloze-test based tasks and vocabulary achievement. *Universal Journal of Educational Research*, 8(7), 2980–2989. <https://doi.org/10.13189/ujer.2020.080726>
- Choo, W. L., & Ng, L. L. (2024). Effects of MOOC and video conferencing deliveries on vocabulary usage and learning strategies. *Journal of Education and Learning (EduLearn)*, 18(4), 1562–1571. <https://doi.org/10.11591/edulearn.v18i4.21253>
- Dorairaju, R., & Jambulingam, M. (2017). The role of music and m-learning in English: Vocabulary gain among tertiary students. *Journal of Language and Education*, 3(2), 39–44. <https://doi.org/10.17323/2411-7390-2017-3-2-39-44>
- Fadzli, N. M. A., & Ismail, H. H. (2023). Minnie sites and enhancing Malaysian upper primary ESL learners' vocabulary during VUCA times. *Creative Education*, 14(10), 2037–2056. <https://doi.org/10.4236/ce.2023.1410130>
- Govindasamy, P., Yunus, M. M., & Hashim, H. (2019). Mobile assisted vocabulary learning: Examining the effects on students' vocabulary enhancement. *Universal Journal of Educational Research*, 7(12A), 85–92. <https://doi.org/10.13189/ujer.2019.071911>
- Har, A. L. C., Mohamad, J. Z. A., & Jamal, S. S. (2019). The benefits and drawbacks of using tablet-based digital storytelling in vocabulary learning among Malaysian young English as a second language (ESL) learners. *Asia Pacific Journal of Educators and Education*, 34, 17–47. <https://doi.org/10.21315/apjee2019.34.2>
- Hassan, K. I., & Gao, X. (2021). A qualitative exploration into in-service teachers' beliefs and practices. *International Journal of TESOL Studies*. <https://doi.org/10.46451/ijts.2021.01.05>
- Husin, M. Z. M., Rahim, N. F. A. A., Ali, Z., Alzebaree, Y., & Bakar, N. A. (2022). Preferred vocabulary learning strategies among Malaysian students. *Research Journal in Advanced Humanities*, 3(4). <https://doi.org/10.58256/rjah.v3i4.942>
- Ibrahim, E. H. E., Sarudin, I., Othman, K., Malik, F. A., & Muhamad, A. J. (2017). The assessment of writing within the CEFR scale: A Malaysian context. *Advanced Science Letters*, 23(5), 4944–4947. <https://doi.org/10.1166/asl.2017.8968>
- John, P. W., Mohamad, M., Mahmud, S. N. D., & Fuad, N. I. M. (2021). The perceptions of tertiary level learners on the use of mobile app “Balloon Vocabulary” in improving vocabulary for reading comprehension. *Theory and Practice in Language Studies*, 11(9), 1007–1017. <https://doi.org/10.17507/tpls.1109.05>
- Lee-Luan, N., & Raghbir, R. S. A. S. (2021). Learning English vocabulary via computer gaming. *Issues in Language Studies*, 10(1), 93–109. <https://doi.org/10.33736/ils.2708.2021>
- Lim, B., Ramanair, J., & Shing, S. R. (2023). Exploring vocabulary teaching: Planning and challenges with the implementation of audio-visual approach in rural East Malaysian primary-level English language classrooms. *3L: The Southeast Asian Journal of English Language Studies*, 29(4), 228–243. <https://doi.org/10.17576/3l-2023-2904-15>
- Manap, M. R., Ramli, N. F., & Mohd Tahir, S. N. B. (2025). Teacher beliefs and approaches to vocabulary teaching in Malaysian ESL primary classrooms. *International Journal of Language*

- Education and Applied Linguistics*, 15(1), 141–151.
<https://doi.org/10.15282/ijleal.v15i1.12001>
- Mat, A. C. (2024). Automated writing evaluation: Users' perception and expectations. *International Journal of Information and Education Technology*, 14(2), 183–192.
<https://doi.org/10.18178/ijiet.2024.14.2.2039>
- McNamara, T., Morton, J., Storch, N., & Thompson, C. (2018). Students' accounts of their first-year undergraduate academic writing experience: Implications for the use of the CEFR. *Language Assessment Quarterly*, 15(1), 16–28. <https://doi.org/10.1080/15434303.2017.1405420>
- Milton, J. (2009). Measuring second language vocabulary acquisition (Vol. 45). Multilingual Matters.
- Ministry of Education Malaysia. (2015). English language education reform in Malaysia: The roadmap 2015–2025. <https://www.eltc.edu.my/pdfviewer/web/showrmp.php>
- Ministry of Education Malaysia. (2017). Dokumen standard kurikulum dan pentaksiran (DSKP) Bahasa Inggeris Tahun 1. Bahagian Pembangunan Kurikulum. <https://bpk.moe.gov.my/kurikulum/kssr/kssr-tahun-1/57-48-dskp-kssr-semakan-tahun-1-bahasa-inggeris-cefr-sk-v2/file>
- Mohd Alias, M. D. I., Abdul Raof, A. H., & Abdullah, T. (2021). Teaching CEFR-aligned writing to young learners: Practices and voices of teachers. *Pertanika Journal of Social Sciences and Humanities*, 29(S3). <https://doi.org/10.47836/pjssh.29.s3.18>
- Mohd Asraf, R., & Supian, N. (2017). Metacognition and mobile-assisted vocabulary learning. *Arab World English Journal*, 8(2), 16–35. <https://doi.org/10.24093/awej/vol8no2.2>
- Mohd Said, N. E., Thambirajah, V., Md Yunus, M., Tan, K. H., & Mohamed Sultan, F. M. (2022). Exploring English descriptive writing vocabulary acquisition through creative pedagogical strategies. *3L: The Southeast Asian Journal of English Language Studies*, 28(4), 212–228. <https://doi.org/10.17576/3l-2022-2804-15>
- Mohd Tahir, M. H., Mohd Ariff Albakri, I. S., Mohd Adnan, A. H., & Abd Karim, R. (2020). The effects of explicit vocabulary instructions on secondary ESL students' vocabulary learning. *3L: The Southeast Asian Journal of English Language Studies*, 26(2), 158–172. <https://doi.org/10.17576/3l-2020-2602-12>
- Mokhtar, N. H., Halim, M. F. A., & Kamarulzaman, S. Z. S. (2011). The effectiveness of storytelling in enhancing communicative skills. *Procedia – Social and Behavioral Sciences*, 18, 163–169. <https://doi.org/10.1016/j.sbspro.2011.05.024>
- Mukhtar, N. H., Zainal, N., Nasir, N. A. M., & Yunus, M. M. (2019). Qletz: Noun-you-know online module for vocabulary learning. *International Journal of Scientific and Technology Research*. <https://www.ijstr.org/final-print/dec2019/Qletz-Noun-you-know-Online-Module-For-Vocabulary-Learning.pdf>
- Mukundan, J. (2023). A review of materials development in multi-cultural developing world L2 contexts. *Journal of AsiaTEFL*, 20(3), 507–523. <https://doi.org/10.18823/asiatefl.2023.20.3.1.507>
- Nation, I. S. P. (2001). How many high-frequency words are there in English? In *Language learning and literature: Studies presented to Håkan Ringbom* (pp. 167–181).
- Ni, C. K., Jong, B., Dison, M. A., Thomas, S. A., Yunus, M. M., & Suliman, A. (2020). Enhancing Malaysian primary pupils' vocabulary skills using Pocable game and Pear Deck. *International Journal of Learning, Teaching and Educational Research*, 19(6), 145–160. <https://doi.org/10.26803/ijlter.19.6.9>
- North, B. (2014). *The CEFR in practice*. Cambridge University Press.

- Page, M. J., McKenzie, J. E., Bossuyt, P. M., Boutron, I., Hoffmann, T. C., Mulrow, C. D., & Moher, D. (2021). The PRISMA 2020 statement: An updated guideline for reporting systematic reviews. *BMJ*, 372, n71. <https://doi.org/10.1136/bmj.n71>
- Paiman, N., Yap, N. T., & Chan, M. Y. (2015). Effectiveness of morphemic analysis of Graeco-Latin word parts as a vocabulary learning strategy among ESL learners. *3L: The Southeast Asian Journal of English Language Studies*, 21(2), 31–45. <https://doi.org/10.17576/3L-2015-2102-03>
- Reddy, A. J., Khera, M. K., McLaughlin, J., & Szabo, C. Z. (2021). The role of motivation in incidental vocabulary learning through academic videos. *Asia Pacific Journal of Educators and Education*, 36(1), 135–153. <https://doi.org/10.21315/apjee2021.36.1.8>
- Savski, K. (2019). Putting the plurilingual/pluricultural back into the CEFR: Reflecting on policy reform in Thailand and Malaysia. *Journal of AsiaTEFL*, 16(2), 644–652. <https://doi.org/10.18823/asiatefl.2019.16.2.13.644>
- Schmitt, N. (2010). *Researching vocabulary: A vocabulary research manual*. Palgrave Macmillan.
- Shamsudin, S., & Ab Rahman, N. A. (2015). The effects of learning from word pairs on word knowledge. *SHS Web of Conferences*, 18, 05003. <https://doi.org/10.1051/shsconf/20151805003>
- Sidhu, G. K., Kaur, S., & Chi, L. J. (2018). CEFR-aligned school-based assessment in the Malaysian primary ESL classroom. *Indonesian Journal of Applied Linguistics*, 8(2). <https://doi.org/10.17509/ijal.v8i2.13311>
- Singh, G. K. S., Dullah, N. A. B., Kumar, M., Nair, S. M., & Derioh, M. M. G. (2024). Exploring lower secondary Malaysian teachers' perceptions of using the listening materials in the Pulse 2 textbook. *Edelweiss Applied Science and Technology*, 8(6), 2662–2678. <https://doi.org/10.55214/25768484.v8i6.2529>
- Subon, F., & Unin, N. (2021). The efficacies of an explicit vocabulary instruction model on ESL learners' vocabulary size and writing skills. *Journal of Language and Education*, 7(1), 190–205. <https://doi.org/10.17323/jle.2021.10209>
- Sulaiman, N. A., & Salehuddin, K. (2022). The effects of input enhancement on incidental academic word learning. *Pertanika Journal of Social Sciences and Humanities*, 30(3), 1245–1262. <https://doi.org/10.47836/pjssh.30.3.17>
- Wong, S. W., & Attan, A. (2014). Comparing intentional vocabulary learning strategies of rote-copying versus read-plus. *3L: The Southeast Asian Journal of English Language Studies*, 20(2), 67–80. <https://doi.org/10.17576/3L-2014-2002-06>
- Wong, W. L., Muhammad, M. M., Mihat, W., Ya Shak, M. S., Rahman, M. A., & Prihantoro, P. (2023). Vocabulary index as a sustainable resource for teaching extended writing in the post-pandemic era. *World Journal of English Language*, 13(3), 181–189. <https://doi.org/10.5430/wjel.v13n3p181>
- Yaacob, A., Narayanan, M., Alsaraireh, M. Y., Yulianeta, Y., Md Hussin, H., & Suryani, I. (2024). Effectiveness of taboo word game on augmenting business vocabulary competency through reflective action research. *Arab World English Journal*, 15(4), 267–281. <https://doi.org/10.24093/awej/vol15no4.17>
- Yaacob, A., Shapii, A., Saad Alobaisy, A., Al-Rahmi, W. M., Al-Dheleai, Y. M., Yahaya, N., & Alamri, M. M. (2019). Vocabulary learning strategies through secondary students at a Saudi school in Malaysia. *SAGE Open*, 9(1). <https://doi.org/10.1177/2158244019835935>
- Yusuf, M., Sim, T. S., & Saad, A. (2014). Students' proficiency and textual computer gloss use in facilitating vocabulary knowledge. *English Language Teaching*, 7(11). <https://doi.org/10.5539/elt.v7n11p99>