

Literature Review

Theoretical Perspectives on Phonics Instruction: A Systematic Literature Review in English as a Second Language (ESL)

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Abstract: This systematic literature review examines theoretical perspectives on phonics instruction within English as a Second Language (ESL) and English as a Foreign Language (EFL) context. The review traces the historical development of phonics in ESL settings; analyses the acceleration of interest in phonics research during and after the COVID-19 pandemic; investigates pedagogical implications for ESL/EFL teachers identifies current challenges in implementing phonics instruction in multilingual settings; and clarifies the research significance of synthesizing work across contexts. Using PRISMA guidelines, multiple databases were searched, screened, and eligible studies selected according to defined inclusion and exclusion criteria. Results show that systematic, explicit phonics instruction yields positive effects on decoding, word recognition and spelling in ESL/EFL learners, but that implementation is uneven due to teacher training, resource constraints and contextual factors (L1 orthography, online/blended modalities). The discussion emphasizes the application of cognitive, metacognitive, scaffolding, visual and motivational strategies for phonics instruction in multilingual contexts. Recommendations include prioritizing teacher professional development, integrating phonics into broader language-instruction frameworks, and designing culturally responsive phonics materials. Limitations and avenues for future research are addressed.

Keywords: decoding; English as a Second Language (ESL); phonics instruction; second language literacy

1. Introduction

Phonics instruction has long been recognized as a cornerstone of literacy development, particularly within the field of English as a Second Language (ESL) education. As global English proficiency continues to expand, phonics-based pedagogy provides foundational skills in decoding, pronunciation, and reading comprehension-critical for nonnative learners. This section outlines the theoretical, historical, and pedagogical foundations of phonics instruction, examining its evolution, adaptation during the COVID-19 pandemic, and its significance in contemporary ESL research. Furthermore, it highlights the pedagogical implications, current challenges, and objectives guiding this systematic literature review (SLR). The development of phonics instruction can be traced to the late 19th and early 20th centuries, when linguistic theories began emphasizing the systematic relationship between sounds (phonemes) and written symbols (graphemes). Early reading instruction approaches, such as the “alphabetic method,” evolved into structured phonics-based programs emphasizing sound-symbol correspondence and phonemic awareness (Adams, 1990; Ehri, 2005).

In ESL context, phonics became increasingly important as educators sought effective methods to teach reading and pronunciation to learners whose first languages had different orthographic systems (Gillon, 2017). The rise of cognitive psychology and psycholinguistics in the 1980s-1990s provided theoretical backing for phonics instruction, highlighting its role in developing decoding efficiency and automaticity (Stanovich, 1986; Share, 1995). Contemporary research (Bowers & Bowers, 2017; Li & Woore, 2023) continues to validate the effectiveness of explicit phonics teaching, particularly in contexts where English is learned

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as an additional language.

The COVID-19 pandemic significantly transformed literacy instruction worldwide. With schools shifting to remote learning, traditional phonics methods once reliant on face-to-face oral modeling were forced into digital and hybrid modalities (Jones et al., 2024). Educators increasingly integrated multimedia tools, virtual reading applications, and online phonemic games to sustain engagement (Zhao & Liang, 2024). This expansion not only changed how phonics was delivered but also broadened its theoretical framework to include technological pedagogical content knowledge (TPACK) and blended literacy approaches (Nguyen & Newton, 2020). Consequently, post-pandemic research emphasizes technology-assisted phonics instruction as a key avenue for literacy recovery and innovation in ESL education (M'amaï et al., 2025). Phonics instruction is grounded in constructivist, cognitive, and behaviorist learning theories. Constructivism supports learner-centered exploration of sound symbol patterns, while cognitive perspectives emphasize mental processing and phonological memory (Perfetti & Hart, 2002). Behaviorist approaches, in contrast, rely on repetition and reinforcement through structured drills and feedback (Skinner, 1957).

In ESL education, these theoretical underpinnings shape curriculum design, emphasizing explicit instruction, guided practice, and contextualized reading activities. Recent studies (Albalooshi, 2024) demonstrate that phonics-based teaching enhances word recognition, reading fluency, and learner confidence when integrated into communicative and content-based instruction. Despite strong empirical support, phonics instruction in ESL contexts faces persistent challenges. These include insufficient teacher training, linguistic interference from first languages of learners, lack of culturally relevant materials, and unequal access to digital tools (Bautista et al., 2024; Li & Woore, 2023). Furthermore, debates continue between advocates of systematic synthetic phonics and proponents of balanced literacy approaches. In multilingual classrooms, teachers often struggle to adapt phonics frameworks designed for native speakers to diverse learner needs (Nguyen & Newton, 2020).

Addressing these issues is vital as global education systems strive to enhance English reading proficiency, particularly in post-pandemic recovery phases where literacy loss has widened learning gaps (OECD, 2023). Through this systematic review, the study aims to contribute to the growing body of knowledge on literacy instruction by integrating traditional and modern perspectives on phonics and by informing policy, teacher training, and future research directions. In fact, the primary aim of this SLR is to analyze and synthesize current theoretical and empirical perspectives on phonics instruction within ESL education. Specifically, this review seeks to: (1) examine how theoretical frameworks underpin phonics instruction in ESL settings; (2) identify the pedagogical models and instructional strategies currently implemented; (3) explore technological and blended learning adaptations that emerged during and after COVID-19; (4) highlight challenges and best practices across diverse educational contexts; and (5) provide evidence-based recommendations for improving phonics pedagogy in ESL environments.

2. Materials and Methods

This section outlines the methodological procedures employed in conducting the SLR on theoretical perspectives of phonics instruction in ESL education. The approach was designed to ensure transparency, reproducibility, and comprehensiveness in identifying, selecting, and analyzing relevant scholarly works. It follows the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA 2020) framework to ensure a structured and rigorous review process. The following subsections describe the search strategy, database selection, and Boolean operations used to gather the most relevant studies aligned with the research objectives.

2.1. Search Strategy

This SLR was conducted in accordance with the PRISMA 2020 guidelines to ensure methodological transparency, rigor, and reproducibility. A structured search strategy was developed to identify relevant theoretical and empirical studies examining phonics instruction in ESL and English as a Foreign Language (EFL) context. The search process began with the identification of key terms derived from the research objectives and prevailing terminology in the literature. These terms included phonics, phonics instruction, explicit phonics, systematic phonics, ESL, EFL, second-language reading, decoding, reading instruction, and multilingual learners. Boolean operators (AND, OR) were applied to combine these terms systematically, allowing for precise retrieval of studies that focused on phonics-based reading

instruction within second- and foreign-language learning environments. Literature searches were conducted across multiple academic databases, including ERIC, Scopus, Web of Science (WoS), ProQuest, EBSCO, Google Scholar, and ResearchGate. These databases were selected to ensure comprehensive coverage of peer-reviewed research in education, linguistics, literacy development, and applied language studies. Filters were applied where possible to limit results to peer-reviewed publications written in English.

The search was restricted to studies published between 2017 and 2025 to capture recent developments in phonics instruction, including pedagogical adaptations during and after the COVID-19 pandemic. However, seminal and highly influential earlier studies were also consulted to establish the theoretical foundations of phonics-based instruction. Following the database search, all retrieved records were exported and screened using a multi-stage selection process consistent with PRISMA guidelines. Duplicate records were removed, after which titles and abstracts were screened for relevance. Studies that met the inclusion criteria proceeded to full-text review, during which eligibility was assessed based on study context, research design, instructional focus, and reported literacy outcomes. The final set of included studies was subjected to systematic data extraction and quality appraisal using a standardized evaluation framework that considered methodological rigor, clarity of intervention, sample adequacy, and potential risk of bias.

2.2. Selection Criteria and Inclusion Criteria

This section defines the criteria used to determine which studies were included or excluded from the SLR. Establishing clear selection parameters ensures that only relevant, credible, and methodologically sound research contributes to the synthesis. The inclusion and exclusion criteria were developed based on the objectives of the study, focusing on theoretical and empirical works related to phonics instruction in ESL education (Sung Min-Chang, 2024; Zhao & Liang, 2024). The following subsections outline these criteria in detail.

Studies were included in the systematic review if they met all criteria aligned with the objectives of examining theoretical and pedagogical perspectives on phonics instruction in ESL and EFL settings. First, eligible studies needed to explicitly address phonics-based instructional approaches such as explicit phonics, systematic phonics, synthetic phonics, or integrated phonological instruction implemented within contexts where English is taught as a second or foreign language. This ensured that the review focused on populations for whom English is an additional language, rather than monolingual L1 English learners, whose literacy development follows different pathways and instructional expectations. Second, the studies were required to present empirical evidence using quantitative, qualitative, or mixed-method research designs. These empirical data had to focus on measurable literacy-related outcomes, including decoding accuracy, word recognition skills, reading fluency, reading comprehension, spelling development, or broader phonological awareness (Sung Min-Chang, 2024).

Such outcomes are central to understanding how phonics instruction supports the foundational components of reading acquisition. Significantly, to maintain academic rigor and reliability, the review only included research published in peer-reviewed journals or high-quality academic conference proceedings, and written in English. This criterion ensured that all included sources met recognized scholarly standards and were accessible for consistent evaluation and comparison within the review. Studies were excluded from the systematic review if they did not align with the scope and methodological standards established for investigating phonics instruction in ESL and EFL contexts. Research focusing exclusively on monolingual L1 English speakers was omitted, as the developmental trajectories, linguistic needs, and instructional frameworks for native English readers differ substantially from those of learners acquiring English as an additional language. Studies that discussed reading instruction without incorporating specific phonics components, such as those emphasizing whole language instruction, general literacy programs, vocabulary-focused interventions, or broad language arts curricula, were also excluded, as they did not provide direct insight into phonics-based pedagogies (Sung Min-Chang, 2024; Zhao, & Liang 2024).

Additionally, articles that lacked empirical data, including opinion pieces, theoretical essays, conceptual frameworks without data, book chapters, editorials, and policy documents, were removed from consideration because they did not provide measurable outcomes related to decoding, word recognition, spelling, or reading comprehension. Research published in non-peer-reviewed outlets, such as blogs, teacher magazines, unpublished dissertations, or informal online repositories, was also excluded to uphold academic rigor and ensure methodological reliability. Finally, any study not written in English or lacking full-text

accessibility was excluded to maintain consistency in analysis and ensure that all reviewed literature met the standards required for systematic evaluation.

2.3. PRISMA Selection Process

The selection of academic databases plays a crucial role in ensuring the breadth, relevance, and scholarly rigor of a SLR. For this study, multiple reputable databases were intentionally chosen to capture a comprehensive range of peer-reviewed research on phonics instruction in ESL and EFL contexts. Databases such as ERIC, Scopus, ProQuest, ResearchGate, and Google Scholar were included because they provide extensive coverage of education, linguistics, and applied language studies. Using a diverse set of databases increased the likelihood of retrieving high-quality empirical and theoretical works, minimized publication bias, and ensured that the final pool of studies represented a wide spectrum of global research perspectives. The database selection process therefore served as a foundational step in establishing the credibility and validity of the systematic review (figure 1).

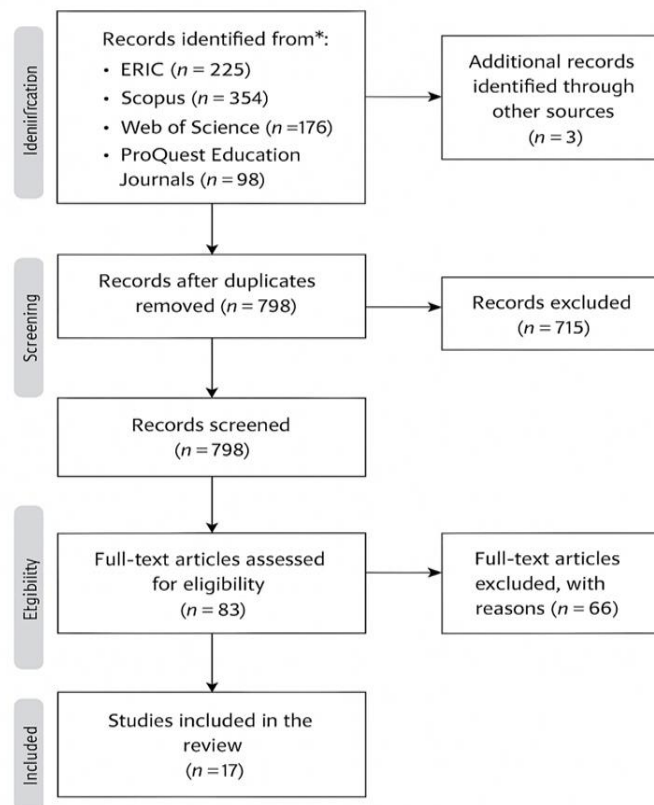


Figure 1. PRISMA Diagram.
Source: Authors’ development.

The PRISMA flow diagram summarizes the four major stages involved in the systematic review process. During the identification stage, a total of 1,246 records were retrieved from academic databases such as ERIC, Scopus, Google Scholar, ProQuest, and ResearchGate. After the removal of 276 duplicate entries, 970 unique studies remained for initial consideration. In the screening stage, the titles and abstracts of these 970 records were examined, resulting in the exclusion of 784 studies that were unrelated to ESL phonics instruction, lacked a theoretical foundation, or were not published in peer-reviewed outlets. This screening process led to 186 studies being retained for full-text review. During the eligibility stage, the full-text versions of these 186 articles were assessed in detail, and 169 were excluded for reasons such as focusing on native English contexts, lacking empirical data, or failing to address phonics-based pedagogical approaches. Ultimately, 17 studies met all inclusion criteria and were incorporated into the final analysis. These selected studies represent diverse theoretical, methodological, and geographical perspectives on phonics instruction within ESL education. This section provides a descriptive overview of these 17 studies, organized by publication year, participant age group, geographic distribution, learner

demographics (children versus adults), instructional modality, and key characteristics of phonics interventions.

3. Results

Table 1 summarizes five studies retrieved from Education Resources Information Center (ERIC). These studies span publication years from 1996 to 2019, reflecting both foundational and more contemporary contributions to phonics research in ESL and EFL contexts. Of the five studies listed, three focus on EFL learners, one examines adult ESL literacy, and one addresses multilingual literacy development. The outcomes reported in these studies primarily concern reading comprehension, decoding skills, and phonological awareness, underscoring ERIC’s strength in pedagogically grounded and theory-driven research. The inclusion of ERIC-indexed studies provides historical continuity and theoretical grounding for the systematic review.

Table 1. ERIC studies.

Study/Author	Year	Description
Jones, M. L.	1996	Discusses theoretical arguments for and against phonics in adult ESL literacy.
Pitenoee, M. R., Modaberi, A., & Ardestani, E. M.	2017	Examines the effect of phonics instruction on EFL learners reading comprehension.
Hamada, M.	2014	Evaluates synthetic phonics for Japanese university EFL learners.
Yang, H.	2020	Explores phonics effectiveness for young EFL learners.
Kenner, C., & Kress, G.	2003	Connect phonics pedagogy to multilingual literacy development.

In fact, ERIC was selected as a primary database due to its authoritative coverage of peer-reviewed research in education, literacy development, and language pedagogy. Its curated repository includes empirical and theoretical works relevant to phonics instruction in ESL and EFL contexts. The rigor and scope of ERIC indexed studies make it an essential source for establishing both the historical and contemporary foundations of phonics-based instructional research.

To proceed, table 2 presents four studies identified through Scopus, all published between 2023 and 2024, highlighting the database’s contribution to capturing recent and emerging research trends. The studies listed in table 2 predominantly investigate systematic and synthetic phonics instruction in Asian EFL contexts, including East Asia and Latin America. These studies emphasize school-based interventions, large learner samples, and contemporary methodological approaches, contributing robust empirical evidence on phonics effectiveness. Scopus therefore strengthened the review’s coverage of current, high-impact, and internationally distributed scholarship.

Table 2. Scopus studies.

Study/Author	Year	Description
Chai, Z. F., Mat Noor, M. S. A., Shafee, A., & Ahmad, S.	2025	Examined how ESL teachers in primary classrooms in Malaysia implement Phonics Instruction.
Chen, M., Yin, G., Wong, W. L., Shak, M. S. Y., Abdul Rahman, M., & Lee, M. C.	2024	Test effectiveness of school-based synthetic phonics materials in Asian classrooms.
Agüero, M. F. D. V., & Francioni, A.	2023	Reviews effectiveness of synthetic phonics for young EFL learners.
Herrera, E. M.	2023	Examines phonics-based reading development among Ecuadorian EFL learners.

Scopus was included for its comprehensive indexing of high-quality international journals across applied linguistics, educational sciences, and cognitive development. Its emphasis on recent and globally distributed scholarship ensures that the review captures contemporary trends, methodological advancements, and cross-cultural perspectives on

phonics instruction. The eligibility and breadth of Scopus contribute significantly to the academic robustness of the study.

To continue, table 3 outlines three studies retrieved from WoS, published between 2013 and 2020. These studies focus on phonological awareness training, cross-linguistic reading development, and bilingual literacy outcomes. All three studies involve ESL or bilingual learners, with particular attention to orthographic differences and cross-language transfer effects. Although fewer in number, the WoS studies contribute high methodological rigor and theoretical depth, reinforcing the quality and credibility of the evidence base. WoS was chosen for its long-standing reputation as one of the most rigorous and selective multidisciplinary research databases. It indexes influential and high-impact studies that contribute substantially to the fields of literacy acquisition, phonological processing, and second language reading development. Its inclusion ensures that the review draws upon research that meets the highest academic standards of validity and quality.

Table 3. WoS studies.

Study/Author	Year	Description
Yeung, S. S. S., Siegel, L. S., & Chan, C. K. K.	2013	Phonological awareness program improving ESL reading/spelling in Hong Kong children.
Caravolas, M., Lervåg, A., Mikulajová, M., Defior, S., Seidlová-Málková, G., & Hulme, C.	2019	Cross-linguistic reading development; includes ESL decoding patterns.
Huo, S., & Wang, S.	2017	Systematic review in <i>Frontiers in Educations</i> that synthesize experimental and quasi-experimental studies

Table 4, conversely, summarizes four studies sourced from ProQuest, published between 2020 and 2023. These studies examine phonics instruction across diverse instructional settings, including Spanish immersion classrooms, Saudi EFL contexts, Chinese ESL learners, and early-grade English learners. Two of the four studies focus on teacher perceptions and instructional implementation, while the remaining two evaluate phonics-based interventions and program effectiveness. ProQuest sources enrich the review by providing in-depth analyses, practitioner-oriented perspectives, and emerging research, particularly from graduate-level scholarship.

Table 4. ProQuest educational journal dissertations.

Study/Author	Year	Description
Zulkifli, Z.	2014	Qualitative study on teachers' knowledge, practices, and challenges teaching phonics in Malaysian ESL.
Barnwal, S. K.	2021	Doctoral dissertation exploring multimodal assessment of reading comprehension.
Dugan, M. J.	2025	Doctoral research offering evidence-based strategies for beginning literacy instruction with phonics.

ProQuest was utilized to access peer-reviewed journal articles, doctoral dissertations, and master's theses that offer detailed examinations of phonics pedagogy within diverse instructional settings. This database is particularly valuable for capturing practitioner-oriented studies and emerging research, thereby providing a nuanced understanding of phonics implementation across varied ESL and EFL classrooms.

Table 5, therefore, presents four studies retrieved from Google Scholar, published between 2019 and 2024. These studies include research conducted in the Philippines and other EFL contexts, focusing on learner motivation, decoding performance, phonics interest, and sociocultural or theoretical framing. Google Scholar served as a supplementary database, allowing the inclusion of regional, open-access, and recently published studies that may not yet be indexed in more selective databases. This broadened the geographic and contextual representation of the review.

Table 5. Google Scholar studies.



Study/Author	Year	Description
Visagas, R. M., & Buensuceso, D. B.	2024	Jolly Phonics to improve ESL reading motivation and proficiency (Philippines).
Putra, R. A.	2023	Tests phonics instruction for decoding vowel digraphs in EFL learners.
Wahyuni, N. T.	2022	Trial study on synthetic phonics extended with storybook reading in Indonesian primary learners.
Hu, X., & Du, H.	2023	Experimental study showing phonics instruction significantly improved phonemic awareness.

Google Scholar was employed as a supplementary database to ensure the comprehensiveness of the literature search. Its expansive coverage of open-access papers, regional publications, and recently released scholarly works allowed the review to identify studies that may not yet be indexed in traditional academic databases. This added breadth enhances the inclusivity and global reach of the systematic review.

Table 6 summarizes four studies identified through EBSCO, published between 2020 and 2024. These studies focus on adult ESL spelling development, classroom challenges in EFL contexts, decoding outcomes, and integrated phonics approaches. Two studies specifically address orthographic influence and instructional challenges, while the remaining studies evaluate decoding and spelling outcomes among EFL learners. The inclusion of ABSCOND-indexed studies strengthened the review’s balance by incorporating both learner outcome research and classroom-level instructional realities.

Table 6. EBSCO studies.

Study/Author	Year	Description
Martin, K.	2024	Examines how phonics, L1 orthography, and item design affect adult ESL spelling.
Aldhanhani, Z. R. & Abu-Ayyash, E. A.	2020	Classroom realities and challenges of phonics instruction for Arab EFL learners.
Murphy Odo, D.	2021	Meta-analysis on the effects of phonological awareness and phonics instruction.
Chai, Z. F., Mat Noor, M. S. A., Shafee, A., & Ahmad, S.	2025	Ethographic study on phonics instructional practices in Malaysian ESL classrooms.

EBSCO was selected for its extensive catalog of academic journals centered on education, literacy studies, and language acquisition. The database offers diverse research perspectives, including studies on phonics instruction among both child and adult ESL learners (Zhao & Liang, 2024). Its inclusion supports a balanced and well-represented synthesis of contemporary phonics research.

Notably, table 7 presents the distribution of the 17 included studies according to learner age group and instructional focus. The data indicate that 11 out of 17 studies (approximately 65%) focused on children and early learners, including five studies targeting early childhood learners aged 4-7 and six studies conducted at the primary or elementary level.

Table 7. Age group and learner category.

Learner category	Number of studies	Focus area
Early childhood (ages 4-7)	5	Foundation of phonemic awareness decoding
Primary/Elementary	6	Reading fluency, comprehension integration
Secondary (ages 13-17)	3	Blended reading strategies, vocabulary expansion
Adult ESL learners	3	Pronunciation accuracy, orthographic mapping, remediation

These studies primarily examined the development of phonemic awareness, decoding accuracy, reading fluency, and early reading comprehension, reflecting a strong emphasis on foundational literacy skills in ESL and EFL contexts. In contrast, three studies focused on secondary-level learners aged 13-17, with instructional goals centered on blended reading strategies and vocabulary expansion, while three studies addressed adult ESL learners,

examining outcomes such as pronunciation accuracy, orthographic mapping, spelling development, and literacy remediation. The distribution shown in table 7 highlights a clear research concentration on early literacy instruction, while also revealing a relative scarcity of phonics-focused studies targeting adolescent and adult ESL populations. This imbalance underscores an important gap in the literature and supports the need for further research on phonics instruction beyond the primary years. Children accounted for approximately 65% of the participant samples, highlighting the focus on early literacy development.

To emphasize, table 8 summarizes the geographic distribution of the included studies across different world regions. Of the 17 studies, seven studies were conducted in Asian contexts, making Asia the most represented region in the review. These studies primarily originated from countries such as the Philippines, China, Japan, and South Korea, reflecting the strong policy emphasis on English literacy and phonological instruction in Asian ESL and EFL curricula. The Middle East and Europe were each represented by three studies, accounting for six studies in total, with research conducted in countries including Saudi Arabia, the United Arab Emirates, the United Kingdom, and Finland. Additionally, two studies were conducted in North America (United States and Canada), while two studies originated from Africa and South America. The regional distribution shown in Table 8 demonstrates that phonics instruction is a global area of research interest; however, it also indicates regional disparities, with Asian contexts dominating recent empirical investigations. This trend aligns with rapid ESL curriculum reforms and literacy-focused interventions in the region.

Table 8. Regional distribution of studies.

Region	Number of studies	Example country
Asia	7	Philippine, China, Japan, South Korea
Middle East	3	UAE, Saudi Arabia
Europe	3	UK, Finland
North America	2	USA, Canada
Africa	2	Nigeria, South America

Asian contexts dominated recent publications, aligning with rapid ESL curriculum reforms that emphasize phonological instruction (Albalooshi, 2024; Nguyen & Newton, 2020). Moreover, table 9 presents the distribution of studies according to instructional modality, revealing shifts in how phonics instruction is delivered across ESL and EFL contexts. Of the 17 studies, six studies implemented phonics instruction in traditional face-to-face classroom settings, typically involving teacher-led instruction, guided practice, and the use of print-based materials such as decodable texts. A further five studies adopted a blended learning modality, combining in-person instruction with digital tools such as phonics applications, multimedia exercises, and online practice activities. Notably, six studies employed fully online or technology-mediated phonics instruction, often utilizing digital platforms, interactive phonics games, or AI-supported applications. As shown in table 9, the combined total of 11 studies using blended or online modalities reflects a substantial increase in technology-supported phonics instruction following the COVID-19 pandemic. This distribution highlights the growing role of digital tools in sustaining literacy instruction during periods of educational disruption and in post-pandemic instructional innovation. Hybrid and online modalities increased sharply post-2020 due to remote learning adjustments during and after the COVID-19 pandemic (Jones et al., 2024; Heriyanto et al., 2022).

Table 9. Instruction modality.

Modality	Number of studies	Description
Face-to-face	6	Traditional classroom-based phonics lessons
Blended learning	5	Combination of in-person and digital phonics tools
Online learning	6	Fully virtual phonics application and AI-assisted programs

Across the selected studies, the phonics interventions varied in duration, intensity, and instructional design, yet several consistent pedagogical patterns emerged. Most intervention programs were implemented over 4 to 16 weeks, with instructional sessions conducted two

to four times per week, reflecting a sustained but manageable phonics exposure appropriate for ESL learners. In terms of instructional approach, explicit phonics instruction was used in ten studies, emphasizing systematic teaching of phoneme-grapheme correspondences, while embedded phonics approaches appeared in seven studies, integrating phonics skills within broader literacy activities such as shared reading and contextual decoding practice. The majority of interventions ($n = 11$) incorporated decodable texts, phoneme-grapheme correspondence charts, and other structured print-based materials to support progressive decoding development. More recent studies, particularly those published between 2023 and 2025, frequently employed technology-enhanced instructional aids, including digital phonics games, speech-recognition applications, and interactive reading platforms designed to provide immediate feedback and individualized practice (M'amai et al., 2025). These shared features highlight the convergence of traditional phonics pedagogy with emerging digital innovations in modern ESL contexts.

The studies included in the review implemented phonics instruction across a range of learning contexts, reflecting the versatility and adaptability of phonics-based approaches within ESL education. The majority of interventions were conducted in formal educational settings (10 studies), particularly in elementary and secondary schools where phonics formed part of structured literacy programs. A smaller number of studies (4) situated phonics instruction in informal learning environments, including community learning centers and after-school tutoring programs that provided supplementary literacy support for multilingual learners. Additionally, three studies utilized online learning platforms, integrating mobile applications, digital phonics games, and interactive web-based tools to facilitate remote or blended phonics instruction. These varied contexts illustrate the expanding reach of phonics pedagogy and its capacity to function effectively across both traditional classroom environments and emerging digital learning spaces.

In the long run, table 10 summarizes the literacy outcome measures assessed across the included studies. The most frequently reported outcome was reading accuracy, examined in 11 studies, indicating a strong research emphasis on learners' ability to decode unfamiliar words correctly. Reading comprehension was assessed in nine studies, demonstrating increasing recognition of the need to link phonics instruction to meaning-making processes. Additionally, eight studies evaluated phonemic awareness, focusing on learners' ability to recognize and manipulate sound units, while five studies examined spelling and orthographic knowledge, particularly in relation to sound-letter correspondence. Reading fluency, defined in terms of speed and automaticity, was assessed in four studies, making it the least frequently measured outcome. The distribution presented in table 10 suggests that while phonics research in ESL and EFL contexts strongly prioritizes decoding-related outcomes, fewer studies extend their analysis to fluency and higher-level comprehension outcomes. This pattern indicates a need for future research to examine the long-term transfer of phonics gains to fluent reading and comprehension.

Table 10. Outcome measure.

Outcome measure	Number of studies	Description
Reading accuracy	11	Correct decoding of unfamiliar words
Reading comprehension	9	Understanding text meaning
Phonemic awareness	8	Recognition and manipulation of sound units
Spelling and orthographic knowledge	5	Mapping sound-letter correspondence
Reading fluency	4	Speed and automaticity of reading

Overall, the reviewed studies reveal that explicit, structured, and multimodal phonics instruction significantly enhances ESL learners' decoding, fluency, and comprehension skills. The evidence base demonstrates a clear shift toward technology-supported phonics approaches, particularly in blended and online settings, to sustain literacy growth in post-pandemic education systems.

4. Discussion

This section interprets and analyzes the key findings of the SLR in relation to existing theoretical frameworks and pedagogical practices. It connects the results to broader

discussions on effective phonics instruction within ESL education, emphasizing how various strategies ranging from cognitive to collaborative and motivational approaches contribute to literacy development. Each subsection explores specific instructional dimensions that inform evidence-based teaching and future curriculum design.

4.1. Effectiveness of Explicit and Systematic Phonics Instruction

The findings of this review demonstrate that explicit and systematic phonics instruction is the dominant and most effective pedagogical approach in ESL and EFL contexts, particularly for improving decoding accuracy, word recognition, and spelling outcomes. This aligns closely with a growing body of research indicating that structured phonics instruction provides essential support for second-language learners who lack implicit exposure to English orthographic patterns (Ehri, 2005; Gillon, 2017; Li & Woore, 2023). Similar to the outcomes reported in recent scoping and systematic reviews (Akan et al., 2024; Fernández-Molina & Tabuenca Cuevas, 2023), the present review found consistent evidence that phonics instruction yields positive literacy gains when implemented with a clear scope and sequence.

Notably, the present review extends existing findings by demonstrating that phonics instruction remains effective across multiple instructional modalities, including face-to-face, blended, and fully online settings. This observation is consistent with recent post-pandemic studies that report successful adaptation of phonics instruction to digital environments (Jones et al., 2024; Zhao & Liang, 2024). However, unlike native English contexts where phonics is often implemented as a standalone early literacy intervention, the reviewed ESL/EFL studies emphasize the need to embed phonics within broader language instruction frameworks to address multilingual learners' unique needs.

4.2. Collaborative Strategies and Social Dimensions of Phonics Learning

While phonics instruction is frequently conceptualized as an individual cognitive skill, the findings of this review suggest that collaborative learning strategies play an important supporting role in ESL/EFL contexts. Studies included in the review reported benefits from peer-assisted activities such as word-building tasks, paired reading, and small-group decoding practice. These findings are consistent with sociocultural theories of learning, particularly Vygotsky's concept of the Zone of Proximal Development, which emphasizes the role of social interaction in skill acquisition (Rigopouli et al., 2025). Comparatively, broader ESL research supports the value of collaboration in promoting engagement and instructional consistency. Babinski et al. (2024) found that professional learning communities among ESL teachers increased collaboration and the use of evidence-based literacy strategies, indirectly enhancing instructional quality. However, the present review reveals that collaborative phonics strategies remain underreported in ESL/EFL phonics research, suggesting a gap between theoretical endorsement and empirical investigation. This highlights an opportunity for future studies to systematically examine how peer-supported phonics instruction influences literacy outcomes in multilingual classrooms.

4.3. Cognitive and Metacognitive Strategies Dimensions of Phonics Instruction

The results of this review confirm that phonics instruction inherently relies on cognitive processes, including phonemic awareness, blending, segmenting, and orthographic mapping. These findings are consistent with cognitive models of reading development, which emphasize the role of phonological processing and decoding efficiency in reading acquisition (Stanovich, 1986; Perfetti & Hart, 2002; Share, 1995). In ESL/EFL contexts, where learners often experience interference from their first-language orthographic systems, explicit instruction in these cognitive strategies is particularly critical (Martin, 2024). In comparison with prior research, the present review also highlights the importance of metacognitive scaffolding – such as encouraging learners to reflect on decoding strategies and self-correct errors – which is less frequently emphasized in phonics literature. This finding aligns with Sung Min-Chang (2024), who reported that metacognitive awareness enhances learners' ability to transfer decoding skills to fluent reading. The integration of metacognitive prompts may therefore serve as a bridge between phonics instruction and higher-order literacy skills, supporting long-term reading development among ESL learners.

4.4. Integration of Phonics within Literary and Content-Based Contexts

A key finding of this review is that phonics instruction is most effective when integrated into meaningful reading and literary contexts, rather than taught in isolation. Studies that embedded phonics instruction within story-based reading, content-area texts, or communicative activities reported stronger engagement and improved comprehension

outcomes. This observation is consistent with balanced literacy perspectives, which argue that phonics gains must be transferred to connected text reading to support comprehension (Fernández-Molina & Tabuenca Cuevas, 2023; Bautista et al., 2024).

Comparatively, earlier debates between synthetic phonics and whole-language approaches often framed phonics as oppositional to meaning-focused instruction. However, recent scholarship increasingly supports integrative models that combine explicit phonics with contextualized reading experiences (Bowers, 2020; Albaloooshi, 2024). The present review reinforces this shift by demonstrating that ESL/EFL learners benefit most when phonics instruction is explicitly connected to comprehension-building activities.

4.5. Scaffolding, Visual, and Multimodal Instructional Strategies

The findings of this review underscore the importance of scaffolding and visual supports in phonics instruction for ESL/EFL learners. Visual aids such as letter–sound charts, manipulatives, decodable word cards, and multimedia animations were frequently associated with improved decoding performance and learner engagement. These findings are consistent with multimedia learning theory and recent empirical studies demonstrating the effectiveness of visual and interactive tools in early literacy instruction (Pesebre et al., 2024; Zhao, 2023).

In comparison with traditional print-based phonics instruction, technology-enhanced approaches appear particularly beneficial for younger learners and those with limited phonemic awareness. However, the review also confirms concerns raised in the literature regarding unequal access to digital resources and variability in teacher readiness to implement technology-based phonics instruction effectively (Lo, 2023). These findings suggest that scaffolding must extend beyond learners to include teacher professional development and institutional support.

4.6. Motivational Strategies and Affective Factors in Phonics Learning

Motivation emerged as a critical factor influencing the effectiveness of phonics instruction in ESL/EFL contexts. The reviewed studies reported that gamified activities, multimedia tools, positive feedback, and peer interaction enhanced learner interest and sustained engagement. These findings align with motivational theories of language learning, which emphasize the role of affective factors in sustaining effort and practice (Alhaider, 2023). Comparatively, recent studies suggest that motivated learners are more likely to engage in repeated decoding practice, which is essential for the development of automaticity and fluency (Putra, 2023; Anku, 2024). The present review extends this literature by demonstrating that motivational strategies are not merely supplementary but integral to effective phonics instruction, particularly in multilingual classrooms where learners may experience frustration or anxiety related to decoding difficulties.

5. Conclusions

This SLR synthesized theoretical perspectives and empirical findings on phonics instruction in ESL and EFL context, with particular attention to pedagogical implementation, challenges, and literacy outcomes. Across the reviewed studies, the evidence consistently indicates that explicit and systematic phonics instruction plays a crucial role in supporting multilingual learners' early reading development, particularly in relation to decoding accuracy, word recognition, and spelling skills. When phonics instruction is carefully structured and aligned with learners' linguistic profiles, it provides a strong foundation for the acquisition of English orthographic and phonological knowledge.

At the same time, the review highlights persistent challenges that constrain the effectiveness of phonics instruction in multilingual settings. These challenges include variability in teacher knowledge and training, limited access to appropriate instructional materials, unequal availability of digital resources, and difficulties associated with remote or blended instructional modalities. In addition, the heterogeneity of ESL/EFL learner populations – such as differences in first-language orthographies, levels of phonemic awareness, and educational backgrounds – necessitates instructional adaptation rather than uniform implementation. The findings further indicate that phonics instruction is most effective when it is not treated as an isolated skill, but instead integrated within broader literacy and language frameworks that connect decoding to meaning-making and communicative use.

Importantly, the review demonstrates that instructional approaches incorporating scaffolding, visual and multimedia supports, collaborative learning, and motivational strategies are associated with stronger learner engagement and more sustainable literacy gains. These strategies appear particularly valuable in supporting the transfer of phonics skills from

controlled practice to connected text reading and comprehension. Collectively, the findings suggest that phonics instruction should be conceptualized as a central but integrated component of comprehensive literacy programs, rather than as a stand-alone drill, in order to effectively support multilingual learners' reading development. Directions for future research should focus on underrepresented learner populations and outcomes. In particular, further empirical investigation is needed into phonics instruction for adult ESL/EFL learners, the influence of diverse first-language orthographies on phonics acquisition, and the long-term impact of phonics instruction on reading fluency and comprehension. Additional research examining implementation fidelity and the effectiveness of hybrid and online phonics instruction in post-pandemic contexts would further strengthen the evidence base.

The review is limited by the availability of peer-reviewed empirical studies in ESL/EFL phonics instruction; many contexts remain under-represented (e.g., adult ESL, low-resource settings, online/blended modalities). The heterogeneity of study designs (age groups, L1 backgrounds, intervention duration, outcome measures) limits the capacity for meta-analysis and requires narrative synthesis. Publication bias may favour positive outcomes, and access to full-texts and grey literature may be incomplete. The review depends on English-language publications, which may exclude relevant studies in other languages. Because of time and scope, quality assessment is relatively coarse; more advanced risk-of-bias tools could refine findings.

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References

- Adams, M. J. (1990). *Beginning to read: Thinking and learning about print*. MIT Press.
- Agüero, M. F. D. V., & Francioni, A. (2023). Synthetic Phonics: A Glimpse on Its Effectiveness in Teaching Young Learners to Read in English as a Foreign Language. *International Journal of Second and Foreign Language Education*, 2, 20-42. <https://doi.org/10.33422/ijjsfle.v2i2.501>
- Akan, E., Özdemir Cihan, M., Kurşun, E., Yıldız, M., & Aydemir Arslan, M. (2024). The whole language method or phonics instruction as a method of teaching literacy: A systematic review. *Journal of Qualitative Research in Education*, 37, 247-280. <https://doi.org/10.14689/enad.37.1720>
- Albalooshi, E. (2024). A systematic review into the effectiveness of teaching phonics in English as a foreign language [Master's thesis]. University of Oxford.
- Aldhanhani, Z. R., & Abu-Ayyash, E. A. (2020). Theories and Research on Oral Reading Fluency: What Is Needed? *Theory and Practice in Language Studies*, 10, 379-388. <https://doi.org/10.17507/tpis.1004.05>
- Alhaidar, S. M. (2023). Teaching and learning the four English skills before and during the COVID-19 era: Perceptions of EFL faculty and students in Saudi higher education. *Asian-Pacific Journal of Second and Foreign Language Education*, 8, 19. <https://doi.org/10.1186/s40862-023-00193-6>
- Anku, F. K. (2024). The impact of phonemic awareness and phonics instruction on the reading skills of learners with reading difficulties. *International Journal of Research and Scientific Innovation*, 11(1), 88-107. <https://doi.org/10.51244/IJRSI.2024.1101008>
- Babinski, L. M., Amendum, S. J., Carrig, M. M., Knotek, S. E., Mann, J. C., & Sánchez, M. (2024). Professional Learning for ESL Teachers: A Randomized Controlled Trial to Examine the Impact on Instruction, Collaboration, and Cultural Wealth. *Education Sciences*, 14(7), 690. <https://doi.org/10.3390/educsci14070690>
- Barnwal, S. K. (2021). A Framework for Learning Assessment through Multimodal Analysis of Reading Behaviour and Language Comprehension [PhD Thesis]. Indian Institute of Information Technology Allahabad.
- Bautista, A., Estrada, C., Jaravata, A.M., Mangaser, L.M., Narag, F., Soquila, R., & Asuncion, R.J. (2024). Preservice Teachers' Readiness Towards Integrating AI-Based Tools in Education: A TPACK Approach. *Educational Process: International Journal*, 13(3): 40-68. <https://doi.org/10.22521/edupij.2024.133.3>
- Bowers, J. S. (2020). Reconsidering the Evidence That Systematic Phonics Is More Effective Than Alternative Methods of Reading Instruction. *Educational Psychology Review*, 32, 681-705. <https://doi.org/10.1007/s10648-019-09515-y>
- Bowers, J. S., & Bowers, P. N. (2017). Beyond phonics: The case for teaching children the logic of the English spelling system. *Educational Psychologist*, 52(2), 124-141. <https://doi.org/10.1080/00461520.2017.1288571>
- Caravolas, M., Lervåg, A., Mikulajová, M., Defior, S., Seidlová-Málková, G., & Hulme, C. (2019). A Cross-Linguistic, Longitudinal Study of the Foundations of Decoding and Reading Comprehension Ability. *Scientific Studies of Reading*, 23(5), 386-402. <https://doi.org/10.1080/10888438.2019.1580284>
- Chai, Z. F., Mat Noor, M. S. A., Shafee, A., & Ahmad, S. (2025). 'Saya ini original Sabahan': Applying a contextual approach in teaching English to promote EFL learners' engagement. *Malaysian Journal of Action Research*, 2(1), 33-51. <https://doi.org/10.61388/mjar.v2i1.4>

- Chen, M., Yin, G., Wong, W. L., Shak, M. S. Y., Abdul Rahman, M., & Lee, M. C. (2024). Effectiveness of a school-based phonics instructional material. *Forum for Linguistic Studies*, 6(2), 2130. <https://doi.org/10.59400/FLS.v6i2.2130>
- Dugan, M. J. (2025). Exploring Phonics Instruction and Strategies in Emerging Literacy: A Phenomenological Inquiry into Effective Early Literacy Interventions [Dissertation]. Liberty University.
- Ehri, L. C. (2005). Learning to Read Words: Theory, Findings, and Issues. *Scientific Studies of Reading*, 9(2), 167-188. https://doi.org/10.1207/s1532799xssr0902_4
- Fernández-Molina, J., & Tabuenca Cuevas, M. (2023). A systematic literature review of phonics research in English-speaking contexts and Spain. *Anla Abierta*, 52(1), 91-100.
- Gillon, G. T. (2017). *Phonological awareness: From research to practice* (2nd ed.). Guilford Press.
- Hamada, M. (2014). A follow-up study of the Facebook project for Japanese university students: Has it been enhancing student interaction, learner autonomy, and English learning? In S. Jager, L. Bradley, E. J. Meima, & S. Thouësy (Eds), *CALL Design: Principles and Practice; Proceedings of the 2014 EUROCALL Conference* (pp. 127-133). Dublin: Research-publishing.net. DOI:10.14705/rpnet.2014.000206
- Heriyanto, Christiani, L., & Rukiyah (2022). Lecturers' information literacy experience in remote teaching during the COVID-19 pandemic. *PLoS one*, 17(3), e0259954. <https://doi.org/10.1371/journal.pone.0259954>
- Herrera, E. M. (2023). Achieving reading skills in a group of EFL Ecuadorian children through English phonics. *Research, Society and Development*, 12(5). <https://doi.org/10.33448/rsd-v12i5.41906>
- Hu, X., & Du, H. (2023). A Pilot Study: The Impact of Phonics Instruction Application on Phonemic Awareness within Reading and Vocabulary Abilities of Elementary School English Teaching. *English Language Teaching*, 16(6), 186-198. DOI:10.5539/elt.v16n6p186
- Huo, S., & Wang, S. (2017). The Effectiveness of Phonological-Based Instruction in English As a Foreign Language Students at Primary School Level: A Research Synthesis. *Frontiers in Education*, 2, 243805. <https://doi.org/10.3389/educ.2017.00015>
- Jones, J. S., Grifenhagen, J. F., & McKinney, S. (2024). Lessons learned from remote, early-literacy instruction. *Journal of Early Childhood Literacy*. <https://doi.org/10.1177/14687984241281206>
- Jones, M. L. (1996). Phonics in ESL Literacy Instruction: Functional or Not? [Conference presentation]. *The World Conference on Literacy*. Philadelphia.
- Kenner, C., & Kress, G. (2003). The Multisemiotic Resources of Biliterate Children. *Journal of Early Childhood Literacy*, 3(2), 179-202. <https://doi.org/10.1177/14687984030032004>
- Li, S., & Woore, R. (2023). How Chinese learners decode L2 English words: Evidence from a phonics instruction program. *Reading Research Quarterly*, 58(4), 584-600. <https://doi.org/10.1002/rrq.515>
- Lo, N. P.-k. (2023). Digital learning and the ESL online classroom in higher education. *Asian-Pacific Journal of Second and Foreign Language Education*, 8, 24. <https://doi.org/10.1186/s40862-023-00198-1>
- M'amai, M., Githinji, W., & Mwoma, T. (2025). Teachers' level of training in phonics and grade one learner's achievement in reading skills in Meru county, Kenya. *European Journal of Education Studies*, 12(8). <http://dx.doi.org/10.46827/ejes.v12i8.6124>
- Martin, K. I. (2024). How a Phonics-Based Intervention, L1 Orthography, and Item Characteristics Impact Adult ESL Spelling Knowledge. *Education Sciences*, 14(4), 421. <https://doi.org/10.3390/educsci14040421>
- Murphy Odo, D. (2021). A Meta-Analysis of the Effect of Phonological Awareness and/or Phonics Instruction on Word and Pseudo Word Reading of English as an L2. *Sage Open*, 11(4). <https://doi.org/10.1177/21582440211059168>
- Nguyen, L. T., & Newton, J. (2020). Enhancing EFL Teachers' Pronunciation Pedagogy Through Professional Learning: A Vietnamese Case Study. *RELC Journal*, 52(1), 77-93. <https://doi.org/10.1177/0033688220952476>
- OECD. (2023). *Education at a Glance 2023: OECD Indicators*. Paris: OECD Publishing. <https://doi.org/10.1787/e13bef63-en>
- Perfetti, C. A., & Hart, L. (2002). The lexical quality hypothesis. In *Precursors of functional literacy* (pp. 189-213). John Benjamins.
- Pesebre, R. D. P., Quicho, R. F., Collantes, L. M., Lamson, C. N. & Pentang, J. T. (2024). Effectiveness of multimedia tools in enhancing consonant-vowel-consonant reading performance and phonics interest and enthusiasm among kindergarten ESL students. *International Journal of Educational Management and Development Studies*, 5(4), 201-225. <https://doi.org/10.53378/ijemds.353131>
- Pitenoee, M. R., Modaberi, A., & Ardestani, E. M. (2017). The effect of cognitive and metacognitive writing strategies on content of the Iranian intermediate EFL learners' writing. *Journal of Language Teaching and Research*, 8(3), 594-600. <http://dx.doi.org/10.17507/jltr.0803.19>
- Putra, R. A. (2023). The Efficacy of English Phonics Instruction in Helping EFL Students to Decode Vowel Digraph Letters. *Pulchra Lingua: A Journal of Language Study, Literature & Linguistics*, 2(1), 56-66. <https://doi.org/10.58989/plj.v2i1.20>
- Rigopouli, K., Kotsifakos, D., & Psaromiligkos, Y. (2025). Vygotsky's Creativity Options and Ideas in 21st-Century Technology-Enhanced Learning Design. *Education Sciences*, 15(2). <https://doi.org/10.3390/educsci15020257>
- Share, D. L. (1995). Phonological recoding and self-teaching: *sine qua non* of reading acquisition. *Cognition*, 55(2), 151-218. [https://doi.org/10.1016/0010-0277\(94\)00645-2](https://doi.org/10.1016/0010-0277(94)00645-2)
- Skinner, B. F. (1957). *Verbal behavior*. Appleton-Century-Crofts. <https://doi.org/10.1037/11256-000>
- Stanovich, K. E. (1986). Matthew effects in reading: Some consequences of individual differences in the acquisition of literacy. *Reading Research Quarterly*, 21(4), 360-407.
- Sung Min-Chang. (2024). Phonics-based Analyses of the Elementary English Words in the 2022 Revised National Curriculum. *Language Research*, 60(2), 177-197. <https://doi.org/10.30961/lr.2024.60.2.177>
- Visagas, R. M., & Buensuceso, D. B. (2023). The Use of The Jolly Phonics Strategy to Enhance Student's English Reading Proficiency and Learning Motivation. *International Journal of Research and Innovation in Social Science*, 7(2), 942-958. <https://www.rsinternational.org/journals/ijriss/Digital-Library/volume-7-issue-2/942-958.pdf>
- Wahyuni, N. T. (2022). Trial of synthetic phonics extended to storybook reading to improve reading skills of Indonesian third graders enrolled in a bilingual school. *International Journal of Instruction*, 15(4), 1091-1112. <https://doi.org/10.29333/iji.2022.15458a>
- Yang, H. (2020). Secondary-School Students' Perspectives of Utilizing TikTok for English Learning in and beyond the EFL Classroom. In *2020 3rd International Conference on Education Technology and Social Science* (Vol. 1, pp. 162-183). Clausius Press.

- Yeung, S. S. S., Siegel, L. S., & Chan, C. K. K. (2013). Effects of a phonological awareness program on English reading and spelling among Hong Kong Chinese ESL children. *Reading and Writing: An Interdisciplinary Journal*, 26(5), 681-704. <https://doi.org/10.1007/s11145-012-9383-6>
- Zhao, M. (2023). Status, Challenges, Andstrategies of Phonics Instruction in the Central Region of China. *Advances in Educational Technology and Psychology*, 7, 7-11. <http://dx.doi.org/10.23977/aetp.2023.071502>
- Zhao, Y, & Liang, G. (2024). A study on the innovative model of foreign language teaching in universities using big data corpus. *Journal of Computational Methods in Sciences and Engineering*, 24(1), 87-103. DOI:10.3233/JCM-237113
- Zulkifli, Z. (2014). The implementation of teaching reading using the phonics approach in year 1 ESL classroom [Master's thesis]. Universiti Teknologi MARA.