INTERNATIONAL JOURNAL OF EDUCATION, PSYCHOLOGY AND COUNSELLING (IJEPC)

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IMPROVING PHONEMIC AWARENESS AND READING FLUENCY IN YOUNG ESL LEARNERS THROUGH GOOGLE READ ALONG

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Article Info:

Abstract:

The growing demand for effective early literacy interventions among young English as a Second Language (ESL) learners highlights the need for accessible, engaging, and pedagogically sound digital tools. Many children in multilingual and low-resource settings face challenges in developing foundational reading skills particularly phonemic awareness and fluency due to limited access to qualified teachers and learning materials. This study adopts a systematic literature review design, conducted in accordance with the Preferred Reporting Items for Systematic Reviews (PRISMA) framework, to evaluate the effectiveness of Google Read Along, a speech-based digital reading application, in enhancing phonemic awareness and reading fluency among young ESL learners. The review followed four structured phases identification, screening, eligibility, and inclusion/exclusion across five major academic databases: ERIC, Scopus, JSTOR, SpringerLink, and Google Scholar. Search strings combined targeted keywords with Boolean operators, and strict inclusion criteria limited the scope to 25 peer-reviewed empirical studies published between 2019 and 2024 that focused on ESL learners aged 5–12 and directly employed Google Read Along as an intervention. Exclusion criteria ruled out studies involving first-language English speakers, non-speech-based tools, non-empirical research, and non-English publications. Thematic analysis of the selected studies revealed five recurring themes: (1) digital tools for enhancing phonemic awareness, (2) reading fluency development through repetition and feedback, (3) learner engagement and motivation in ESL contexts, (4) accessibility and equity in low-resource settings, and (5) the evolving role of teachers in digital integration. Overall, findings suggest that Google Read Along is a promising tool for supporting early literacy in ESL learners, particularly when integrated with

complementary instructional strategies. The results offer evidence-based insights for educators, curriculum developers, and policymakers seeking to strengthen early literacy programs through technology integration.

Introduction

Phonemic awareness and reading fluency are foundational components of early literacy, significantly influencing a child's overall reading development. This is particularly crucial in preschool settings where children acquire a second or third language during this stage, in addition to their native tongue. Reading fluency encompasses the ability to read with appropriate speed, accuracy, and expression, while phonemic awareness involves the capacity to hear, identify, and manipulate individual sounds (phonemes) in spoken words. These skills are often challenging for English as a Second Language (ESL) learners due to unfamiliarity with English phonological patterns, limited exposure to native speech models, and diverse linguistic backgrounds that affect pronunciation and decoding abilities (Choi et al., 2023; Gillon, 2023).

In recent years, the shift toward language learning digital tools has been global, and these have been an opportunity to make the language acquisition in early childhood education better (Choi et al. (2024) Sim, S.E.J., Ismail, H.H. (2023). Google Read Along is one such tool; it is a speech-based reading app which helps children in improving literacy development by getting interactive practice on reading (Ramasamy et al., 2025) The app is a speech recognition technology that listens to a child's reading and gives immediate feedback, with rewards for progress. Its engaging design, real time guidance, content based on a story so reading becomes an enjoyable habit too, you improve your pronunciation, and become more fluent as cited by (Ramasamy et al., 2025). Google Read Along provides an interesting intervention tool for ESL learners, as it provides both access to reading English materials as well as interactive and autonomous learning. The app provides repeated exposure to words and phrases along with a model of correct pronunciation and verbal participation in a space where learners can play with sounds freely with little fear of making mistakes in front of other learners. Also, it is perfect for differentiated instruction used in ESL classrooms since student level of proficiency may vary, and students read at different paces.It is designed to understand how much the application facilitates measurable improvements in these two key areas of literacy and the factors within context that dictate the success of its implementation. In this way, the review shows how digital tools can strategically be incorporated in ESL instruction, especially in early childhood education settings (Sari & Kurniawan, 2025).

This systematic literature review was intended to explore empirical evidence about the use of Google Read Along to support the development of phonemic awareness and reading fluency skills among young ESL learners. This review has the potential of telling educators, policymakers, and curriculum developers on the pros and cons of including digital applications i.e Google Read Along into ESL literacy programmes. This review will also look at common trends and gaps in the literature and practical recommendations to improve the digital literacy

interventions for young ESL learners with the aid of this review. The review contributes to broader discourse on closing the gap on learning through technology in the multilingual classrooms through a systematic and theme based analysis. As such, it asks 2 questions:

(a) What empirical evidence exists on the effectiveness of Google Read Along in enhancing phonemic awareness in young ESL learners?, and (b) How does Google Read Along influence reading fluency among early-stage ESL students?

Methodology

This study followed the Preferred Reporting Items for Systematic Reviews (PRISMA) guidelines designed to produce reviews on how Google Read Along, a digital speech-based reading tool, supports the development of phonemic awareness and reading fluency among young ESL learners. Based on 4 phases (identification, screening, eligibility, inclusion and exclusion), the review focused on empirical, peer-reviewed research published between 2019 and 2024. The review aimed to identify patterns, strengths, limitations, and gaps in the literature to inform educators, curriculum developers, and policymakers on the effective integration of digital literacy tools in early childhood ESL instruction. The results are categorized into five main themes which will be discussed later.

Phase 1: Identification

The literature was thoroughly examined through a large and systematic screening process to explore the topic of *"Improving Phonemic Awareness and Reading Fluency in Young ESL Learners through Google Read Along."* Specifically, the Education Resources Information Centre (ERIC), Scopus, JSTOR, SpringerLink, and Google Scholar were used as key academic databases, as they are renowned for disseminating peer-reviewed and high-quality education research publications. The search was limited to empirical studies published within the last five years (2019–2024) to ensure that the review captured the most recent and relevant developments within the educational technology ecosystem, particularly in the context of early literacy interventions for ESL learners. This ecosystem encompasses the integration of digital learning tools, such as speech-based reading applications, into primary education settings. The search strategy employed targeted keywords and Boolean operators designed to retrieve studies closely aligned with the research focus.

Table 1: The Search String Used For The Systematic Review Process

Section	Details
Databases Searched	ERIC (Education Resources Information Centre) Scopus
	JSTOR
	SpringerLin k Google Scholar

| Search Keywords	"Google Read Along" "Phonemic awareness" "Reading fluency" "ESL learners"
	"Early literacy digital tools" "Oral reading accuracy"
	"Reading comprehension in young learners"
	"Digital reading applications for ESL children"
Boolean Operators Used	AND, OR, NOT
	Used individually and in combination (e.g., "Google Read Along AND phonemic awareness", "reading fluency AND ESL learners AND digital tools")

(Source: Self-Developed)
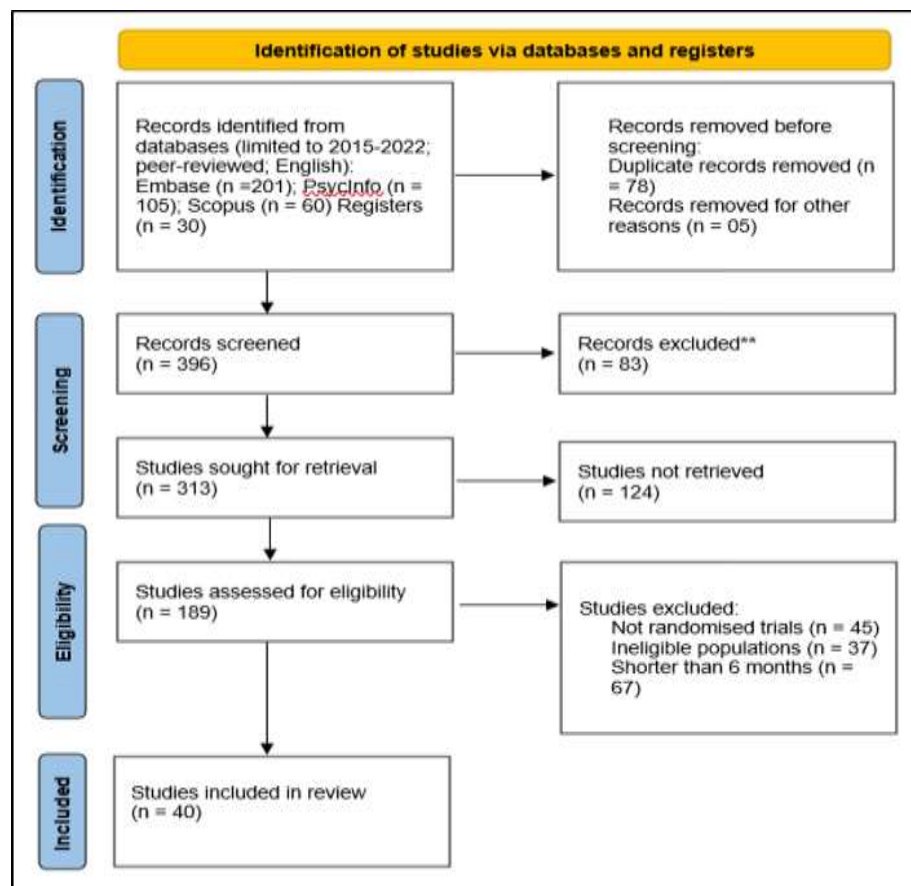
Figure 1: Prisma Framework

(Source: Self-Developed)

Boolean operators such as AND, OR, and NOT were applied in combination with carefully selected keywords to retrieve the most relevant studies. For instance, search strings like *"Google Read Along AND phonemic awareness"* or *"reading fluency AND ESL learners AND digital tools"* were frequently used to generate focused results. To ensure the quality and relevance of the included literature, several restrictions were applied. Only articles that were peer-reviewed were considered, meaning they had undergone a formal evaluation by independent experts in the field prior to publication. This status was confirmed through database filters—such as selecting "peer-reviewed journals only" in ERIC or Scopus—and by cross-checking the journal's editorial policy on its official website when necessary. Additionally, only empirical studies (quantitative, qualitative, or mixed-method) published in English and focused on young ESL learners aged 5–12 were included. Articles that did not meet these criteria—such as opinion pieces, theoretical papers, or studies on first-language learners—were excluded from the review.

Phase 2: Screening
Therefore, rigorous inclusion and exclusion criteria were set up to ensure the credibility, relevance and focus of the systematic literature review. These criteria served to narrow down the choices in the studies which were most closely related to the research question of how Google Read Along helped in improving phonemic awareness and reading fluency among young ESL students.

Table 2: The Inclusion and Exclusion Criteria

Inclusion Criteria	Exclusion Criteria
Studies focusing on ESL learners aged 5–12	Studies not involving ESL learners
Use of Google Read Along in methodology	Studies without Google Read Along
Empirical (qualitative or quantitative)	Theoretical/non-empirical studies
Peer-reviewed journals (2015–2025)	Articles before 2015
English language publications	Non-English publications

(Source: Self-Developed)

Phase 3: Eligibility
From a total of 40 articles, selected articles were screened based on a set of filters, which are reviewing the titles, abstracts and full text of the studies upon administering the keyword search to a clearly defined set of inclusion and exclusion criteria. If the study only focused on Google Read Along app or only consisted of ESL learners or did not provide empirical evidence, it was not included in this review. With these filters, 15 articles were excluded due to its for not because they fell in the category of theoretical content, again older publication dates, or not fitting into the matters of phonemic awareness or reading fluency. Ultimately, 25 articles were chosen for review in detail, and thematic analysis of them forms the basis of this systematic literature review.

Phase 4: Inclusion Criteria

Following three stages, only articles that actually satisfied the criterion were included. Studies not involving ESL learners, without the keyword 'google read Along', theoretical and non-empirical studies and non-English publications published before 2015 were all crucial criteria for exclusion. After the screening procedure, 25 articles were chosen to be reviewed in this systematic literature review. The chosen articles' objectives were all connected to the integration of 'Google Read Along' app in the context of ESL. The results of the research will be discussed and purposely addressed in the following section.

Results And Discussion

Based on the 40 selected studies, five central themes were identified from various sources through a comprehensive screening process conducted across major academic databases including ERIC, Scopus, JSTOR, SpringerLink, and Google Scholar. The search was restricted to studies published between 2019 and 2024 to ensure relevance to recent advancements in educational technology. The review specifically focused on empirical research examining the effectiveness of Google Read Along in enhancing phonemic awareness and reading fluency among young ESL learners. The results of the main themes in the previous study were categorized into five main themes which are described below;

Digital Tools For Enhancing Phonemic Awareness

Phonemic awareness is an important early literacy skill, and fundamental to children's reading development, especially those who are learning English as a Second Language (ESL). Sanjilatheeban & Yunus (2024) mentioned that the inclusion of effective digital tools is integral for supporting proactive skills associated with ESL. Google Read Along is a digital tool that has been found to be very powerful in advancing this skill. According to Donnelly et al. (2020) these digital tools use varied kinds of interactive features to have learners engage with activities in recognition, differentiation, and manipulation of phonemes, prior to and during the beginning of formal instruction of decoding and word recognition. In the view of Ramanair et al. (2020) one of the main points because Google Read Along is so effective is its use of speech recognition technology. This feature enables the app to listen to the learners' pronunciation and immediately give them a response. Jose (2021) showcases that with the help of Web 2.0 tools, it can be possible to focus on persistence, adaptability, and social and cultural awareness of students in ESL classrooms. This is very useful for ESL learners as they will get to hear the correct pronunciation words, and receive instant corrections when they make a mistake. This real time feedback allows learners to keep adjusting on their pronunciation and phonemic awareness, which is necessary to overcome the difficulties that come with the English language's complicated phonetic system. In general, most ESL learners have problems recognizing sound-letter correspondences and consequently they mispronounce words or they do not understand the pairing between letters and sounds. These learners are able to practice with real-time feedback to fine tune their phonemic awareness by working with sound symbol associations and via self-correction. Yeung et al. (2020) the basic phonemic recognition activities, Google Read Along also offers learners to interact with exciting interactive story-based content. Stories present learners with multiple phonemic patterns and word structures in a setting that is fun and educational. The exposure to this contextual situation facilitates their transfer of phonemic awareness to real reading because they are seeing how sounds work in words and sentences. It also improves by providing Google Read Along's multilingual support for ESL learners. It allows learners to read in not just their native language but also English, through the content available in the app. The fact that this bilingual support allows learners to

connect new English phonemes to phonemes in their first language, and practice also at the pace and in the way that makes sense to their linguistic background, is very helpful. Switching languages is a useful aspect for so many ESL learners, giving them a comfort in familiarity, lessening the cognitive load of having to learn a new language.

Reading Fluency Development Through Repetition And Feedback

One of the most important of all literacy skill development is reading fluency as it entails speed, accuracy, and expression, and is of utmost importance in the case of young ESL learners. Google Read Along has great potential to enable improved reading fluency in these learners by means of repeated practice and immediate feedback, which its interactive features have demonstrated.

Repetition For Mastery

Recent findings of Taguchi et al. (2023) repetition is crucial to becoming a reading fluent. For ESL people, continuous exposure to words and sounds is the best way to improve accuracy and speed of reading. Google Read Along's function does this repetition as it encourages students to repeatedly listen to and, together with the narrator, read their favourite stories. Readers can pause and replay sentences or words that seem complex during the reading and control the pace of reading. Sometimes, the most repetitive of practices is necessary; word recognition and decoding skills must be reinforced. The success of the app is largely attributed to the voice feedback that provides learners with the opportunity to listen to the correct pronunciation of the sounds repeatedly. In the aspect of Aquino and Ramírez's (2021) findings, Repetition of the same words in this way helps students internalise the sounds and structures of a language, and make them more fluent. This repetition is the basis for automaticity in reading, where we no longer have to think about decoding every word, but can read rapidly and with ease, thus reading more quickly and more accurately. Furthermore Massler et al. (2022) mentioned that the gamified approach of Google Read Along builds a sequence of repetitions in a fun way. The app makes what would otherwise possibly be monotonous reading exercises into an interactive experience that encourages users to keep on drilling. It's fun and it will help your students practice more reading sessions so that your students have more opportunities to improve their reading level.

Scaffolded Learning And Pacing

Google Read Along's scaffolded learning approach is another important feature as it gradually supports learners in doing their reading. Scaffolded instruction consists of a structured framework being provided to the learners which becomes less and less structured as their competence increases. For example, the app starts with easier stories and language + you receive clear/clearing out feedback. The complexity of the stories grows with the learners but the level of support decreases. It provides a pacing through which learners never get overwhelmed and are empowered to learn and build their skills gradually without getting frustrated. In a comprehensive review of Kheirzadeh and Malakootikhah (2023) since ESL learners may find the vocabulary, syntax and pronunciation complexities to be challenging, scaffolded learning is very important. With Google Read Along, learners have resources to support them in following challenging words or sentences with visual and audio cues. Highlighted text, which does follow along with the audio, allows learners to marry spoken words to their written counterparts. Young ESL learners who are still trying to understand the fundamentals of reading will greatly benefit from this pairing of visual-auditory. There is also positive reinforcement in the app when learners correctly complete the reading tasks. This

reinforcement not only helps to motivate, but it also gives people the sense that they are going in the right direction and helps them to be persistent with more difficult matters. As learners move through use of the app, they find it easier to read independently, a measure of reading fluency.

Immediate Feedback On Pronunciation And Accuracy

As stated by Suzuki et al. (2022) one of the major benefits of the Google Read Along app is that it automatically provides immediate, one automatic feedback on your reading accuracy and pronunciation. In fact, this is very useful feedback for ESL learners, because they may not always be able to receive immediate correction in the traditional classroom setting. In the app, if the learner's reading is different from the correct pronunciation, the app's speech recognition system listens to the learner's reading and corrects it, as needed. The existence of this instant feedback loop lets learners correct whatever incorrect pronunciations or reading habits as they occur, on the fly. Feedback Timing also fits with the self regulated learning in that learners have the ability to monitor their progress on their own without having to wait for a teacher's correction. In the words of Sari & Han (2024), this is great for the struggling readers because this gives them a safe environment to practice and learn at the pace that is just right for them. There is no pressure if they are able to try a sentence a few times, to keep going until they get the pronunciation right, instead of in a classroom. This makes students practice more self-confident, and also more fluent because they practice more by their own. In addition to pronunciation, Sari & Kurniawan (2025) have opined that Google Read Along gives feedback on reading accuracy and provides suggestions for pronunciation, such expression and how some words are phrased. The app promotes the students matching the same inflection and speed of the voice model, which enhances the naturalness of their reading. Some of the feedback that exists is crucial to building expressive reading, which is a missing part of fluency.

Benefits For Struggling Readers

In the view of Malakowsky (2023) Google Read Along provides tremendous benefit to struggling readers. Slow reading speed, poor comprehension and low confidence in themselves are some of the challenges that struggle readers face. This is because it allows these learners to get more and more confident about how to use the app, as well as to get better and better at being fluent. The app is scaffolded in such a way that students can practice at their own level and go at their own pace, which lessens anxiety and raises motivation. Above all, the fact that the app is gamified with rewards for doing tasks keeps frustrating readers engaged and motivated. By providing these rewards, fluency building is encouraged, as students feel rewarded for their efforts and it gives them a sense of accomplishment. Google Read Along does this by promoting an enjoyable and interactive form of reading that keeps learners interested in their progress, as is usually a key roadblock for struggling readers in non-educational settings. It can be said that this theme is related with the previous theme as both themes are closely intertwined since digital tools such as Google Learn Together encourage phonemic awareness through interactive, game-like tasks, which create the base of the reading fluency. With its repetition, immediate feedback, and step-by-step learning, the app helps ESL learners learn the sounds, pronounce words better, and start to crack into decoding. These phonemic abilities play a key role in driving overall reading fluency, which is why digital tools are critical for both early literacy and lifelong reading achievement.

Learner Engagement and Motivation in ESL Contexts

According to Shen and Chong (2023) in language learning, namely, English for young learners, motivation and sustained engagement are key and any part can collapse the effort and rewards continuum. On the other hand, Shen, & Chong (2023) showcases that in regard to the context of ESL with the help of a corrective feedback engagement framework, it can be possible to investigate learner engagement. Learning English as a second language is in itself a very complicated process, which involves not only a new speech vocabulary and grammar, but also learning to decipher and understand written texts. Consequently, constant student motivation and engagement is required for them to make the best use of learning. Owing to this, Chans & Portuguez Castro (2021) stated that the attitudes and actions of students can be shaped and improved with the help of motivating and increasing engagement with students whereas gamification can be considered as one of the crucial strategies. But Google Read Along with other digital tools have been very helpful in making it an interactive, engaging, positive learning experience. The first theme of this talk explores how Read Along enhances learner engagement and motivation and hence, the learning process becomes more effective and less stressful to young ESL learners. Google Read Along uses interactive characters and story-based rewards that are some of the most excellent ways it pushes engagement. Animated characters are embedded in the app design to give learners visual and auditory feedback. These characters help students to continue when they are going through the reading process and sometimes like to handle reading tasks so they will give them a word or phrase that includes the person's name they read and even praise when they finish reading. In contrast, Booton et al. (2023) opined that animated scenes and characters have no impact on word learning and story comprehension. It not only attracts the learner's attention but also makes the reading process look a bit more like a game than a regular lesson. It implies that the learners are more likely to remain engaged and stay motivated to practice.

Recent findings of Gao (2021) Google Read Along also has a voice feedback feature that is imperative for maintaining learners' engagement. For ESL learners who may find it difficult to speak or read aloud, it's important to have immediate feedback on pronunciation as provided by the app. Not only does this feedback help in correcting errors but can also be reassuring since it is said in a nonjudgmental, encouraging way. It is more likely for learners to keep on reading practice when they are supported and confident rather than discouraged with mistakes. The gamification combined with instant feedback makes sure the learners don't feel bored while they're reading and keeps themselves motivated to practice and improve their reading skill. According to an analysis by Panhwar and Bell (2023) Google Read Along has a motivational impact which is not limited to the app in which it occurs. Many teachers and parents say children become even more willing to read outside of formal learning. App users have been less anxious to read aloud with the app than without them, but parents and teachers who have surveyed them have said they are also more excited to read aloud. For the ESL learners, this is extremely important since they often feel shy or afraid that they will not be able to speak in their native language due to the lack of understanding of that language. In a comprehensive review of Tu (2021) teacher involvement in the use of Google Read Along for student engagement cannot be overemphasized. Although the app serves well in supporting independent study, teachers are key to allowing the app to be used to drive motivation with the app and assist in that process by assigning certain reading activities in Google Read Along, tracking progress for students, etc. Without the active part of the teacher, the app can lead to the learning happening instead of being entertained, instead of the teacher talking at kids, kids

talking at the teacher, or other passive roles. Teachers that encourage students to use the app do help reinforce the sense of achievement and motivation the app creates.

Accessibility And Equity In Low-Resource ESL Settings

To begin with, the issue of accessibility and equity in education settings is a problem specially for young English as a Second Language (ESL) learners living in a low income or a resource constrained environment. In such contexts, traditional literacy interventions are hampered by shortage of trained educators, and financial and teaching material resources.

Offline Capabilities And Multilingual Support

According to Ezeh et al. (2022) Google Read Along's offline functionality is one of the most significant advantages in using the service in ESL low resource settings. Most of the rural or economically less privileged areas do not have proper internet infrastructure to access online educational tools. In fact, Google Read Along allows for learning online or offline—the recommended way to learn is in the offline mode, which means learners can continue to practice reading and phonemic awareness when they don't have a stable internet connection. In areas where educational resources are scarce, and getting access to technology is almost impossible, this feature becomes very important. With the app also functioning offline, learners can access educational content at any time, thus solving the issue of unreliable or non-existent internet. Access to various languages is also a priority in terms of accessibility in less developed communities. As stated by Pitchford et al. (2021), multilingual contexts need to be ensured in different educational apps in order to support the learning process. Particularly, many ESL first time learners are from homes where English is not the home language and speak a variety of indigenous or regional languages. Google Read Along is addressing this challenge by its content in multiple languages that is available to a wider range of learners. The app supports the languages of the learners by enabling them to interact with the literacy materials in a culturally relevant and linguistically appropriate manner. It is this multilingual approach that allows learners to develop phonemic awareness and reading fluency in English, all at the same time reinforcing what they know about the sounds and structures of their native language.

Bridging The Literacy Gap

Lack of reading materials is an enormous obstacle to literacy development when literacy cannot be provided in a low resource setting. As stated by Fisal and Said (2023) the majority of ESL learners in these environments attend schools without adequate financial resources to afford a large variety of books, educational games, and various other learning materials. In this regard, Howden (2024) identified that potential educational trauma can impact classroom outcomes such as lack of resources and interrupted formal education. By supplying all kinds of reading resources for free, Google Read Along can fill the gap of this literacy. Our app includes interactive reading materials, stories, poems and educational games in the area of phonemic awareness or reading fluency. It gives a quick and constant supply of interesting content material to proceed to study and is key for language acquisition. In places where there are not enough teachers, Google Read Along has been a crucial support of the area. Qualified teachers are particularly hard to find in many underprivileged communities, especially English reading and literacy skills needed teachers. This shortage is compensated by the tool provided by Google Read Along that supplies structured reading instruction. It gives automatic feedback and correction and practice at the learner's pace without needing a continuous teacher watch. It not only relieves pressed educators of extra burden but also makes ESL learners a significant learning opportunity, even in a setting without direct instruction. The voice recognition

technology in the app also contributes in a way towards the proper pronunciation and fluency demonstrated by the learners. In low resource settings, especially where English speakers that can serve as role models for pronunciation are scarce, this is particularly useful since English is so difficult to master other than via observing its language users. This is because Google Read Along offers real time feedback on pronunciation so that learners can catch their mistakes and move at their own pace, so that no learner, regardless of background, can improve phonemic awareness and reading fluency.

Differentiated Instruction In Multilingual Classrooms

In the view of Haufiku et al. (2022) in low resource ESL settings usually there are multilingual classrooms, where students may have different languages that they are speaking. Along with this, in the study of Matiyenga & Ajani. (2024) Differentiated instruction has been considered as a pedagogical approach which is tailored in order to meet the diverse preferences and needs of students, it is critical for developing inclusive classrooms and enhancing learning outcomes for each of the students. The reason Google Read Along fits so well in these situations is that it is designed to meet different linguistic needs. The app provides differentiated instruction, meaning that learner can work with content that is relevant to the individual language proficiency level that he or she possesses. For illustration, both beginners can focus on basic phonemate awareness and simple vocabulary; more advanced readers can work with more complex texts and the reading fluency. A study by Rukmana et al. (2023) given the multilingual classrooms where students can have limited literacy in both their native language and English, tailoring the learning experience to meet individual needs is very important. As well as Google Read Along's adaptive features, meaning students receive an appropriate level of challenge so they are not over challenged or under challenged when working through their books. This practice provides the underpinnings for a positive learning environment where students are able to develop their skill at their own pace to mitigate the outcomes of disparity in literacy development.

Promoting Equity In Education

In the realm of the equity, use of the Google Read Along in the low resource settings ensures the access of quality of education equally. According to James and Lee (2021) educational resources, although widely available in developed nations and regions, are in many developing countries or underserved communities often located based on such factors as socioeconomic status and geographical location, and often inaccessible due to the lack of qualified teachers or other teachers. According to Muslim et al. (2025), it is essential for policymakers to focus on context-sensitive interventions which can be helpful in narrowing the educational divide between rural and urban students and guarantee equal access to quality instruction associated with ESL. With Google Read Along, we are providing free, accessible, high-quality educational content that enables more learners, ESL or rural or urban, to get equal playing field opportunity to learn the building blocks of literacy to access opportunity in their world. More importantly, the app's capacity to provide language resources for reading in different languages guarantees the classroom maintains its diversity for language. Not only does this help the ESL learners but it's inclusive too, because students from various language backgrounds also get to feel accepted and be a part of their learning process.

Teacher Roles And Digital Integration In ESL Instruction

Google Read Along could easily become a very useful digital tool in the classroom that will boost the literacy skills of young ESL learners. Though it is not as much dependent on the

technological features of these tools, it is quite much based on the role the teachers play to guide use these tools. It has been discovered that the greatest effect on Google Read Along is in a combined learning environment in which teachers are not only on hand to monitor progress, but also active with the app's functions, adding additional instruction. This relation between digital tools and traditional teaching methods leads to a supporting and motivating learning experience to ESL learners.

Blended Learning Environments And Teacher Facilitation

Recent findings of Allehyani and Algamdi (2023) Google Read Along is a tool to complement face to face instruction in a blended learning environment. This has helped studies demonstrate that teachers who guide students through the app's features, help them set goals, and track progress, make for better implementations of the program. In the views of Su et al. (2024), in comparison to emergency remote learning, an adaptation of blended learning can be helpful in developing a better learning environment for students. It enables the use of the app alone without structured support, which did not suitably help learners learn. Such as, teachers can embed certain phonemic awareness or vocabulary lessons and feed them in parallel to the app's reading sessions in order to cement the learning objectives. The app alone cannot always address the areas of struggle as comprehensively as teachers provide immediate feedback in the form of feedback on areas where learners struggle. Google Read Along has automatic pronunciation correction but teachers can notice persistent problems that may need some more individual assistance. Let's assume that teachers may notice a particular sound that a learner has difficulty with and the app can basically have more practice or phonics sections for that, which will increase its (the app's) overall effectiveness. This guidance provides needed help in bridging the distance between independent learning and teacher led instruction to make the move from independent learning to teacher led instruction a cohesive, integrated literacy experience for the student.

Teacher's Monitoring Role And Adaptation Of Instruction

According to an analysis by Bhowmik and Kim (2022) Google Read Along allows them to track learners' progress over time, and that creates such great data on the individual performance that teachers have. Reports to teachers on a learner's fluency, accuracy and engagement are available, allowing teachers to adapt to individuals' needs. Looking at it this way, if the app points out that a student always has difficulties pronouncing a specific phoneme or sound, the teacher can adjust her lesson plans to concentrate on these parts in order to avoid having learning gaps. In line with this, Celik et al. (2022) highlighted that in the contemporary era, AI has been deployed in order to reduce the workload of teachers for monitoring the progress of students. Such individualized attention is important in the ESL context where the needs of the learners can vary widely and many one size fits all methods of the teaching leave out the needs of varied learners. It has been identified that teachers can use the app's native features to differentiate. For example Bright, R. (2021) have said that they might select reading passages at students' proficiency level, and eventually, as proficiency increases, ever-more challenging readings. The part of a scaffold that is this form allows students to have a customized learning experience depending on their level of knowledge. Teachers who are proactive in adjusting the content and pacing based on data from the app can create a more effective and engaging learning environment that caters to the needs of each student.

Digital Literacy And Professional Development

In a comprehensive review of Han et al. (2024) the benefits that Google Read Along has on the classroom are clear, however; the success of the program falls on the basis of the digital literacy of the teachers. As opined by Tinma et al. (2022), digital literacy helps to address digital inequalities that encompass self-perceptions, skills, access and usage of relevant resources. The app must be integrated into teachers' broader pedagogical strategies and teachers must be familiar with using the app effectively so that they know where it works best and when. Studies have shown that if the educators don't have proper training on how to use the digital tools, then the impact of such technologies is greatly compromised. Sometimes, teachers may be unable to utilize the app's features effectively and/or do not know how to integrate the app's activities with curriculum goals. For this reason, this tool is often underutilized or used in a manner that does not achieve its maximum potential. According to recent research by Yaccob et al. (2023) it necessitates professional development in the digital literacy domain. To be able to manage the new educational technologies, teachers have to have new skills and abilities and they need constant training and support from their teachers. There are professional development programs which would assist educators in knowing about the pedagogical value of tools such as Google Read Along and the right way to incorporate these tools into lessons, thereby putting forth strategies to deal with the issues that might arise when dealing with digital platforms. Some teachers even have said that getting trained properly not only lifts their confidence about the technology but further makes them better at managing and improving the learning experience of students.

Challenges And Barriers To Effective Digital Integration

As stated by Lo (2023) although he can appreciate the value of teacher involvement in digital initiatives, it is important to note that a few challenges still exist in the value of effective use of digital tools in the ESL class. These kinds of disparities include lack of equal access to technology, especially in schools that are under-resourced. According to DEMİRBİLEK (2024), lack of internet connectivity and insufficient budget for schools have been recognised as significant barriers to adopting digital tools in the teaching procedure. However, teachers working in this setting may have challenges in achieving maximum utilization of digital apparatuses like Google Read Along where students do not have stable access to gadgets and the web. As such, teachers may have to be more resourceful in these situations and come up with alternative strategies to make sure that all students can join digital learning activities. It entails utilizing offline versions of the app as well as giving students additional resources at home, or giving aid outside of the classroom hours. As a systematic review, this paper emphasizes the capability of Google Read Along as an efficient device to advance young ESL learners' phonemic awareness and reading fluency. It has also designed the app in such a way that they integrate speech recognition, feedback mechanisms and gamified elements in such a way that it fosters an interactive and engaging learning experience. Read Along provides individualized support, so for an ESL learner who may struggle with phonemic awareness and fluency, it is possible for them to progress at their pace.

According to recent research by Xiao et al. (2023) at the core of the benefits of Google Read Along is the fact that it allows repeated practice opportunities. Absence of phonemic awareness is evident due to poor exposure to phonemes, blending, and segmenting. While these skills develop naturally in a real communication context, frequency or varied contexts necessary for their development may not be available or felt to be sufficiently so in traditional classroom settings such as large ESL classrooms with students at varying levels of proficiency. Along

with this Triwibowo (2023) exhibits that in regards to the facilitation of cross-cultural communication, it has been assumed that ESL holds a Paramount significance in the educational context. In contrast, learners are presented with a prompt to practice with, practicing sound intercept correspondences and decoding skills while not under the pressure to compare their results to a peer. However, for ESL learners who need to practice more to master basic language skills, this is vital. As stated by Suzuki et al. (2022) the app's immediate corrective feedback plays an important role for the improvement of phonemic awareness. Liu & Feng (2023) demonstrated that in the case of both ESL and EFL, providing corrective feedback plays a crucial role in improving engagement with students and reducing the chances of errors.Instant corrections in traditional classrooms may not always be possible by the teacher and incorrect phonetic patterns could be reinforced. This limitation is overcome by Google Read Along which gives real time feedback and learners can correct their mistakes as they occur. This serves to avert the establishment of erroneous phonemic patterns that, otherwise, would jeopardize the ability to become fluent long term. In a comprehensive review of Tu (2021) the data indicates that Google Read Along is also effective in improving reading fluency. Reading fluency is not just about reading fast but accurately and expressively; it includes concepts of prosody, expressive knowledge of the text, as well as kinaesthetic efforts. An automatic correction and modelling of pronunciation provide a scaffolding mechanism to support learners' development of these skills. Fluency is practiced in practice through the app's interactive reading sessions, learners become familiar with the patterns of words, the structure of sentences, and the overall comprehension. It results in increased confidence of reading aloud, which is a necessity for ESL learners who usually feel nervous in speaking in English. According to James and Lee (2021) success of Google Read Along app is not solely based on what the app offers. Factors such as teacher involvement and digital literacy around this period of time do play an important role in determining its effectiveness. The app is a powerful tool, but its potential is not fully realized apart from in a blended learning environment where teachers use the app to guide the learning; monitor progress; and help with supplementary instruction. With the addition of teachers commenting on the app and reinforcing concepts, or getting in there and addressing concerns that may come up during independent practice, the app's features can be expanded. It is for the most part this teacher student interaction that is the key to being sure that learners stay on track and stay motivated.

Conclusion

It is revealed from the systematic literature review that Google Read Along is a highly effective digital tool to assist young ESL learners in improving phonemic awareness and reading fluency. The application integrates interactive storytelling, real time feedback and speech recognition technology to create more dynamics and personalized learning experience which is not easy to offer consistently in traditional classroom settings. This attention given to each ESL learner helps them develop the basic parts of English language such as decoding, sounds recognition and also word pronunciation.

Apart from the cognitive benefits, Google Read Along adds gamified elements, voice based motivational benefits and culturally diverse reading materials to enhance learner engagement and motivation. Not only do these features help develop an appropriate reading habit but also, they help in building learner confidence since the learner gets comfortable with the language. This is important in ESL contexts where language barriers make them shy and hesitant. What is important here is the accessibility of applications – it is free and works without the Internet

and this is particularly beneficial in low resources or in rural environments, when teacher support and reading materials may be scarce.

The review, however, also properly emphasizes that benefits derived from digital tools like Google Read Along are maximized when paired with a comprehensive instructional plan that includes teacher guidance, structured feedback and a supportive learning climate. To use the tool optimally, it is necessary to train educators in digital literacy and envision how the tool will be used.

Acknowledgment

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