



Research Article

To cite this article

Evaluating teachers' phonological awareness strategies for enhancing communication skills in senior high school students

Mathew Amoako¹, Stephen Ofori², Frank Lamadoku Attila^{3*}, Daniel Inkoom⁴ and Abigail Dzama Anderson⁵

College of Education Studies, University of Cape Coast, Cape Coast, Ghana

Article Info	Abstract
Received: 26 September 2024 Accepted: 15 March 2025 Online: 30 March 2025	This study investigates the phonological awareness strategies (PAS) employed by English language teachers in senior high schools in Cape Coast to improve students' communication skills. Quantitative data was collected from 49 English Language teachers
Keywords:	across the 10 ten Senior High schools for the study using a descriptive survey design.
Communication skills	Descriptive statistics and Spearman correlation analyses were conducted to test the
Phonological awareness strategies Senior high schools Students Teachers	relationships between variables. The results indicated the frequent use of pronunciation drills (M = 4.19, SD = 0.66) and group activities (M = 4.12, SD = 0.59), with teachers perceiving significant improvements in students' phonological awareness (M = 4.0, SD = 0.62), Student feedback and group activities (M = 4.05, SD = 0.58) and speaking skills (M = 3.95, SD = 0.49). However, student confidence remained moderate (M = 3.84, SD =
2717-7602/ © 2025 by PRESS. Published by Genc Bilge (Young Wise) Pub. Ltd. This is an open access article under CC BY-NC-ND license	0.81). Key challenges included large class sizes (M = 3.86, SD = 1.17), insufficient curricular time (M = 3.72, SD = 1.12), and varying English proficiency levels (M = 4.00, SD = 1.27). A significant positive correlation emerged between PAS usage and perceived impact (r = 0.456, p < 0.01). The study recommends that policymakers and institutions prioritise teacher training programs and resources to improve the implementation of phonological awareness strategies in senior high schools in Ghana.

Amoako, M., Ofori, S., Attila, F.L., Inkoom, D. and Anderson, A.D. (2025). Evaluating teachers' phonological awareness strategies for enhancing communication skills in senior high school students. *Psychology Research on Education and Social Sciences, 6*(1), 31-44. DOI: https://doi.org/10.5281/zenodo.15147810

Introduction

Success depends on communication becoming more indispensable in personal and professional areas. English is a prestigious and high-priority language crucial in academics, politics, research, and business. Its use is essential for developing 21st-century skills, including digital literacy, media literacy, teamwork, and cultural awareness. Mainly in English as a Second Language (ESL) courses, educational institutions strongly focus on improving communication skills to enable students to grow and polish their language proficiencies. Communication conveys knowledge via several verbal and nonverbal channels (Finnegan, 2014). In modern society, good communication abilities define success (Sen, 2007; Finnegan, 2014). Teachers thus concentrated on examining the fundamental aspects of language development that

¹ Kwame Nkrumah University of Science and Technology, Kumasi, Ghana. ORCID: 0000-0002-7817-6474

² Kwame Nkrumah University of Science and Technology, Kumasi, Ghana.

³ College of Education Studies, University of Cape Coast, Cape Coast, Ghana. E-mail: frank.attila001@stu.ucc.edu.gh ORCID: 0000-0002-7800-4816

⁴ College of Education Studies, University of Cape Coast, Cape Coast, Ghana. ORCID: 0000-0001-7329-1871

⁵ Kwame Nkrumah University of Science and Technology, Kumasi, Ghana. ORCID: 0000-0003-3944-180X

significantly influence communication skills. Language development depends on phonological awareness, which also helps students to improve their communication abilities.

Phonological awareness is hearing and controlling spoken language sounds, such as syllables, onset rhyme parts, and phonemes (Griffin, 2022). These are critical skills for precision in decoding and encoding messages, which improve clarity and coherence in transmitting information. Furthermore, awareness develops phonemic manipulation, which helps people enhance their oral communication (Jordan, 2016; Suggate, 2016). Gradually, the impact of phonological awareness on wider communication has attracted increasing attention from education researchers. Good communication depends on knowing the sounds inside words and vocabulary and grammar. Including phonological awareness exercises in L2 education provides scaffolding to improve students' sensitivity to language sounds (Zoubek, 2017). If students develop this awareness, they can spell words and identify patterns in spoken English more precisely (Ruan et al., 2018; Pavelko et al., 2018).

Research has shown significant correlations between phonological awareness and improved communication skills among ESL learners (Nushi Kochaksaraie & Makiabadi, 2018; Abdon et al., 2019; Abdon & Barrios, 2022; Nushi Kochaksaraie & Makiabadi, 2018). Studies in Nigeria, Tanzania, and South Africa have also demonstrated that among ESL learners, phonological awareness greatly enhances reading and communication skills (Ogunsola & Lazarus, 2018; Alcock et al., 2010; LeRoux et al., 2017).

In Ghana, communication barriers significantly affect students' performance (Asemanyi, 2015). Teachers' inability to develop engaging lessons, speech and language difficulties, and large class sizes impede effective communication (Paschal, Paacho & Adewoyin, 2022; Mohammed & Amponsah, 2018). Additionally, mother tongue interference— when elements of a learner's native language affect the learning of a second language—creates communication gaps, impacting pronunciation, grammar, and vocabulary (Addo-Kuffour, 2020). Despite the extensive literature on communication skills and phonological awareness, significant gaps exist concerning English language teachers' strategies in senior high schools in Ghana to improve students' speaking skills. Existing studies often generalise teaching methods without focussing on areas or educational levels, leaving a void in understanding actual practices (Nsenyiane & Amaniampong, 2021; Bakyil, 2018; Hammond, 2024).

Furthermore, there is a lack of research assessing teachers' perceptions of the impact of phonological awareness strategies on students' communication skills in senior high schools. There is not much extensive literature on the challenges these teachers face when implementing such strategies in senior high schools in Ghana. Addressing these gaps is critical to identifying the phonological awareness strategies, assessing teachers' perceptions of their impact, and examining English language teachers' challenges in senior high schools in Cape Coast, Ghana.

Problem Statement

Proficient communication skills are essentially underpinned by phonological awareness (PA)—the ability to detect and play with language sounds—thereby enabling clarity, pronunciation, and oral proficiency (Griffin, 2022; Jordan, 2016). While studies in Nigeria, Tanzania, and South Africa demonstrate the role of PA in promoting the communication skills of ESL students (Ogunsola & Lazarus, 2018; Alcock et al., 2010; LeRoux et al., 2017), senior high schools in Ghana persistently face enormous challenges. These include large class sizes, mother tongue interference, and insufficient teacher training, which hinder effective language instruction (Asemanyi, 2015; Paschal et al., 2022; Mohammed & Amponsah, 2018; Addo-Kuffour, 2020). Despite PA's benefits, gaps persist in understanding Ghanaian English teachers' strategies, perceptions, and implementation challenges, particularly at the senior high school level (Nsenyiane & Amaniampong, 2021; Hammond, 2024). This study seeks to address these gaps by:

Identifying the phonological awareness strategies used by English language teachers, teachers' perception of PAS impact on students, and the challenges teachers face in implementing these strategies. By exploring these domains, the study seeks to develop actionable recommendations that may guide policy and practice to inform better teaching and language learning success in Ghanaian high schools. This study is essential to develop effective instructional interventions to improve the communication skills of English language learners (ELLs) and the potential of teachers within the demanding environment of Ghanaian schools.

Literature Review

Phonological Awareness Strategies

A common theme in literature is that older students (ELLs) benefit from the same phonemic awareness and phonic instructions used in young students (1). This includes instruction on perceiving and using phonemes and mapping these sounds to letters or letter combinations. For instance, exercise in segmentation of words into phonemes, blending sounds to form words and recognising rhyming. Cho et al. (2021) found that phonological awareness-focused interventions moderately positively affected reading outcomes (effect size ~0.53) in upper-grade students. Moreover, teachers turn phonological drills into games for students to compete to find words with target sounds in text using quick games like bingo, Hangman or Scrabble to reinforce phonological patterns (O'Connor, 2014; Mahendra et al., 2024; Langille & Green, 2021). Tongue twisters and wordplay games are among the activities that improve alliteration perception and production, hence strengthening phonological ability (Albritton & Johnson, 2023). Auditory discrimination exercises help students distinguish between similar sounds, improving their phonetic skills (Khasawneh & Alkhawaldeh, 2020; Eccles et al., 2021). These different multi-sensory phonics learning styles provide "visual, auditory, kinesthetic, and tactile" support for building phonological skills by making learning activities fun and interactive (Riaño, 2024; Sarudin et al., 2019). Recent studies also place intense focus on using student's first language (L1) to promote phonological awareness in English ((Khalaf et al., 2019; Wu & Juffs, 2022; Krenca et al., 2020). Many students possess transferable reading skills in their native language, and teachers often draw attention to the phonemes of the student's native language and English (Chung et al., 2019). For instance, it is possible to demonstrate to a Spanish-speaking student that, despite differences in letter-sound correspondences, the process of sounding out letters is comparable in Spanish and English (Camarillo Arroyo, 2022; Zaretsky, 2020). Teachers also use cognates to show familiar sound patterns to improve students' literacy skills (García et al., 2020). Cognate instruction can also scaffold context clue strategies to help students guess unknown words' meanings and increase vocabulary knowledge (Montelongo et al., 2011).

Impact of Phonological Awareness (PA) Strategies on Students

Phonological awareness instruction strongly influences English language learners (ELLs) by enhancing their reading, spelling, pronunciation, and academic performance abilities. Yeung et al. (2013) conducted a phonological awareness intervention with Chinese learning English as a second language and concluded that the instruction group "performed significantly better than the comparison group on English word reading" following the intervention. Morales Pilatuña (2024) also found that intensive training in phonological awareness led to improved reading skills of English words by students. Similarly, Cho et al. (2021) conducted a multilevel meta-analysis involving 28 studies between 2008 and 2018, revealing that phonological awareness strategies positively affected the reading performance of English Language Learners (ELLs). Research indicates that phonological awareness training can decrease spelling and writing errors and enhance literacy achievement (Baezzat & Eizadifard, 2012; Siregar et al., 2023). Strategies like updated interactive writing programs effectively enhance students' word recognition, passage comprehension, and word reading growth (Craig, 2006; Kim & Zagata, 2024). Wardana et al. (2022) also found that instruction in phonological awareness improves the pronunciation of phonemes, stress and intonation determination and boosts motivation and confidence in speaking in EFL learners. Buana and Irawan (2021) point out that using various PA strategies helps learners improve pronunciation because they struggle with consonants, vowels and diphthongs.

Besides, PA instruction can also improve reading, writing, and spelling in children who have or do not have language impairments (Carson et al., 2013; Mutiana & Amato, 2022). Decoding skills, word recognition, and comprehension during reading are directly related to PA skills (Siregar et al., 2023). However, the effectiveness of PA interventions would

depend on the targeted component. Research on syllable and rhyme awareness demonstrated minimal effect on literacy development and possibly interfered with the acquisition of phoneme awareness (Nancollis et al., 2005). Most research, however, demonstrates the significance of phonemic awareness (PA) for academic achievement across various grade levels (Mutiana & Amato, 2022). Screening, evaluation, and intervention at an early stage for children at risk for PA challenges are required to improve their literacy and academic performance (Siregar et al., 2023).

Challenges Faced by Teachers in Implementing Phonological Awareness (PA) Strategies

Teachers face several challenges in implementing PA strategies when teaching students and English learners for early literacy development. One of the significant issues is instructional time, as teachers find it challenging to find more time as PA activities must compete with other curricular demands, making sustained and systemic practice difficult (Haile & Mendisu, 2023; Carson & Bayetto, 2018). Choi et al. (2024) also found that teachers often face language and cultural barriers, lack of developmental materials and insufficient support from district and parents when implementing PA techniques in schools. Haile and Mendisu (2023) also found that a lack of subject content and pedagogical knowledge, inadequate teaching materials, inadequate teacher-training programs, a lack of an enabling, literacy-rich environment, and a lack of in-service training in the first grades hinder teachers from practising PA strategies in classrooms. In addition, teachers overestimate their PA knowledge whilst having low actual PA knowledge, thus relying on observation and professional judgment with no or limited expertise (Carson & Bayetto, 2018). Adamu et al. (2020) indicated that large classes hinder individualised attention, feedback, and assessment of teachers in understanding students' reading development. To address these issues, teachers employ strategies such as grouping students, employing technology, and promoting peer feedback (Xu & Harfitt, 2018). Putting students' engagement first and coordinating teaching strategies to enable critical thinking can help address large class issues (O'Connor, 2014; Chand, 2023). Moreover, providing teachers with adequate content and pedagogy training, supplying phonological awareness materials, offering in-service support, and creating literacy-rich environments (Haile & Mendisu, 2023).

Theory guiding the study

The social constructivism theory, which provides the basis for this study, emphasises the importance of social interactions in language learning. Based on Lev Vygotsky's theories, this perspective posits that students construct knowledge through meaningful engagement with peers and teachers, emphasising collaborative problem-solving and verbal communication (VaVasalou et al., 2017; Amineh & Asl., 2015; Vygotsky & Cole, 2018). It supports a student-centred approach and sees the teacher as a facilitator (Bechter et al., 2019), but social constructivism has some problems, such as not considering how different people think and learn and having trouble judging personal contributions in group settings (Varpio et al., 2017; Bahadur & Zhang, 2021). This theory is relevant to the study because it clarifies how language instructors improve students' phonological awareness and communication abilities through interaction and collaboration while accounting for sociocultural factors affecting classroom dynamics in Ghanaian senior high schools.

Method

Research Design

The study used the descriptive survey design. This design allows the researchers to systematically observe and document the instructional methods that the teachers used in the Senior High Schools (Siedlecki, 2020). The descriptive survey design was relevant to the study because it allowed for collecting detailed data on current teaching practices and their impact on students. Using this design, the study can depict the effectiveness and usage of the various strategies, offering essential information to teachers and policymakers to improve educational outcomes.

Participants

The population of this study included English teachers of the 10 senior high schools in Cape Coast, Ghana. The schools were Adisadel College, St. Augustine College, Mfantsipim School, Wesley Girls High School, Holy Child School, Ghana National College, Christ the King Academy, Oguaa Senior High Technical School, University Practice Senior High

School, and Efutu Senior High Technical School. The target population was teachers known to use phonological awareness in teaching. This ensured that the selection aligned with the study objectives and context.

Sampling Technique and Sample Size

The sampling technique and sample size were applied based on the study methods and objectives. The sampling method considered the selection of schools and teachers. Accordingly, the school selection was based on access to instructional materials, native-language teaching experience and teachers. Therefore, based on the above criteria, all ten schools in Cape Coast were selected. Next, 49 teachers of 62 English teachers (based on their experience, native-language teaching experience, recommendation by the principals of the schools and the teacher's willingness to participate in the study) were intentionally selected in the sampling method from the senior high schools. Of the respondents, 39.5% were males and 60.5% were females. Additionally, 72.1% fall within the 30-39 age category. 23.3% were between the ages of 40 - 49, and 4.7% were between the ages of 29 - 29. About 65.1% had bachelor's degrees, 25.6% had master's, and 4% had doctorate degrees. Most teachers (55.8%) were married, 39.5% were single, and 4.7% were divorced. Participants with 6 to 10 years of teaching experience constituted 20.9% of the sample, those with 16 to 20 years accounted for 14.0%, and only 4.7% had 21 to 25 years of experience. Additionally, 30.2% of respondents had 1 to 5 years of experience, and another 30.2% had 11 to 15 years.

Data Collection Tools

Teachers' demographics

Teachers reported their demographic information, including their gender identity, age category, highest education level, marital status, and years of teaching experience. The demographics were coded with dummy variables to represent the data categories. For example, gender was measured using a dummy coded variable (male = 1 and female = 2), age category was coded with coded variables (1 = 20 - 29, 2 = 30 - 39, 3 = 40 - 49, 4 = 50 - 59) and highest level of education was coded with variables with 1, 2 and 3 representing bachelor's degree, master's and doctorate. The marital status and years of experience were also coded with dummy variables to represent each category of the variable.

Development of the PAS Scale

The Phonological Awareness Scale (PAS) was developed in 2024 by a team of researchers to assess the impact of phonological awareness strategies on students' communication skills in Cape Coast senior high schools. The development process followed a rigorous multi-step approach to ensure validity and reliability. First, an extensive literature review was conducted to identify key dimensions of phonological awareness. The works of scholars such as Ehri et al. (2001) on phonological awareness principles, Haile and Mendisu (2023) on phonological awareness practices, the Phonological and Print Awareness Scale (PPA Scale) and other scholars informed the conceptual framework and item construction. This theoretical foundation ensured that the scale accurately measured essential components such as rhyming, phoneme segmentation, blending, and sound-symbol correspondence. An expert panel of five specialists in language education and psychometrics was consulted to improve content validity further. The experts assessed each item based on clarity, relevance, and alignment with the study objectives. Their feedback led to refinements in item phrasing, response format, and the inclusion of additional items to improve construct coverage. A field test was conducted in four public senior high schools in Takoradi to validate the instrument in a comparable educational setting. A sample of 20 teachers participated in the pilot study, rating the clarity and applicability of the scale. Based on their feedback, minor modifications were made to item wording, response categories, and scoring to enhance interpretability and ease of administration. The scale was tested for internal consistency using Cronbach's alpha, yielding a high-reliability coefficient ($\alpha = 0.84$) during the pilot study to ensure reliability.

Implemented Phonological Awareness Strategies

One dimension of the study, seeking the teacher's perception of the phonological awareness strategies implemented in the school, was used. Their perception of the phonological awareness strategies was assessed with a five-item scale. Teachers were asked to respond to the following prompt, "Please rate the following phonological strategies used in class?"

Examples of items included: "Teachers frequently use rhyming, segmenting and blending sounds to improve student speaking skills," "Pronunciation drills are regularly included in English lessons," and "Group activities and peer feedback are used to enhance students' phonological awareness in speaking activities." All items were assessed on a 5-point scale ranging from Strongly *Disagree* (1) to Strongly *Agree (5)*. All the items were used to create a mean score. The reliability for this scale was strong ($\alpha = 0.80$).

Impact of Implemented Phonological Awareness Strategies

Teachers were asked to rate the impact of the PAS on their student's communication skills using a six-item measure. The items included: "The pronunciation exercises we do in class have significantly improved my students' spoken English," "My students feel more confident speaking English because of the phonological awareness strategies I use," and "My students find the phonological awareness activities (such as rhyming and sound segmenting) in our English classes helpful for improving their speaking skills." Items were assessed on a 5-point scale ranging from *Strongly Disagree* (1) to *Strongly Agree* (5). The reliability of the scale was strong ($\alpha = 0.91$).

Challenges and Barriers to Implementing PAS

Teachers were asked to measure the challenges and barriers faced when implementing PAS in the classroom on a fiveitem measure. The items included: "There is insufficient time allocated in the curriculum for phonological awareness activities." "I receive adequate training on how to implement phonological awareness strategies effectively," and "Large class sizes make it difficult to conduct effective phonological awareness activities." The items were measured on a 5-point scale ranging from *Strongly Disagree* (1) to *Strongly Agree* (5). The reliability of the scale was strong ($\alpha = 0.82$).

Data Analysis

This study's analysis involved descriptive and correlation analyses. First, we examined the demographic characteristics of the participating teachers. Frequencies were calculated in SPSS to generate output displaying the count and percentage of respondents in each demographic category. We calculated means and standard deviations to analyse data. Lastly, the Spearman correlation was run to explore the relationship among the variables phonological awareness strategies [P], impact of the strategies [T], and challenges faced by teachers [PE]. The output provided the correlation coefficient with its associated significance levels. Before running the correlation analysis, the multiple Likert items were combined into a single composite variable to simplify the analysis.

Results

Assessment of Phonological Awareness Strategies

Table 2 presents the assessment of phonological awareness strategies (PAS) usage among teachers, ranked by mean scores. The highest-rated strategies were incorporating pronunciation drills into English lessons and providing regular feedback on students' pronunciation and phonological exercises, with a mean score of 4.19 (SD = 0.66 and SD = 0.39, respectively). Following closely, group activities and peer feedback to enhance students' phonological awareness in speaking activities had a mean score of 4.12 (SD = 0.59). Auditory discrimination activities aimed at helping students distinguish different sounds received a mean score of 4.09 (SD = 0.61). Lastly, teachers frequently used phonological awareness exercises, such as rhyming, segmenting, and blending sounds, to improve student speaking skills and had a mean score of 4.07 (SD = 0.74).

Table 2 Frequency	of PAS Usage
-------------------	--------------

	Phonological Awareness Strategies	Mean
		(SD)
1	Teachers frequently use phonological awareness exercises (such as rhyming, segmenting, and	4.07 (0.74)
	blending sounds) to improve student speaking skills.	
2	Pronunciation drills are regularly incorporated into English lessons.	4.19 (0.66)
3	We employ various auditory discrimination activities to help students distinguish different sound	4.09 (0.61)

- 4 Group activities and peer feedback enhance students' phonological awareness in speaking activities. 4.12 (0.59)
- 5 We provide regular feedback on students' pronunciation and phonological exercises. 4.19 (0.39)

Perception of the Impact of PAS on Students

Table 3 presents teachers' assessments of the impact of phonological awareness strategies (PAS) on students, highlighting their perceptions ranked by mean scores. The highest-rated perception is that group activities and peer feedback are effective in helping students improve their phonological awareness, with a mean score of 4.05 (SD = 0.58). Following closely, teachers reported that both phonological awareness activities, such as rhyming and sound segmenting, and students' feedback on their pronunciation help improve speaking skills, each receiving a mean score of 4.00 (SD = 0.62). The perception that pronunciation exercises in class have significantly improved students' spoken English was noted with a mean score of 3.95 (SD = 0.49). Lastly, the belief that students feel more confident speaking English due to the phonological awareness strategies used in class received the lowest mean score of 3.84 (SD = 0.81).

Table 3. PAS Impact on Students

	Teachers Perception on Phonological Strategies Impact	Mean (SD)
1	My students find the phonological awareness activities (such as rhyming and sound segmenting)	4.00 (0.62)
	in our English classes helpful for improving their speaking skills.	
2	The pronunciation exercises in class have significantly improved my students' spoken English.	3.95 (0.49)
3	My students feel more confident speaking English due to the phonological awareness strategies I use.	3.84 (0.81)
4	My students' feedback on their pronunciation helps them understand and correct their mistakes.	4.00(0.62)
5	Group activities and peer feedback are effective in helping my students improve their phonological awareness.	4.05 (0.58)
6	My students believe the phonological awareness strategies used in our English classes effectively enhance their communication skills.	3.98 (0.60)

Challenges and Barriers to the Implementation of PAS

Table 3 outlines the challenges and barriers faced in implementing phonological awareness strategies (PAS), ranked by mean scores. The most significant challenge identified is that students' varying levels of English proficiency pose a challenge in implementing PAS, with a mean score of 4.00 (SD = 1.27). Following closely, large class sizes make it difficult to conduct effective phonological awareness activities, receiving a mean score of 3.86 (SD = 1.17). Insufficient time allocated in the curriculum for phonological awareness activities was noted with a mean score of 3.72 (SD = 1.12), while teachers expressed that they receive adequate training on how to implement these strategies effectively, resulting in a mean score of 3.67 (SD = 0.99). Lastly, the lack of resources, such as audio equipment, books, and language apps, was identified as a barrier to implementing PAS, with a mean score of 3.40 (SD = 1.23).

Table 3. Perception of PAS Implementation Challenges and Barriers

Challenges and Barriers to the Implementation of PAS		
There is insufficient time allocated in the curriculum for phonological awareness activities	3.72 (1.12)	
I receive adequate training on how to implement phonological awareness strategies effectively.	3.67 (0.99)	
Lack of resources (such as audio equipment, books, and language apps) is a barrier to implementing	3.40(1.23)	
phonological awareness strategies		
Large class sizes make it difficult to conduct effective phonological awareness activities	3.86(1.17)	
Students' varying levels of English proficiency pose a challenge in implementing phonological	4.00(1.27)	
awareness strategies		

Spearman Rank Correlation

Table 4 presents the Spearman rank correlation results among the variables related to phonological awareness strategies (P), the impact of the strategies (PE), and the challenges faced by teachers (T). The Spearman rank correlation was used

because the data was ordinal and not normally distributed (evidenced by the skewed means and moderate-to-high standard deviations in Tables 1 to 3), given the non-parametric nature of the data). The analysis reveals a significant positive correlation between phonological awareness strategies and the perceived impact of these strategies, with a correlation coefficient of 0.456 (p < 0.01), indicating that as the use of phonological awareness strategies increases, so does the perceived impact on student outcomes. Conversely, there is no significant correlation between phonological awareness strategies and challenges faced by teachers, as indicated by a correlation coefficient of -0.010 (p = 0.949). Additionally, the correlation between the impact of strategies and the challenges teachers face is insignificant, with a coefficient of 0.006 (p = 0.967).

Variable	Р	Т	PE	
Р	1.000	010	.456**	
Т	010	1.000	.006	
PE	.456**	.006	1.000	

Table 4 (Correlation	Resul	lts
-----------	-------------	-------	-----

**. Correlation is significant at the 0.01 level (2-tailed).

Note: phonological awareness strategies [P]; impact of the strategies [PE]; challenges faced by teachers [T].

Discussion

The current study examines teachers' phonological awareness strategies to improve students' communication skills in Cape Coast's senior high schools. Although a great deal of prior research has asserted that phonological awareness strategies do improve students' communication skills and academic performance (LeRoux et al., 2017; Ogunsola & Lazarus, 2018; Paschal et al., 2022), few quantitative studies have examined the strategies, its impact and challenges on senior high schools' students' communication skills in Cape Coast and Ghana from the teacher's perspective. Focusing on teachers' phonological strategies in the classroom, pronunciation drills, and regular feedback are among the most highly rated strategies teachers use to improve communication skills. This finding is consistent with other works which found constructive feedback and pronunciation drills are essential in improving students' communication skills and performance (Dawson et al., 2019; Qureshi et al., 2023; Saleh et al., 2020; Al Otaiba et al., 2019). The emphasis on group activities and feedback aligns with modern pedagogical approaches that advocate for a collaborative learning environment to improve students' language skills (Qureshi et al., 2023). Moreover, auditory discrimination activities were essential for helping students differentiate sounds, forming a basis for developing practical communication skills. Studies suggest that students who engage in such activities demonstrate improved phonemic awareness, linked to better reading and speaking skills (Eccles et al., 2021; Li et al., 2024).

The teacher's perception of the impact of PAS reveals a strong belief in its effectiveness in improving students' phonological awareness and communication skills. They rated group activities and peer feedback as beneficial in improving students' communication skills. This relates to studies indicating that these activities are essential for social interaction in language learning and proficiency (Chang & Lin, 2019; Kuyyogsuy, 2019). Ghavifekr (2020) also found that collaborative learning is a motivation strategy that helps students communicate and improve their social interaction skills. However, while teachers noted improvements in the students' spoken English due to pronunciation exercises, they reported lower student confidence levels. This discrepancy suggests that while PAS enhances specific skills, they may not fully address affective factors such as self-efficacy in communication. Previous studies have indicated that confidence plays a crucial role in students' language acquisition (Akbari & Sahibzada, 2020; Tridinanti, 2018; Gultom & Oktaviani, 2022), especially in areas that involve student participation in activities.

The study revealed significant obstacles that teachers face in effectively teaching phonological awareness. They indicate that issues such as insufficient time allocated in the curriculum, inadequate training, lack of resources, large class sizes, and students' varying levels of English proficiency are perceived as considerable challenges. Insufficient time allocated for phonological awareness activities is echoed in the literature, where it is often noted that effective

phonological instruction requires dedicated time within the curriculum. Many studies have found that teachers report that the existing curriculum does not allow sufficient time for phonological awareness activities, which are crucial for developing foundational reading skills (Carson et al., 2013; Arceo–Elemento & Capinpin, 2024; Helf et al., 2018). This aligns with findings from Kim et al. (2012), who emphasise that teachers struggle to implement sheltered instruction observation protocol without adequate time to provide necessary instructions for English language learners (ELLs), who may require intensive training.

Moreover, the lack of resources, including audio equipment and instructional materials, complicates PAS even more. Effective phonological education depends on access to quality resources (Huo & Wang, 2017); without them, teachers cannot engage pupils sufficiently or offer various learning opportunities (). This lack reduces the efficacy of education and can irritate teachers who understand the need for these approaches. Another major obstacle was the large class sizes, which made it challenging for teachers to carry out efficient PAS activities catered to student requirements. According to Eison (2010) and Taft et al. (2019), large classes reduce chances for tailored instruction and feedback—qualities essential for kids with phonological awareness. Furthermore, the difficulty presented by students' different degrees of English competency is crucial; as Zoubek (2017) emphasises, ELLs often show lower phonological awareness skills than their native-speaking peers, which calls for different instructional approaches many teachers find difficult to apply in a crowded classroom environment.

It was also found that there is a significant positive correlation between phonological awareness strategies and the challenges faced by the teachers, showing that as the use of these strategies increases, so do the challenges that teachers face. This implies that even if challenges exist, they might not discourage teachers from using successful approaches once they see their possible advantages. This resilience is vital since it stresses the need for professional development and support structures for teachers to overcome these obstacles properly. However, no relationship existed between the strategies and their impact on the students. This result was interesting compared to the broader literature, where many studies usually confirm the favourable effects of phonological awareness techniques on student performance (Pfost et al., 2019; Khasawneh, 2024). Other studies have demonstrated that efficacy can vary greatly depending on variables such as the degree of training, the age of the students, and the phonological tasks used (Baezzat et al., 2018; Bratsch-Hines et al., 2020; Lin & Zhang, 2023).

Conclusion and Recommendations

The study shows that English teachers use Phonological Awareness Strategies (PAS) in Cape Coast senior high schools to influence students' communication skills. However, large class sizes and limited time in the curriculum make it hard for teachers to focus on these activities. Some students also lack confidence or emotional involvement in the process. Counsellors can help by asking schools to invest more resources, reviewing the curriculum to allow enough time for PAS, and providing teacher training that offers practical strategies for many learners. They can also motivate students to participate in classroom activities, work closely with parents to encourage language practice at home and use study data to plan evidence-based support for students needing extra help. With better training, resources, and collaboration among schools, teachers, parents, and counsellors, PAS can be more effective in helping all students develop stronger communication skills.

The future directions of this study include the need for an expanded sample involving more schools from other regions to improve the representativeness of results. Another critical aspect is the implementation of longitudinal research to explore how exactly PAS impacts students' communication skills over time as it helps track changes inherent to the use of PAS among students. Additionally, it is necessary to conduct a more profound examination of the relevance of PAS and the struggles experienced by teachers to improve this methodology. In such a way, qualitative research, such as interviews with teachers or focus groups, will reveal the experiences and opinions of educators, contributing to a more detailed identification of the challenges they face and the means of resolving them. Implications for Counselling Based on the Key findings, here are some potential counselling implications:

- Advocacy for increased resource allocation: Counsellors can advocate for schools to allocate more resources for PAS, including audio equipment, language apps, and additional training for teachers.
- Curriculum review and adjustment: Counsellors can work with school administrators and teachers to review the curriculum and ensure sufficient time is allocated for PAS.
- > Teacher training and support: Counsellors can provide support and training to teachers on effective implementation of PAS, addressing specific challenges and providing strategies for diverse learners.
- Student support and motivation: Counsellors can help students understand the importance of PAS and motivate them to participate actively in classroom activities.
- Collaboration with parents: Counsellors can involve parents in supporting their children's language development by providing resources and encouraging home-based activities to reinforce PAS.
- Individualized support: For students who may require additional support, counsellors can work with teachers to identify appropriate interventions or accommodations.
- Data-driven decision making: Counsellors can use the data from the study to inform their interventions and advocate for evidence-based practices.

Limitation of Study

One of the significant limitations is the sample size; only forty-three teachers from 10 different senior high schools participated in the study. Since the population of all English teachers in Ghana is unknown, this sample size may not be representative. The results can only be generalised to the population of English teachers at Senior High schools at Cape Coast. Furthermore, since purposive sampling was used to gather the sample, only those who teach English were selected, meaning that selection biases were introduced, and other teaching practices and problems faced by other teachers from different fields were ignored. The study also relies on self-reported data, which poses questions concerning potential biases such as social desirability bias, in which some people say comments they think are favourable to them instead of their thoughts. In addition, since this study has a cross-sectional design, it cannot provide a cause-effect conclusion that the PAS effectively improves students' communication skills over a long duration.

Biodata of Authors



Matthew Amoako is Senior Assistant Registrar and Manager at the Ghana Universities Staff Superannuation Scheme Hostels at the Kwame Nkrumah University of Science and Technology, Kumasi. Research area is Students and Staff Welfare in a Higher Education. Completed Bachelor of Arts in 1998, MBA (2008) and currently pursuing LLM. **Email**: mamoako.admin@knust.edu.gh **ORCID**: 0000-6474

0002-7817-6474



Stephen Ofori, Graduated schools: Pentecost university – 2022: Advanced Certificate in Counselling and Family Therapy; University of Cape Coast: 2011-2013: Med. Guidance and Counselling; University of Cape Coast: 2000-2003 -Bed. Psychology. Important Study: Emotional Problems Facing Adolescents figh schools (2024). Specialties: B ehabilitation Counselling. Adolescent and Youth Counselling. Marriage

in Senior High schools (2024). Specialties: Rehabilitation Counselling, Adolescent and Youth Counselling, Marriage and Family Counselling, Career Counselling, Substance Abuse Counselling, Educational Counselling, Crisis and Trauma Counselling. E-mail: ofori.stephen@knust.edu.gh ORCID :0009-0007-4629-3389



Frank Lamadoku Attila, Background Born and raised in Western Ghana, Africa, I am currently a Ph.D candidate in Guidance and Counselling at the University of Cape Coast. I am a family person who loves schoolwork and working with children. I volunteered for a Christian organisation where I served as a bishop for more than 5 years Qualifications Earned a teacher's certificate (2002), a diploma in education (2008), a bachelor's degree in education (2012), and a master's degree (2017). Currently is the headteacher

of an elementary school in Ghana, a professional teacher with over 20 years of experience and a certified counsellor. Research interests: Mental health, Counselling & Psychotherapy, Education & Learning. **E-mail**: frank.attila001@stu.ucc.edu.gh **RiD**: 29423 O**RCID**: 0000-0002-7800-4816



Daniel Inkoom, Lecturer: Berekum College of Education, affiliate of the University of Cape Coast, Ghana, PhD student at the Guidance and Counselling Department of University of Cape Coast, Ghana. Email: daniel.inkoom@becoled.edu.gh. Phone number: +2330243723180 Undergraduate Education: University of Cape Coast, Initial courses in Teacher at Atebubu College (2002); University of Ghana,

Diploma in Youth Development Work (2008); University of Education, Winneba, Bachelor of Education in Guidance and Counselling (2012); University of Education, Winneba, MPhil.in Guidance and Counselling (2015); Abilene Christian University, USA, MA in Christian Ministry (2022); University of Cape Coast, PhD in Guidance and Counselling (ongoing). Research Interest: Parenting and academic performance, Parenting and child development outcomes etc. **E-mail:** daniel.inkoom001@stu.ucc.edu.gh **ORCID:** 0000-0001-7329-1871



Abigail Dzama Anderson, Undergraduate Education Information; University of Cape Coast Bachelor of Management Studies (2003), Graduate Education Information; University of Cape Coast Master of Arts in Human Resource Management (2010). She works in higher education administration in Kwame Nkrumah University of Science and Technology, Kumasi, Ghana. **E-mail**: adanderson.reg@knust.edu.gh

ORCID: 0000-0003-3944-180X

References

- Abdon, M. M., & Barrios, A. (2022). Phonological awareness intervention in mother tongue among Filipino kindergarten learners. *Indonesian Journal of Applied Linguistics*, 12(2), 399-411.
- Abdon, M. M., Maghanoy, J. M., Alieto, E. O., Buslon, J. B., Rillo, R. M., & Bacang, B. C. (2019). Phonological Awareness Skills of English as Second Language (ESL) Learners: The Case of First-Grade Filipino Bilinguals. *Online Submission*, *31*(5), 647-652.
- Adamu, A., Tsiga, A. U., & Zuilkowski, S. S. (2020). Teaching reading in Northern Nigeria: The challenges of large class size. *Pedagogy, Culture & Society, 30*(2), 225-242.
- Addo-Kuffour, P. (2020). The influence of mother tongue (L1) on the use of English (L2) by (SHS) students at (KSHTS) Patasi-Kumasi (Doctoral dissertation, University of Education, Winneba).
- Akbari, O., & Sahibzada, J. (2020). Students' self-confidence and its impacts on their learning process. *American International Journal of Social Science Research*, 5(1), 1-15.
- Al Otaiba, S., Allor, J., Baker, K., Conner, C., Stewart, J., & Mellado de la Cruz, V. (2019). Teaching Phonemic Awareness and Word Reading Skills: Focusing on Explicit and Systematic Approaches. *Grantee Submission*.
- Albritton, K., & Johnson, L. (2023). Onset-Rime, Alliteration, and Incidental Teaching. In *Reading Intervention Case Studies for School Psychologists* (pp. 20-39). Routledge.
- Alcock, K. J., Ngorosho, D., Deus, C., & Jukes, M. C. (2010). We don't have language at our house: disentangling the relationship between phonological awareness, schooling, and literacy. *British Journal of Educational Psychology*, *80*(1), 55-76.
- Amineh, R. J., & Asl, H. D. (2015). Review of constructivism and social constructivism. *Journal of social sciences, literature and languages, 1*(1), 9-16.
- Arceo-Elemento, E., & Capinpin, M. B. (2024). Phonological Awareness of Kindergarten Teachers. Psychology and Education: A Multidisciplinary Journal, 17(4), 350-363.
- Asemanyi, A. A. (2015). An Assessment of Students' Performance in Communication Skills: A Case Study of the University of Education Winneba. *Journal of Education and Practice, 6*(35), 1-7.
- Baezzat, F., & Eizadifard, R. (2012). Effect of phonological awareness training package on reduction of spelling errors of primary school students with writing disorder. *International Journal of Behavioral Sciences, 6*(1), 55-60.
- Baezzat, F., Moradi, M., & Motaghedifard, M. (2018). The effect of phonological awareness on the auditory memory in students with spelling problems. *Iranian Rehabilitation Journal*, *16*(1), 83-90.
- Bahadur, R., & Zhang, L. (2021). Socratic teaching and learning styles: exposing the pervasiveness of implicit bias and white privilege in legal pedagogy. *Hastings Race & Poverty LJ*, 18, 114.
- Bakyil, L. (2018). *Phonological awareness and its impact on the reading competences of form one pupils of St. Francis junior high school, Jirapa* (Masters dissertation, Washington State University).
- Bechter, B. E., Dimmock, J. A., & Jackson, B. (2019). A cluster-randomised controlled trial to improve student experiences in physical education: Results of a student-centered learning intervention with high school teachers. *Psychology of Sport and Exercise*, 45, 101553.
- Boateng, G. O., Neilands, T. B., Frongillo, E. A., Melgar-Quiñonez, H. R., & Young, S. L. (2018). Best practices for developing and validating scales for health, social, and behavioral research: a primer. *Frontiers in public health*, *6*, 149.

- Bratsch-Hines, M., Vernon-Feagans, L., Pedonti, S., & Varghese, C. (2020). Differential effects of the targeted reading intervention for students with low phonological awareness and/or vocabulary. *Learning Disability Quarterly*, *43*(4), 214-226.
- Buana, T. S., & Irawan, L. A. (2021). Students' phonological awareness and their strategy in pronuncing words. *Journal of Language and Literature Studies, 1*(1), 51-56.
- Camarillo Arroyo, S. H. (2022). Impact of Targeted Interventions for English Learners in the Domains of Word Recognition, Letter Sound, and Phonological Awareness (Doctoral dissertation).
- Carson, K. L., Gillon, G. T., & Boustead, T. M. (2013). Classroom phonological awareness instruction and literacy outcomes in the first year of school. *Language, Speech and Hearing Services in Schools, 44*, 147 160.
- Carson, K., & Bayetto, A. (2018). Teachers' phonological awareness assessment practices, self-reported knowledge and actual knowledge: The challenge of assessing what you may know less about. *Australian Journal of Teacher Education (Online)*, 43(6), 67-85.
- Chand, G. B. (2023). Teaching Large Classes: What Teachers Say and Do?. Far Western Review, 1(1), 43-54.
- Chang, C., & Lin, H. C. K. (2019). Effects of a mobile-based peer-assessment approach on enhancing language-learners' oral proficiency. *Innovations in Education and Teaching International*, 57(6), 668–679.
- Cho, Y., Kim, D., & Jeong, S. (2021). Evidence-based reading interventions for English language learners: A multilevel metaanalysis. *Heliyon*, 7(9), 1-11.
- Choi, Y., Hatcher, W. J., & Spinrad, M. (2024). Preschool and Kindergarten Teachers: Self-Reported Phonological Awareness Strategies and Challenges in Teaching English Learners. *Journal of Education and Training Studies*, *12*(3), 36-48.
- Chung, S. C., Chen, X., & Geva, E. (2019). Deconstructing and reconstructing cross-language transfer in bilingual reading development: An interactive framework. *Journal of neurolinguistics*, *50*, 149-161.
- Craig, S. A. (2006). The effects of an adapted interactive writing intervention on kindergarten children's phonological awareness, spelling, and early reading development: A contextualised approach to instruction. *Journal of educational psychology*, *98*(4), 714.
- Eccles, R., Van der Linde, J., le Roux, M., Holloway, J., MacCutcheon, D., Ljung, R., & Swanepoel, D. W. (2021). Is phonological awareness related to pitch, rhythm, and speech-in-noise discrimination in young children?. *Language, speech, and hearing services in schools, 52*(1), 383-395.
- Ehri, L. C., Nunes, S. R., Willows, D. M., Schuster, B. V., Yaghoub-Zadeh, Z., & Shanahan, T. (2001). Phonemic awareness instruction helps children learn to read: Evidence from the National Reading Panel's meta-analysis. *Reading research quarterly*, *36*(3), 250-287.
- Eison, J. (2010). Using active learning instructional strategies to create excitement and enhance learning. *Jurnal Pendidikantentang* Strategi Pembelajaran Aktif (Active Learning) Books, 2(1), 1-10.
- Finnegan, R. (2014). Communicating: The multiple modes of human communication. Routledge.
- Ghavifekr, S. (2020). COLLABORATIVE LEARNING: A KEY TO ENHANCE STUDENTS'SOCIAL INTERACTION SKILLS. *MOJES: Malaysian Online Journal of Educational Sciences*, 8(4), 9-21.
- Griffin, K. M. (2022). Phonological Awareness. In Constructing Strong Foundations of Early Literacy (pp. 185-204). Routledge
- Gultom, S., & Oktaviani, L. (2022). The Correlation Between Students' Self-Esteem And Their English Proficiency Test Result. *Journal of English Language Teaching and Learning*, 3(2), 52-57.
- Haile, S. Z., & Mendisu, B. S. (2023). Early-Grade Reading: The Challenges That Affect Teachers' Practice of Phonological Awareness: The Case of Koorete Language. *Education Research International*, 2023(1), 9527369.
- Hammond, D. A. (2024). *The missing foundation in beginning reading instruction: The case of Ghana* (Doctoral dissertation, Washington State University).
- Helf, S., Yearta, L., & Ming, K. (2018). Maximising Learning: Embedding Phonological Awareness Throughout the Day. *Georgia Journal of Literacy*, 41(1), 30-37.
- 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, 1-13.
- Jordan, D. (2016). The impact of explicit phonemic awareness instruction on kindergarteners' ability to manipulate sounds and *decode* (Doctoral dissertation, The William Paterson University of New Jersey).
- Khalaf, S., Santi, K. L., Kulesz, P. A., Bunta, F., & Francis, D. J. (2019). Bilingual phonological awareness: Construct validation in Grade 1 Spanish-speaking English learners. *New directions for child and adolescent development*, *2019*(166), 79-110.
- Khasawneh, M. A. S. (2024). The impact of phonological awareness in improving sequential memory among students with learning disabilities. *International Journal of Disability, Development and Education*, 71(1), 42-54.
- Khasawneh, M.A.S., & Alkhawaldeh, M. A. (2020). The Effectiveness of Phonological Awareness Training in Treating Deficiencies in Auditory Processing among Children with Learning Disabilities among Elementary Cycle Students in Saudi Arabia. *International Journal of Language Education*, 4(3), 350-360.
- Kim, J. Y., Walker, C., & Manarino-Leggett, P. (2012). Equipping classroom teachers for English language learners. *TESOL Journal*, 3(4), 722-734.

- Kim, Y. S. G., & Zagata, E. (2024). Enhancing reading and writing skills through systematically integrated instruction. *The Reading Teacher*, 77(6), 787-799.
- Krenca, K., Segers, E., Chen, X., Shakory, S., Steele, J., & Verhoeven, L. (2020). Phonological specificity relates to phonological awareness and reading ability in English–French bilingual children. *Reading and Writing*, *33*(2), 267-291.
- Kuyyogsuy, S. (2019). Promoting Peer Feedback in Developing Students' English Writing Ability in L2 Writing Class. *International Education Studies*, *12*(9), 76-90.
- Langille, J., & Green, Z. (2021). The impact of multi-sensory phonics programs in teaching English as an additional language. *Canadian Journal of Education*, 44(4), 1024-1050.
- LeRoux, M., Geertsema, S., Jordaan, H., & Prinsloo, D. (2017). Phonemic awareness of English second language learners. *South African Journal of Communication Disorders*, 64(1), 1-9
- Li, M., Jerasa, S., Frijters, J. C., & Geva, E. (2024). Using phoneme discrimination to help emergent bilinguals with reading disabilities acquire new sounds. *TEACHING Exceptional Children*, *56*(5), 310-322.
- Lin, J., & Zhang, H. (2023). Cross-linguistic influence of phonological awareness and phonological recoding skills in Chinese reading acquisition among early adolescent students. *The Journal of General Psychology*, *150*(1), 120-141.
- Mahendra, J. W., Maghfiroh, A., Harmanto, B., & Hatmoko, D. (2024). The Effectiveness of Scrabble Games to Promote Vocabulary Achievement of Migrant Workers' Children in Malaysia. *Journal of Languages and Language Teaching*, *12*(2), 963-973.
- Mohammed, I., & Amponsah, O. (2018). Predominant Factors Contributing to Low Reading Abilities of Pupils at Elsie Lund Basic School in the Tamale Metropolis, Ghana. *African Educational Research Journal*, *6*(4), 273-278.
- Montelongo, J. A., Hernández, A. C., Herter, R. J., & Cuello, J. (2011). Using cognates to scaffold context clue strategies for Latino ELs. *The Reading Teacher*, 64(6), 429-434.
- Morales Pilatuña, N. M. (2024). The importance of phonological awareness as a natural approach in children's reading process from Manuela Cañizares School. Universidad Católica de Cuenca
- Nancollis, A., Lawrie, B. A., & Dodd, B. (2005). Phonological awareness intervention and the acquisition of literacy skills in children from deprived social backgrounds. *Language, speech, and hearing services in schools, 36*(4), 325-335.
- Nsenyiane, A. M., & Amaniampong, P. (2021). Teachers' strategies for teaching pupils with reading difficulties: The case of Awutu Senya East Municipality, Central of Ghana. *International Journal of Research*, *10*(15), 25-36.
- Nushi Kochaksaraie, M., & Makiabadi, H. (2018). Second language learners' phonological awareness and perception of foreign accentedness and comprehensibility by native and non-native English speaking EFL teachers. *Teaching English as a Second Language Quarterly (Formerly Journal of Teaching Language Skills)*, *36*(4), 103-140.
- O'Connor, R. E. (2014). Teaching word recognition: Effective strategies for students with learning difficulties. Guilford Publications.
- Ogunsola, B. A., & Lazarus, K. U. (2018). *Relationship of phonological awareness and word recognition to comprehension of texts among selected pupils in Ibadan, Oyo State* (Masters Thesis, University of Ibadan).
- Paschal, M. J., Pacho, T. O., & Adewoyin, O. (2022). Teaching methods applied in higher education during C0VID-19 pandemic in Africa. *International Journal of Educational Policy Research and Review*, *9*(1), 27.
- Pavelko, S. L., Lieberman, R. J., Schwartz, J., & Hahs-Vaughn, D. (2018). The contributions of phonological awareness, alphabet knowledge, and letter writing to name writing in children with specific language impairment and typically developing children. *American Journal of Speech-Language Pathology*, 27(1), 166-180.
- Pfost, M., Blatter, K., Artelt, C., Stanat, P., & Schneider, W. (2019). Effects of training phonological awareness on children's reading skills. *Journal of Applied Developmental Psychology*, 65, 101067.
- Qureshi, M. A., Khaskheli, A., Qureshi, J. A., Raza, S. A., & Yousufi, S. Q. (2023). Factors affecting students' learning performance through collaborative learning and engagement. *Interactive Learning Environments*, *31*(4), 2371-2391.
- Ramaswamy, S., & Lackey, A. D. (2023). Instructivism in Literacy as a Means for Social Justice: An Effective Path Forward with Direct Instruction Reading. *Behavior and Social Issues*, 1-31.
- Riaño, Y. J. (2024). Enhancing phonemic awareness in bilingual kindergarten students: the impact of multi-sensory material in prereading skills. Fundación Universitaria Juan N. Corpas
- Ruan, Y., Georgiou, G. K., Song, S., Li, Y., & Shu, H. (2018). Does writing system influence the associations between phonological awareness, morphological awareness, and reading? A meta-analysis. *Journal of Educational Psychology*, *110*(2), 180.
- Sarudin, N. A. A., Hashim, H., & Yunus, M. M. (2019). Multi-sensory approach: How it helps in improving words recognition?. *Creative Education*, 10(12), 3186.
- Sen, L. (2007). Communication skills. PHI Learning Pvt. Ltd.
- Siregar, D. Y., Khairani, Y. L., & Lubis, Y. (2023). The Influence Of Phonological Awareness On Early Literacy Development. *Jurnal Pendidikan dan Sosial Humaniora*, 1(3).
- Taft, S. H., Kesten, K., & El-Banna, M. M. (2019). One Size Does Not Fit All: Toward an Evidence-Based Framework for Determining Online Course Enrollment Sizes in Higher Education. Online Learning, 23(3), 188-233.
- Tridinanti, G. (2018). The correlation between speaking anxiety, self-confidence, and speaking achievement of Undergraduate EFL students of private university in Palembang. *International Journal of Education and Literacy Studies*, *6*(4), 35-39.

- Varpio, L., Ajjawi, R., Monrouxe, L. V., O'Brien, B. C., & Rees, C. E. (2017). Shedding the cobra effect: problematising thematic emergence, triangulation, saturation and member checking. *Medical education*, *51*(1), 40-50.
- Vasalou, A., Khaled, R., Holmes, W., & Gooch, D. (2017). Digital games-based learning for children with dyslexia: A social constructivist perspective on engagement and learning during group game-play. *Computers & Education*, 114, 175-192.
- Vygotsky, L., & Cole, M. (2018). Lev Vygotsky: Learning and social constructivism. *Learning theories for early years practice*, 66, 58.
 Wardana, I. K., Astuti, P. T., & Sukanadi, N. L. (2022). Examining the effect of phonological awareness instruction on EFL learners' pronunciation and motivation. *Erudita: Journal of English Language Teaching*, 2(2), 129-147.
- Wu, Z., & Juffs, A. (2022). Effects of L1 morphological type on L2 morphological awareness. *Second Language Research*, 38(4), 787-812.
- Xu, Y., & Harfitt, G. (2019). Is assessment for learning feasible in large classes? Challenges and coping strategies from three case studies. *Asia-Pacific Journal of Teacher Education*, 47(5), 472-486.
- Yeung, S. S., Siegel, L. S., & Chan, C. K. (2013). Effects of a phonological awareness program on English reading and spelling among Hong Kong Chinese ESL children. *Reading and writing*, *26*, 681-704.
- Zaretsky, E. (2020). English spelling acquisition by English Language Learners from Spanish-speaking background: The role of cognitive and linguistic resources and L1 reading status. *Cognitive Development*, *55*, 100918.
- Zoubek, M. (2017). Increasing the Reading Achievement of Elementary English Language Learners: The Critical Role of Oral language and Phonological Awareness in Learning to Read in a Second Language (Doctoral dissertation).