



## The Role of Phonological Awareness in Developing Speaking Skills: A Focused Literature Review

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### Abstract

Phonological awareness is the ability to identify and understand sounds of language, a critical skill for early literacy growth. Although much research has confirmed the importance of phonological awareness in learning to read and spell, interaction with speaking abilities has been insufficiently studied. This literature review presents a synthesis of early and latest researchers from the 1930s – 2024 to explain the link between phonological awareness and speaking skills. The study provides an overview of theoretical models, research results, and pedagogical practices showing the links between phonological awareness and pronunciation, fluency, and speaking accuracy in general. Although the crucial role of phonological awareness in reading is well recognized, small research has been devoted specifically to how phonological awareness helps attain proficiency as a speaker. This gap highlights the need for research into how phonological awareness contributes to oral language proficiency through specific pathways. This highlights the need for educators and policymakers to incorporate phonological awareness and play-based learning activities into language instruction to develop communication skills across diverse student groups.

**Keywords:** Phonological Awareness, Speaking Skills Development, Pronunciation, Fluency, Language Development

### Introduction

Phonological awareness includes an individual's ability to recognize and manipulate the sound structures of language, which underlies literacy development more broadly (see Figure 1). It includes rhyming, syllable segmentation, and phoneme manipulation — all crucial literacy and oral language skills. Speech production, involving pronunciation, fluency, vocabulary usage, and grammatical accuracy, is fundamental to verbal communication or linguistic proficiency for both native and second-language speakers.

Much research has identified a strong association between phonological awareness and reading ability development (Adams et al., 1998; National Reading Panel, 2000). Phonological awareness is considered one of the best predictors of early reading success because it supports decoding written language, just as it supports spelling. Even though literacy research is ongoing, there is insufficient acknowledgment of the value of phonological awareness in speaking Development. The difference between these findings indicates a potential blind spot in educational research and practice. As such, it is committed to investigating the role of phonological awareness in oral language proficiency.

This literature review aims to find the relationship between phonological awareness and speaking skills from 1930 to 2024. This review aims to comprehensively understand how phonological awareness affects speaking proficiency by reviewing



theoretical frameworks, empirical studies, and educational interventions. It also highlights limitations of existing research, notably an emphasis primarily on speaking skills in the literature, and recommendations for future research and pedagogy. The review provides focused insight on the importance of including phonological awareness tasks for improving students' abilities to speak in the language instruction setting that can inform educators, policymakers, and researchers not only by indicating areas needing further exploration but also effective strategies.

## Enhancing Speaking Skills through Phonological Awareness

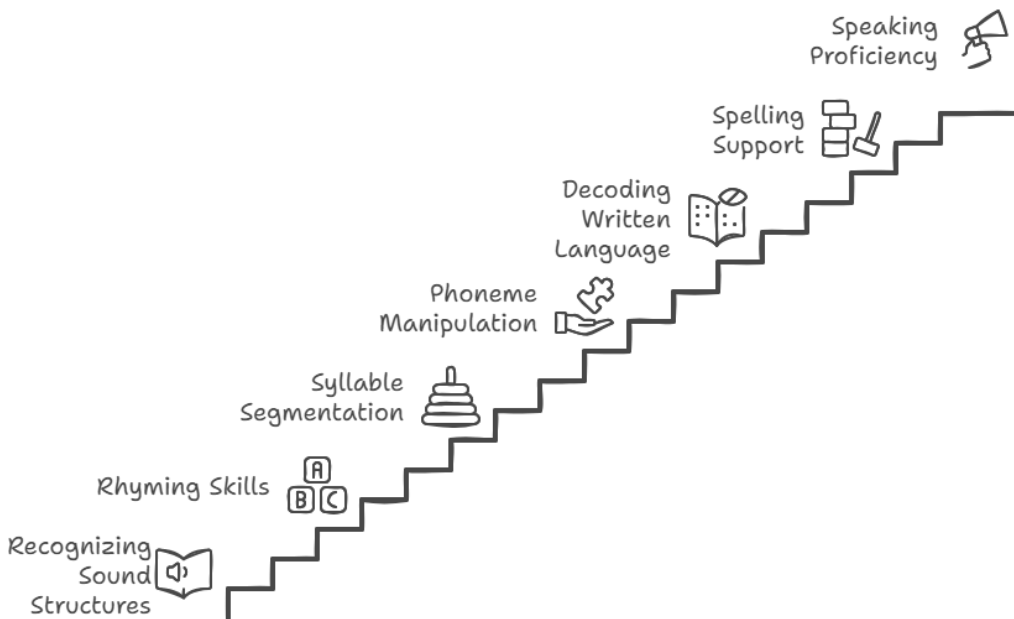


Figure 1. Enhancing Speaking Skills Through Phonological Awareness

### Theoretical Framework

An in-depth theoretical perspective is required to study the relationship between phonological awareness and speaking skills. Many theories can be used to understand phonological awareness and its contribution toward language development, which is central to oral language proficiency. This section contains four overarching theoretical perspectives: Cognitive Load Theory, Sociocultural Theory, Information Processing Theory, and Phonological Processing Theory (see Figure 2). Each theory gives a different insight into the relationship between phonological awareness and speech production skills.



### **Cognitive Load Theory**

Cognitive Load Theory, proposed by Sweller (1988), suggests that our cognitive capacity is limited, and instructional design should consider this to support better learning. For sound awareness and speech, Cognitive Load Theory proposes that control over processing phonological information eases verbal communication. Automate phonemic and phonological activities, such as rhyming and phoneme manipulation, to minimize cognitive load during sound recognition and production. This effectively offloads cognitive load, making the speakers free to address higher understandings of language, such as flow and cohesion (Sweller, 1988).

### **Sociocultural Theory**

The Sociocultural Theory, developed by Vygotsky (1978), highlights the significant role of social interaction and cultural context in cognitive Development. This theory posits that learning is a socially mediated process, and language development depends heavily on interactions with others who are more knowledgeable. Phonological awareness tasks such as rhyming games with peers or peer-assisted phoneme manipulation in groups match the social learning component of Sociocultural Theory. These activities improve phonological outcomes and afford opportunities to develop speaking skills through meaningful language and interaction in socially supportive learning communities (Vygotsky, 1978).

### **Information Processing Theory**

According to information processing theory, the human mind is a system that processes, stores, and retrieves the same information. This theory illustrates that efficient information processing mechanisms are needed in language development to produce fluent and correct speech effectively. Phonological awareness exercises improve the manipulation and storage of tasks relevant to the speech process (i.e., more effective encoding and retrieval). These exercises help the way you speak advance because by having a tighter semblance of what sounds belong in vogue, your brain can retrieve them from memory and create more developed utterances (Atkinson & Shiffrin, 1968).

### **Phonological Processing Theory**

The Phonological Processing Theory focuses on mechanisms needed for phonological information processing and organization in language development. This theory describes the three elements of phonological processing (phoneme awareness, short-term memory, and rapid naming) and how they influence speaking abilities, among other language skills (Wagner & Torgesen, 1987). Phonological awareness as a construct includes phonemic, syllabic, and rhyme awareness, which is necessitated for formulating letters in words and proper articulation. Better phonological processing, in turn, leads to better retrieval and production of phonological information during speaking— as



evidenced by improved pronunciation— and in terms of its connection to higher fluency and overall verbal communication (Wagner & Torgesen, 1987).

## Integration of Theories

From the perspectives of each theory, we can find a lot about how phonological awareness influences speaking skills and, therefore, viewed together, offer the whole picture. The Cognitive Load Theory is related to the role of processing efficiency; the Sociocultural Theory describes interactive value; the Information Processing Theory indicates the relevance of content design and recovery knowledge; and the Phonological Processing Theory addresses the specific cognitive constituents required by phonological awareness. These theories suggest that phonological awareness activities help develop speaking skills by lowering cognitive demands, promoting interpersonal learning contexts, increasing information processing capacity, and strengthening the phonological structures in memory.

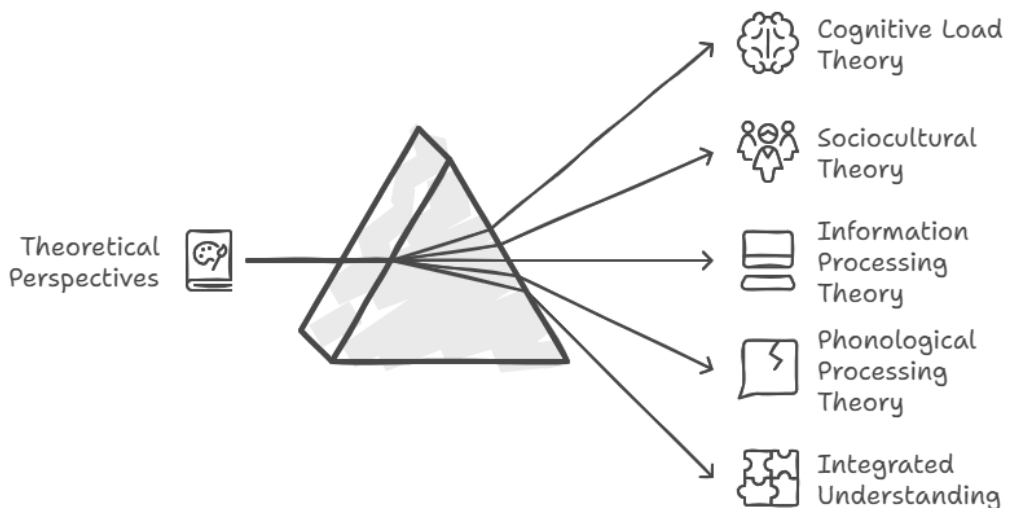


Figure 2. Theoretical Perspectives on Phonological Awareness and Speaking Skills

## Application to Phonological Awareness and Speaking Skills

These theoretical perspectives applied to the relationship between phonological awareness and speaking reveal how structured phonological activities can be beneficial in fostering verbal communication. Focusing on phonological processes is connected to Cognitive Load Theory, which describes the benefit discovered by automating phonological awareness through practicing speaking fluency and coherence. Sociocultural theory also explains that social exchanges reinforce phonological units and speaking skills, and the Information Processing Theory points to improved phonological representations as



the foundation for more efficient speech production. Phonological Processing Theory Bridges the relationship of these elements by explaining that it is a cognitive component skill transfer from phonological awareness to speaking.

Overall, Cognitive Load Theory, Sociocultural Theory, and Information Processing Theory combined with the Phonological Processing Model offer a comprehensive view of the relevance of phonological awareness in speaking Development. Such theories describe the cognitive and social activities that underlie lower and higher language proficiency levels and help us systematically interpret other studies (learning about designing an effective educational intervention) to increase people's language proficiencies.

### **Phonological Awareness and Speaking Skills Development**

It is paramount to note that phonological awareness predicts numerous outcomes in language, with effects detected on measures such as reading and oral language skills (see Figure 3). Therefore, the relationship between phonological awareness and speaking skills extends beyond simply recognizing sounds by combining three aspects: phoneme recognition, manipulation, and even production. In this regard, this section contains some empirical studies closely related to how phonological awareness plays a role in pronunciation, fluency, and articulation by various researchers.

### **Pronunciation and Articulation**

Correct pronunciation is a significant factor in developing speaking skills, and phonological awareness aids in it. Rhyming games and phoneme manipulation tasks have been found to promote the ability to produce sounds accurately (Biemiller, 2003). An example of this can be found in a study by Lonigan, Burgess, and Anthony (2000), who found that children who received systematic phonological awareness interventions could improve their pronunciations compared to those receiving no intervention. Unpacking the sound structures of language gives children practice in reliable phoneme articulation.

Likewise, Munson and Archibald (2005) found that phonological awareness training also decreased speech errors in children with speech delay. The paper showed that focusing on phonemic activities enhanced the sound system generation, bringing about higher speech production by enhancing those synapses in memory that are accountable for carrying the articulation contrasts.

Subsequent studies have expanded these results to second language learners. In another example, Kivistö-de Souza (2015) investigated the role of phonological awareness on speech perception in second-language acquisition and claimed that for L2 learners' high phonological awareness leads to better pronunciation and reduced accentuates. This finding shows that phonological awareness benefits not only monolinguals, native speakers



of a language, but also second language users regarding how well they pronounce it (Kivistö-de Souza, 2015).

### **Fluency**

Speaking fluency means the ability to speak effortlessly and continuously without too much hesitation or repetition. Phonological awareness helps by speeding up the process of recognizing and producing phonemes. Wagner and Torgesen (1987) posited that one of the benefits related to enhanced phonological processing is quicker access to phonological information, which supports more fluent speech production.

A study examined the effects of phonological awareness instruction on speaking fluency in young elementary students (Torgesen, Wagner, Rashotte, Voeller, & Lindamood, 1999). The students made significant gains in their speaking fluency as measured by decreased pauses and increased speech rate after being instructed on phonological awareness. These findings suggest that training in phonological awareness can aid fluid, natural speech by reducing the cognitive load associated with the processing of sounds.

Follow-up research from Wardana et al. (2022) examined the impact of phonological awareness instruction on pronunciation and motivation in EFL learners. Explicit phonological training, in turn, was shown to increase pronunciation fluency and learner intrinsic motivation for speaking, thus contributing to improved overall speaking proficiency (Wardana et al., 2022).

### **Vocabulary and Grammatical Accuracy**

Although phonological awareness refers to sound structures, its involvement goes beyond the strict word level concerning vocabulary and syntax. It improves the ability to produce and decode words precisely and simultaneously facilitates learning vocabulary and correct grammar in speech (Biemiller, 2003).

In the second-language acquisition context, Felker et al. (2021) investigated how explicit instruction in phonological awareness influences L2 sound contrast perception among younger and older adults. Findings showed that explicit phonological training improves phonological processing and grammatical accuracy in L2 speakers, demonstrating the relationship between phonological skills and more general language skills (Felker et al., 2021).

### **Transfer to Speaking Skills**

Numerous cognitive processes transfer phonological awareness skills to speaking abilities, including decoding phonemes, memory, and retrieval. Phonological awareness activities train the brain to disassemble and reassemble sounds, making spoken language



more straightforward to produce for efficiency. This means better pronunciation, more fluency, and a clear speaker because all this counts as ultimate verbal communication.

Similarly, Stanovich (1986) found a longitudinal relationship in which early phonological awareness skills were significantly related to later speech production. From preschool through early elementary school, kids with higher phonological awareness had more proficient speaking abilities—and more precise pronunciation and more fluent speech—than those with weaker levels of this type of knowledge.

In addition, the most recent research has examined phonological awareness in adult learners. Alastair (2024) investigated the English phonological awareness of adult Saudi learners and discovered a significant positive correlation between phonological awareness and pronunciation accuracy. Consequently, phonological skills have a significant effect not only on the learning of an adult's second language but also on their oral proficiency (Alasmari, 2024).

In summary, phonological awareness plays a crucial role in developing speaking skills. Phonological awareness activities improve pronunciation accuracy, fluency, vocabulary, and grammatical correctness, culminating in better verbal communication. The empirical findings support including phonological awareness training in language teaching to promote speaking proficiency in varied learner groups.

### Enhancing Speaking Skills through Phonological Awareness

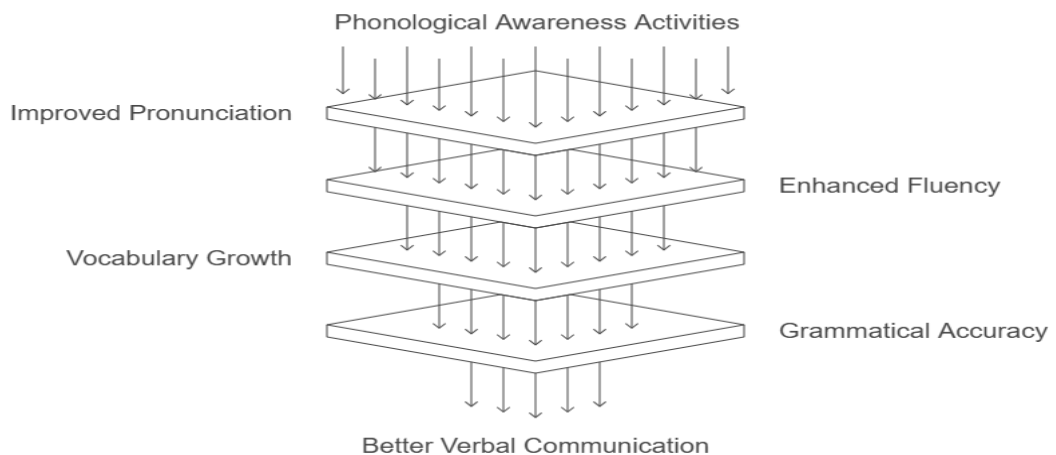


Figure 3. Layers of Speaking Skills Enhanced by Phonological Awareness

### Gaps in Literature





Although much research is available on phonological awareness and its importance in language development, gaps remain in the scientific literature (see Figure 4). Spotting shortcomings like these is crucial for moving forward and educating educators on phonological awareness and verbal skills.

### **Limited Focus on Speaking Skills**

Most phonological awareness research has focused on reading and writing development (Adams et al., 1998; National Reading Panel, 2000). Although the overall implications of phonological awareness on language are well recognized, their impact on speaking has not been investigated to that extent. This narrow focus indicates a gap in knowledge about how phonological skills map onto oral language competence more broadly.

**Recommendation:** Future research should explore phonological awareness and speaking skills directly. This includes examining how particular phonological awareness activities impact speaking (e.g., pronunciation accuracy, fluency, and articulation).

### **Longitudinal Studies on Speaking Skill Development**

Although several studies have investigated the concurrent effects of phonological awareness instruction on speech, a dearth of research examines the longitudinal impacts over time. Longitudinal research studies are needed to discern the lasting effect of phonological awareness on speaking proficiency across time and whether early phonological skills presage later speech success.

**Recommendation:** Future research should conduct longitudinal studies that follow students from early childhood through later elementary years to assess the enduring effects of phonological awareness training on speaking skills.

### **Phonological Awareness in Diverse Populations**

Much research on phonological awareness and speaking skills has focused on monolingual, generally developing children. There is inadequate research on how phonological awareness interventions impact speaking skills in varied populations, including bilingual or multilingual students, students with speech or language impairments, and students from numerous social backgrounds.

**Recommendation:** Additional studies should explore the relationship between phonological awareness and speaking skills in diverse populations to develop inclusive and culturally responsive instructional strategies.

### **Integration of Phonological Awareness with Other Language Domains**



Phonological awareness does not operate in isolation; it interacts with other language domains, such as vocabulary, syntax, and semantic understanding. However, the literature often treats phonological awareness and speaking skills as separate constructs without examining their interdependencies.

**Recommendation:** Future research should investigate the interplay between phonological awareness and other language domains to develop a more integrated understanding of language development and to inform comprehensive instructional approaches.

### **Effectiveness of Technology-Based Interventions**

Although phonological awareness interventions are becoming increasingly available through newer technology tools, only a handful of empirical studies have compared traditional workshop-based teacher-led approaches to their technological counterparts. Decisive, evidence-based integration of digital tools and applications in educational practices requires understanding the relative efficacy of those technologies. Prior research indicates that digital tools can effectively enhance phonological awareness and student engagement (Naeem & Khan, 2024).

**Recommendation:** Consequently, comparative studies examining the efficiency of technology-based phonological interventions compared to traditional methods are crucial for educators to know which instructional tools to choose.

### **Mechanisms of Transfer from Phonological Awareness to Speaking Skills**

The specific cognitive and linguistic mechanisms through which phonological awareness influences speaking skills remain underexplored. Understanding these mechanisms can enhance the design of more effective phonological interventions directly targeting speaking proficiency.

**Recommendation:** Future research comparing the cognitive and linguistic mechanisms that underlie the transfer of phonological awareness training to speech outcomes can help design effective interventions.

### **Variability in Intervention Implementation**

There is substantial variability in how phonological awareness interventions are delivered from one educational setting to the next. This variability in programming has made it difficult to compare findings and make generalizations about the effectiveness of phonological awareness activities.

**Recommendation:** Standardizing intervention protocols and reporting implementation fidelity in research studies can facilitate more consistent and comparable findings, thereby strengthening the evidence base for phonological awareness interventions.



All in all, taking into account the associations between phonological awareness and speaking skills is an essential step; however, addressing the aforementioned gaps provides a foundation for more precise understanding and thereby strengthens the capacity to use these findings in educational practices with relevance. For the field to move forward regarding phonological awareness and spoken language development, future research needs longitudinal designs, inclusion of varied populations, an analysis across language domains, evaluation of technology-based interventions, investigation into mechanisms of transfer, and use of implementation protocols.

### **Implications for Practice**

The learnings derived from the phonological awareness and speaking skills research can be helpful in education practice, curriculum design, and policy making. This section elaborates on some primary practical uses of the conclusions drawn from the investigations and suggests possible measures for teachers, speech therapists, and policymakers.

### **Curriculum Integration**

Integrating phonological awareness activities into the language curriculum is important for developing speaking skills. Teachers should systematically include phonological tasks in their lessons so that they are embedded in other language teaching activities.

**Recommendation:** Design a comprehensive language program in which phonological awareness activities like rhyme games, segmentation of syllables, or phoneme manipulation will be regularly conducted. These activities should be placed in context with other activities within the literacy and oral language lessons to bridge the relationship between phonological and speaking skills (Adams et al., 1998).

### **Professional Development for Educators**

Teachers must have exceptional knowledge of phonological processing and appropriate instructional practices for phonological awareness instruction to be meaningful and relevant. They must also be engaged in continued professional training to be knowledgeable and competent in phonological awareness activities.

**Recommendation:** Create structured in-service training programs to cover phonological awareness, including training in recommended practices, instructional approaches, and evaluation methods. Increasing the number of teachers with such a possibility and providing them with comprehensive assistance and materials promotes effective phonological instruction and the Development of speaking skills (Harvey & Goudvis, 2007).

### **Use of Multisensory and Interactive Activities**

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Using a variety of senses in interactive phonological awareness activities increases students' participation while ensuring that the phonological skills are ingrained into their minds. Diversity increases when visual, auditory, and kinesthetic aspects are included in phonological activities.

**Recommendation:** Devise and carry out multisensory phonological awareness activities incorporating visual, auditory, and tactile elements. For example, use props and charts for syllable segmentation, conduct drills to identify phonemes, and utilize touch in rhyming games. Interactive technologies, such as educational games and computer software, can also enhance phonological learning experiences (Gillon, 2004).

### **Differentiated Instruction**

Phonological awareness instruction should be differentiated to meet students' needs because there is a wide range of phonological skills and learning styles based on their diverse needs. Phonological awareness instruction can be tailored so all students, including those with speech or language impairments, can benefit from the activities.

**Recommendation:** Implement differentiated phonological awareness instruction by providing varied levels of task complexity, offering additional support for students who require it, and incorporating enrichment activities for advanced learners. This approach ensures that all students receive the appropriate level of challenge and support to develop their speaking skills effectively (Biemiller, 2003).

### **Assessment and Monitoring**

Regular assessment of these skills is necessary to monitor student progress and tailor instruction to the associated skills of phonological awareness and speaking. Through standardized assessment tools, educators can pinpoint a student's strengths and weaknesses so that intervention can target the existing gap.

**Recommendation:** Regular assessments should be conducted using validated phonological awareness and speaking skill measurement tools. Assessment data can be used to make instructional decisions, to deliver individualized support, or to measure the effectiveness of phonological awareness intervention over time (Torgesen et al., 1999).

### **Collaboration with Speech Therapists**

Collaboration between educators and speech therapists can also enhance the effectiveness of phonological awareness interventions, especially for students with speech and language impairments. Speech therapists can offer specialized support and expertise in developing phonological skills that translate into better speaking competence.

**Recommendation:** Develop partnerships between classroom teachers and speech therapists to develop and carry out phonological awareness activities collaboratively with



students who exhibit speech delays or language impairment to meet their needs. The shared intervention strategies and other aspects of joint planning affirmatively reinforce a united approach to supporting speaking skill development.

### Policy Support for Phonological Awareness Programs

Educational policies that emphasize phonological awareness, a critical component of language instruction, can drive the implementation of effective phonological awareness programs. However, policy support guarantees that phonological awareness activities are adequately resourced and incorporated into educational regulations.

**Recommendation:** Educate to raise voices for educational policies that see phonological awareness as a key aspect of language development and fund phonological awareness programs. Thus, policies should support professional development, resource allocation, and integration into the curriculum for widespread implementation of effective phonological awareness practices (National Reading Panel, 2000).

In conclusion, the literature on phonological awareness and speaking skills offers valuable insights that can inform and enhance educational practices. By integrating phonological awareness into the curriculum, providing professional Development, utilizing multisensory activities, differentiating instruction, conducting regular assessments, collaborating with speech therapists, and advocating for supportive policies, educators and policymakers can effectively foster speaking skills development in diverse student populations.

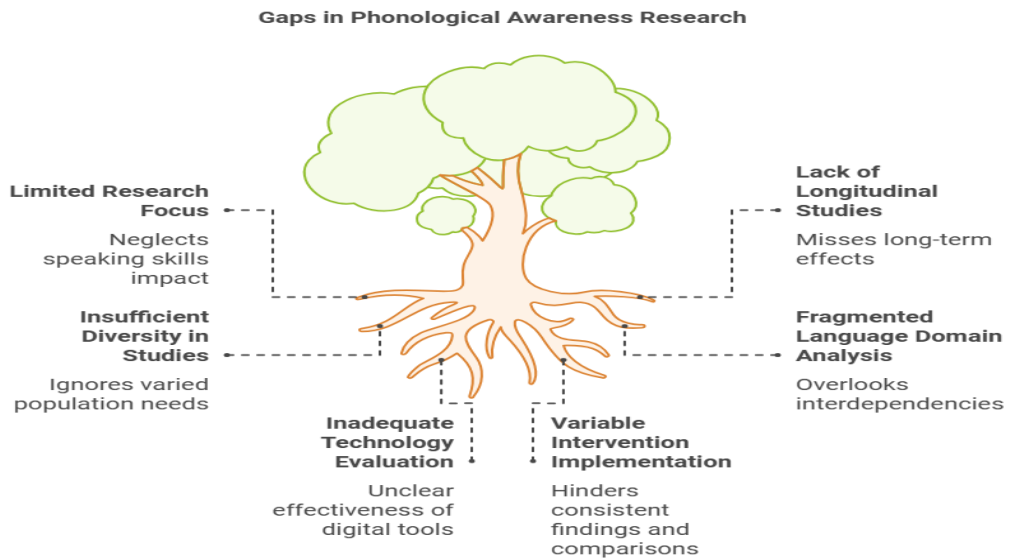


Figure 4. Gaps in Phonological Awareness Research



### Conclusion

Being phonologically aware is part of developing language and is quite important to children's Development of speaking skills. This literature review has synthesized research from the last two decades to interpret the mechanisms by which phonological awareness provides a basis for speaking competence (pronunciation accuracy, fluency, and articulation). Cognitive load theory, sociocultural theory, information processing theory, and phonological processing theory fully explain how cognitive and social processes linked to phonological awareness also lead to speaking skills.

Many empirical studies find that successful phonological awareness work has ramifications for different areas of speaking proficiency. Structured phonological awareness programs, technology-enhanced interventions, and collaborative learning strategies can enhance pronunciation, fluency, and verbal communication. Nevertheless, implementing phonological awareness activities is limited by challenges, including inadequate instructional time, resource restraints, and differing student needs.

Areas for future investigation include the gap in longitudinal studies, the need to study more diverse populations, and the relationship between phonological awareness and other language domains, which should be considered. It will fill some gaps in understanding how phonological awareness impacts speaking skills and help construct additional helpful educational interventions.

From a reflective perspective of practice, the study's implications are the integration of curriculum, professional Development, multisensory instructional approach, differentiated instruction, consistent assessment, the alliance of speech therapists, and supportive educational policies. Educators and policymakers can embrace the recommendations and help design supportive environments to develop speaking skills, allowing phonological awareness activities in the correct order of speaking processes.

To put it simply, children must learn phonological awareness to speak effectively. Educators can incorporate phonological awareness activities into language, which play a key role in pronunciation, fluency, and oral communication skills. Theoretical frameworks and empirical studies reviewed elucidate the varied effects of phonological awareness on spoken proficiency (see Figure 5). The evidence is contradictory regarding challenges in the execution of the literature yet to be identified and the paramount importance of phonological awareness for language development.



## Enhancing Speaking Skills through Phonological Awareness



Figure 5. Enhancing Speaking Skills Through Phonological Awareness

Research into these areas needs to be done in the future, such as longitudinal studies and studies of diverse populations. Targeted instructional approaches are derived for Development based on understanding how phonological awareness affects speaking skills. Educators and policymakers can equip students with the ability to efficiently communicate in linguistically diverse contexts by focusing on phonological awareness in evidence-based interventions in educational policies.

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