The Importance of Phonemic Awareness Instruction for African American Students

by Ramona T. Pittman, Marianne Rice, Esther Garza, and Myriam J. Guerra

Research has shown that educator preparation programs may not adequately prepare teachers to teach students to read (Binks-Cantrell et al., 2012; Pittman et al., 2020), although decades of research has confirmed that the science of reading is a body of knowledge that informs how proficient reading and writing develops, how reading and writing should be assessed and taught, and what happens when a student does not learn to read (Moats, 2020; The Reading League, 2022). Science of reading knowledge, therefore, can increase the literacy outcomes of students.

Because of the high percentage of students who are not reading proficiently, the science of reading has gained considerable attention in recent years as school districts, educator preparation programs, and content providers move away from Balanced Literacy toward science of reading aligned instruction.

When learning about the science of reading, teachers come to understand the structure of the English language, so they can help students learn to decode and encode (spell). In order to be successful with both of these skills, one must become aware of individual sounds (phonemes) in words. Phonemic awareness is important because it facilitates students being able to decode and encode using the alphabetic principle of mapping phonemes to letters or letter combinations (graphemes). When spelling without automaticity, for example, one must consciously segment each phoneme in the word and map it to the correct grapheme, as would happen when spelling the pseudoword vust. If a student was asked to read the word vust, the student must be able to attach a phoneme to each grapheme and then blend the phonemes together to decode the word. The ability to understand and teach the structure of the English language at the phoneme level is crucial when students are learning to read and spell.

Phonemic Awareness Instruction

Phonemic awareness is the ability to blend, segment, and manipulate individual speech sounds, or phonemes, in words (Ehri, 2022; Mesmer & Kambach, 2022). A phoneme is the smallest unit of speech sound that changes the meaning of a word (Uhry, 2013); if the /b/ in bat was changed to /r/, the new word would be rat, thus changing the meaning. Students with good phonemic awareness skills will notice that mat (/m/ /a/ /t/), shut (/sh/ /u/ /t/), church (/ch/ /ur/ /ch/), and through (/th/ /r/ /oo/) are composed of three individual phonemes regardless of how many letters are present in the word.

Phonemic awareness falls under the umbrella of phonological awareness. Phonological awareness is understanding how spoken language can be broken down and manipulated and includes (a) rhyming and alliteration, (b) sentence segmentation, (c) blending and segmenting syllables, (d) blending and segmenting onset and rime, and (e) blending, segmenting, and manipulating phonemes (i.e., phonemic awareness; Ehri, 2001). The skills listed before phonemic awareness deal with larger chunks of spoken language and progress from the word level to the syllable level and then to the level of individual phonemes. Stu-
Students who are able to manipulate phonemes in words are more likely to be successful at decoding and spelling, as phonemic awareness is a predictor of later reading success (Erbeli, 2018; Melby-Lervag et al; 2012). Those who cannot manipulate phonemes have difficulty decoding and spelling (Ehri et al., 2001; Ehri, 2020). This is especially true for children learning in a language or dialect that is different from what they experience at home.

Given that many students enter school with limited phonemic awareness skills (Hatcher, et al., 2004), it is necessary for teachers to provide explicit phonemic awareness instruction, as it serves as a foundation for solid decoding ability (Brady, 2020). In a recent meta-analysis, Rice et al. (2022) found that phonemic awareness instruction was shown to be effective in improving the phonemic awareness skills of students on all phonemic awareness tasks (e.g., identification, isolation, blending, and segmenting) in preschool and first grade. Rice et al. (2022) also found that phonemic awareness instruction was effective regardless of the size of the instructional group (e.g., small group, whole class), who provided the instruction (e.g., teachers, parents, or computer programs), and whether the students were at risk for reading difficulties or were English language learners.

English has a relatively opaque writing system, meaning there is not always a 1:1 correspondence between letters and sounds. For example, one has to learn whether the consonant digraph th is going to be pronounced as /th/ in bath (unvoiced sound, when the vocal cords do not vibrate) or /TH/ in bathe (voiced sound, when vocal cords vibrate). Phonemic awareness instruction is pivotal in ensuring that students can notice the distinct sounds between /th/ and /TH/ or that the final sounds in magic, stomach, plank, and stick are the same.

Russak (2013) noted that if students are unable to perform phonological awareness tasks in their home language, then these tasks would be difficult when learning other languages as well. An additional problem is that familiar phonemes such as consonant digraphs /sh/, /th/, and /wh/ may not exist in the language that the student is learning (Russak, 2013).

**Phonemic Awareness and African American Students**

In the U.S., African Americans account for about 13% of the population. Of this 13%, approximately 80% speak a dialect of English called African American English (AAE; Rickford, 1999). AAE is a variety of English that is rule-governed and “has a set of phonological (system of sounds), morphological (system of structure of words and relationship among words), syntactic (system of sentence structure), semantic (system of meaning), and lexical patterns (structural organization of vocabulary items and other information)” (Green, 2002, p. 1).

According to Green (2011), however, when it comes to oral language, speakers can be on various levels of a continuum of points A-D, where point A represents general American English (GAE; Washington & Seidenberg, 2022), the language expected to be spoken in school settings, and point D represents AAE, the heritage language of many African Americans. Depending upon the audience, some students are able to “style shift” (Wolfram & Schilling 2015) from each point effortlessly, while others may have difficulty moving along the continuum between AAE and GAE. Labov (1995) questioned whether AAE could be a possible source of reading difficulty for African American students style shifting to GAE. Charity et al. (2004) argued that many teachers set low expectations for African American students based upon the language they speak, when instead, each person’s language should be valued as a part of their heritage. AAE speakers are linguistically diverse, as they both understand AAE and style shift to GAE when using expressive language (speaking and writing) or receptive language (listening and reading). Few studies have focused specifically on phonemic awareness instruction with AAE speakers.

With a focus on the importance of phonemic awareness, educators must become familiar with AAE so they will not assume that students who speak AAE have phonological difficulties. This viewpoint causes students to be viewed as “less than,” when in fact, they may...
AAE speakers are linguistically diverse, as they both understand AAE and style shift to GAE when using expressive language (speaking and writing) or receptive language (listening and reading). Few studies have focused specifically on phonemic awareness instruction with AAE speakers.

have phonological differences (Delpit, 2006). It is important, therefore, to understand the phonological features of AAE since it plays such a key role in understanding the language structure of English. The phonological features of AAE that are most often used include the following:

- final consonant blend reduction → pass (past), dess (desk), mine (mind)
- unvoiced /th/ → tin (thin), teef (teeth)
- voiced /TH/ → dat (that), breave (breathe)
- reduction of the final /r/ → poe (pour)
- reduction of middle and final /l/ → hep (help), pia (pill)
- reduction of final /g/ in gerunds → dancin (dancing)
- three letter initial consonant blend str → skraw (straw)

(For a complete list, see Rickford [1999] and Green [2002].)

For students who speak AAE, a discrepancy exists between the language they use and the language that is expected to be used in school. For example, a teacher may read a book that features the word four. If the student is familiar with the pronunciation foe but not four, the student’s comprehension may be compromised due to the difference in the pronunciations of the word. It is important for teachers to understand these features so they can better understand style shifting for formal classroom instruction, the AAE-related pronunciations that may appear in their students’ spellings (Pittman et al., 2014), and how phonological spelling is derived from sounds heard in words (Read, 1971; Treiman, 2018).

Many students who speak languages other than English participate in emergent bilingual classes. These classes often teach students how to speak, read, and write in GAE. African American speakers are not given similar opportunities because many educators remain either unaware of AAE (Pittman, 2017) or think that since AAE is English, these students are not bilingual/bidialectal. If teachers remain unaware, they cannot provide instruction to help students style shift to GAE, while at the same time, acknowledge and appreciate their dialect.

Phonemic awareness instruction will be especially important for students who are AAE speakers, especially when they begin to blend and segment words using GAE. Teachers will need to note the number of phonemes in a word as well as how the student pronounces them. For example, if showing a picture of a tooth and asking how many phonemes the word has, a student responding that it has three phonemes is correct. When asked to segment the word into its three phonemes, the student might identify the phonemes as /t/ /oo/ /f/ instead of /t/ /oo/ /th/. The teacher has to draw attention to these phonemes so that the mismatch between the phonemes does not impede the student’s spelling or decoding. Again, this is a phonological difference and not a phonological deficit.

Practical Applications
In this section, we suggest modifications of three widely used phonemic awareness tasks to focus specifically on the phonology of AAE speakers.

Elkonin sound boxes. One of the most prevalent phonemic awareness tasks is sound boxes, where students move a counter to a drawn box for each phoneme in the word. For example, if the word is test, the student would move four counters into a box, one for each phoneme, while saying each phoneme out loud. A teacher might notice a student moves and says only three phonemes, and because she knows that some AAE speakers reduce the final phoneme /t/ and pronounce the word as tes, the teacher can then use the Elkonin box task to instruct that in GAE, there are four phonemes in test. Students can eventually use counters featuring letters to build alphabetic knowledge as well as phoneme awareness. Keesey et al. (2015) found a positive relationship

Phonemic awareness instruction will be especially important for students who are AAE speakers, especially when they begin to blend and segment words using GAE.
between sound box instruction, segmentation skills, and letter correspondences.

**Mirrors.** Mirrors are used to notice mouth movements in alphabets instruction, and they are particularly useful for AAE speakers. The students can see how their tongue, teeth, and/or lips are in different positions when pronouncing phonemes such as /th/ in *bath* and the /fl/ in *baf*. They can also see that when mouth movements appear the same, such as when pronouncing /t/ and /d/, the phoneme is different because one is unvoiced and one is voiced (AAE speakers might transpose these sounds). Treiman (2004) found that AAE students spelled words such as *ballot* as *balloed* and *rigid* as *rigit*. Mirrors can reinforce instruction and allow students to see what is happening when phonemes are produced. For a list of phoneme cognates (phonemes that have identical mouth movements with one being voiced and the other unvoiced), see Carreker and Birsh (2019).

**Incorporating letters.** Phonemic awareness instruction combined with letters enhances the alphabetic principle, spelling, and decoding (Clemens et al., 2021). When incorporating letters, consider those that AAE speakers might use to represent phonemes perceived in words. For example, a student may not represent the final consonant in the consonant blend -ld, writing *hole* instead of *hold*, so it is important that the teacher understand that this spelling may be based upon AAE phonology. The final phoneme may not be represented in print if it is not noticed by the student.

The key to equitable teaching of phonemic awareness instruction for African American students is to provide engaging tasks while paying particularly close attention to those sounds that may vary from GAE. Moreover, when assessing sounds on phonological assessments, educators should understand the specific sounds that might be produced by AAE speakers so that their pronunciations will not be considered errors. Teachers should make note of responses during an assessment and address them with the student during instruction. Remembering that variances be-

---

**References**


Treiman, R. (2018). Teaching and learning spelling. Child Development Perspectives, 0(0), 1-5. doi: 10.1111/cdep.12292

Results that change outcomes.

To help all students achieve successful reading outcomes, you need to know where they’re at, where they need to get to, and whether they are making progress toward their goals. Backed by decades of research and development, Acadience Reading helps you to identify students who are at risk for reading difficulties early, set meaningful learning goals, and target instruction so they get back on track.

Find out more at acadiencelearning.org.
Ramona Pittman

Dr. Ramona T. Pittman is an associate professor in the Department of Teaching, Learning, and Culture at Texas A&M University. She has B.S. and M.Ed. degrees in elementary education and a Ph.D. in curriculum and instruction with an emphasis in literacy. She has taught PK-12 and higher education for over 20 years. Her research interests include African American English and literacy, preservice and inservice teacher knowledge, and literacy development in decoding and encoding (spelling), with the idea that these are intertwined to create equitable learning experiences for all students.

Marianne Rice

Marianne Rice is currently a doctoral student in the Department of Educational Psychology with a focus on special education at Texas A&M University. She has taught for over 10 years in public education in early childhood grade levels and as a reading interventionist and specialist. Her research focuses on early identification and intervention for students with reading difficulties and disabilities, as well as how to identify and support students with dyslexia.

Esther Garza

Dr. Esther Garza is chair of the Department of Educator and Leadership Preparation and an associate professor of bilingual and ESL education at Texas A&M University - San Antonio. She spent 10 years as a certified bilingual teacher and has been a bilingual and ESL faculty member in higher education for over 20 years. Her research interests are in biliteracy development, bilingual teacher preparation, STREAM education for bilingual learners, bilingual health education, and multiculturalism.

Myriam Jimena Guerra

Dr. Myriam Jimena Guerra is an assistant professor in the Department of Bilingual and ESL Education, College of Education and Human Development at Texas A&M University - San Antonio. She has 18 years of experience in the education field of bilingualism and bilingual teacher preparation. Her research focuses on biliteracy development among children and young adults, literacy practices of linguistically and culturally diverse populations, and primary and secondary discourses at school and home.