# Same or Different How Bilingual Readers Can Help Us Understand Bidialectal Readers 

Nicole Patton Terry, Brandy Gatlin, and Lakeisha Jobnson


#### Abstract

Reading achievement gaps are prominent in U.S. schools, most notably when comparing the performance of African American and Latino/Hispanic children to their White peers. Among the many reasons offered to explain and address these achievement gaps, language differences and language proficiency are primary considerations because many African American children are bidialectal and many Latino/Hispanic children are bilingual. A review of research findings on the relations between language and reading development and performance in these two distinct student populations suggests that bidialectalism and bilingualism are not risks to be remedied. Rather, they are unique language experiences that have different implications for children's English language knowledge and, therefore, reading development and achievement. Moreover, there is evidence that, when provided with rich and robust language interactions, bidialectalism and bilingualism can be leveraged as strengths to support literacy learning. Key words: achievement gap, bidialectal, bilingual, English learner, literacy, reading


IT IS WELL known that, in U.S. schools, children from race- and ethnic-minority backgrounds do not perform as well as their peers academically. These achievement gaps are most apparent when comparing African American and Latino/Hispanic children with their peers. For example, results from the

[^0]DOI: 10.1097/TLD.0000000000000141

National Assessment of Education Progress (NAEP) consistently reveal significant gaps in performance between African American and Hispanic children compared with White students, with little narrowing in these gaps over the last 30 years (National Center for Education Statistics [NCES], 2015). Among the many reasons that have been offered to explain these persistent achievement gaps, in particular, in reading, poverty and language have garnered significant attention with respect to both of these student populations.

On the one hand, ample empirical evidence confirms that children growing up in poverty and lower socioeconomic status (SES) households tend to demonstrate lower levels of oral language processing, production, and comprehension and to experience lower quantity and quality of oral language interactions in their home and school environments (Hoff, 2012). Moreover, these difficulties with oral language proficiency are associated with and predictive of poor language and literacy performance across the preschool and school-age years (e.g., National Early Literacy Panel, 2008; National Institute of Child Health and Human Development
[NICHD], 2000; NICHD Early Child Care Research Network, 2005). That is, these poverty-influenced language deficits are a primary cause of the observed achievement gaps. In the United States, both African American and Hispanic/Latino children are more likely to grow up in poverty. According to the National Center for Children in Poverty, in 2014, whereas $32 \%$ of children younger than 18 years lived in poverty nationwide, the rates were $13 \%$ for White children, $12 \%$ for Asian children, $32 \%$ for Hispanic children, $35 \%$ for American Indian children, and $38 \%$ for African American children (Jiang, Ekono, \& Skinner, 2016). The devastating repercussions of poverty on child development are robust and compounding; they transcend differences in race and ethnicity and require direct attention to improve child well-being.

On the other hand, above and beyond the negative effects of poverty, language has also been studied as a malleable aspect of child development that can be leveraged to understand and ameliorate observed achievement gaps between African American and Hispanic/ Latino children and their peers. Here, one primary argument that has been advanced for both student populations is that language differences are a primary cause of observed achievement gaps. On the surface, this argument makes sense. Many Hispanic/Latino children are emerging or fluent Spanish bilinguals who speak a language that differs significantly from they encounter in English-speaking schools and texts. Similarly, many African American children are fluent emerging or fluent bidialectals who speak a dialect (African American English [AAE]) that differs significantly from what they encounter in mainstream or Standard American English (SAE)-speaking schools and texts. Thus, researchers and professional educators often hypothesize that children in these groups experience interference that negatively impacts their reading and writing ability (Johnson, Terry, Connor, \& Thomas-Tate, 2017; Labov, 1995; Siegel, 1999). That is, children may use features from their native language or dialect in contexts that presuppose use of their
second language or dialect when reading a passage orally or composing a text.

However, recent research findings on how children learn to read, including studies with bilingual and bidialectal learners, complicate this viewpoint and highlight how different approaches may be necessary to address language differences for these students (e.g., August \& Shanahan, 2006; Johnson et al., 2017; National Early Literacy Panel, 2008; NICHD, 2000; Terry, Connor, Johnson, Stuckey, \& Tani, 2016). That is, despite the many similarities between bilingual and bidialectal learners in their reading performance and general educational experience in U.S. schools, the differences between them may affect how professionals address reading difficulties among them.

Thus, the goal of this article is two-fold. First, we review the research literature on the reading development and performance of bilingual and bidialectal students in U.S. schools, focusing on the preschool through primary-grade years and on malleable factors that may be responsive to instruction or intervention. Second, we consider what the available empirical evidence reveals about reading underachievement for African American and Latino/Hispanic children. Overall, by reviewing both literatures, we consider what can be learned from each population that could alleviate reading achievement gaps in both groups.

## EARLY READING ACHIEVEMENT AMONG YOUNG BILINGUAL LEARNERS

## Who are bilingual students?

According to the Federal Interagency Forum on Child and Family Statistics (2017), $22 \%$ of school-aged children in the United States speak a language other than English at home. This percentage has risen drastically over the past four decades and is predicted to continue to grow (Colby \& Ortman, 2015; Hernandez, 2004; National Clearinghouse for English Language Acquisition, 2017). The majority (76\%) of these students were born in the United States with one or both parents
born outside of the United States (Capps et al., 2005; Federal Interagency Forum on Child and Family Statistics, 2017). Not surprisingly, for a growing number of children in early childhood education settings, such as child care centers, preschool, and head start, English is not their home language. Of the nearly one million students enrolled in head start during the 2013-2014 school year, 30\% of them spoke a language other than English at home (Administration for Children and Families, 2016). In $84 \%$ of those households, the native language was Spanish.

Developmental trajectories of language among children who hear and speak a language other than English at home vary widely (Baker \& Wright, 2017; Dixon, Wu, \& Daraghmeh, 2012). For instance, some children develop as monolingual speakers of their parents' native language until they are regularly exposed to English speakers in preschool or kindergarten; these children are best characterized as English learners (EL). Alternatively, other children would be best characterized as bilinguals, that is, they have experienced formal and informal exposure to two languages at home and at school throughout childhood (August \& Hakuta, 1997; Paradis, Genesee, \& Crago, 2011; Petitto, 2009).

Our primary focus in this review is on the student population whose native language differs from that encountered in school. These are children who are educated almost entirely in the second language, and whose formal exposure and education in the second language typically begin with preschool or $\mathrm{K}-12$ school enrollment. EL and bilingual children vary in their degree of proficiency in the first language and in English. A number of bilingual children develop English language skills comparable with those of their monolingual English-speaking peers with or without explicit instruction, but many do not. It is estimated that $9.4 \%$ of public school children currently experience significant difficulty speaking, reading, writing, or understanding English (McFarland et al., 2017); these students are typically considered to be ELs.

Spanish is the first language for more than three-quarters of these children (77.1\%), and $77.8 \%$ of children who speak a language other than English at home are Hispanic (McFarland et al., 2017). Arabic (2.3\%), Chinese (2.2\%), and Vietnamese ( $1.8 \%$ ) are the next most common home languages for ELs. Geographically speaking, ELs are dispersed across the country, with 25 states and the District of Columbia reporting an EL student population greater than $6 \%$. Spanish-speaking ELs are widely distributed in urban, suburban, and rural school districts across the United States but are largely concentrated in 12 states, with five of these states-California, Texas, Florida, New York, and Illinois-also reporting the highest numbers of ELs overall (National Clearinghouse for English Language Acquisition, 2017). The majority of school-aged ELs are in lower grades. Just more than half ( $51 \%$ ) are in grades K-3, and $16.7 \%$ of all kindergarteners are ELs (McFarland et al., 2017).

## EARLY READING PERFORMANCE AMONG BILINGUAL STUDENTS

Similar to language skills, developmental trajectories in reading among EL children who use a language other than English at home vary a great deal (August \& Hakuta, 1997; August \& Shanahan, 2006). Many EL and bilingual students develop reading proficiency in English comparable with that of their native English-speaking peers. Others even go on to become proficient in reading and writing more than one language. However, because students who have difficulty speaking and understanding English generally have lower reading proficiency than that of their peers, second language acquisition is often associated with lower reading performance among young children (Snow, Burns, \& Griffin, 1998). On the most recent NAEP, grade 4 ELs scored substantially lower in reading than their non-EL peers (NCES, 2015). Moreover, $71 \%$ of ELs (compared with $21 \%$ of non-ELs) scored below basic proficiency on the latest national assessment in reading. The results of this assessment, which excluded
students with the lowest levels of English proficiency from testing, indicates that nearly three-quarters-or perhaps more-of the nation's ELs are unable to demonstrate partial mastery of the required knowledge and skills necessary to perform successfully on grade level.

Furthermore, Hispanic students, who make up the vast majority of ELs, receive lower classroom grades and are retained more often than their non-Hispanic White classmates (Buron, Beecroft, Bell, Price, \& Gemmen, 1998; Musu-Gillette et al., 2016). Hispanic students are also disproportionately represented in special education (Donovan \& Cross, 2002; Harry \& Klingner, 2006). Specifically, they are more likely than all other racial/ethnic groups combined to be diagnosed with a specific learning disability after 6 years of age (U.S. Department of Education, 2015). However, Hispanic students are less likely than nonHispanic White peers to receive services in early childhood special education programs (Delgado \& Scott, 2006; Morgan, Farkas, Hillemeier, \& Maczuga, 2012), and those living in poverty are also less likely than both nonHispanic White and Black students to be enrolled in early childhood care and education programs (Kohler \& Lazarín, 2007).

Achievement disparities in reading and literacy-related skills between ELs and native English speakers often appear early and persist throughout school careers (August \& Hakura, 1997; Calderón, Slavin, \& Sanchez, 2011). For example, in a longitudinal study, Hoff, Core, Place, Rumiche, Señor, and Parra (2012) found that at the preschool level, children who were learning two languages generally had lower skills in vocabulary and grammatical complexity in both Spanish and English than did monolingual children. In addition, in this study, native-English speaking children's vocabulary gains in English were larger over time. Other research has demonstrated that a substantial number of bilingual children may begin school with insufficient English oral language skills (e.g., Hammer, Davison, Lawrence, \& Miccio, 2009; Thordardottir, Rothenberg, Rivard, \& Naves,

2006; Vagh, Pan, \& Mancilla-Martinez, 2009), which provides a hindrance to their literacy development in English, and, ultimately, their academic success (Shatz \& Wilkinson, 2010).

Regarding other literacy-related skills, on average, prekindergarten and kindergarten children who speak more than one language at home demonstrate lower performance on English measures of phonological awareness and letter identification than do monolingual English speakers (Hammer \& Miccio, 2006; Hammer, Miccio, \& Wagstaff, 2003; Páez, López, \& Tabors, 2007). This lack of proficiency in language and literacy-related skills apparent at school entry between some bilingual children and monolingual children has been referred to as the "school readiness gap" (Castro, Páez, Dickinson, \& Frede, 2011, p. 15). Promisingly, however, research has demonstrated that instruction providing extensive coverage in the key components of reading identified by the National Reading Panel (NICHD, 2000)—phonemic awareness, phonics, fluency, vocabulary, and comprehension-is beneficial for students learning English as a second language (August \& Shanahan, 2006). Oral proficiency in English is important as well; however, it is an area that tends to be overlooked in instruction (Al Otaiba et al., 2008; August \& Shanahan, 2006).

## EARLY READING ACHIEVEMENT AMONG YOUNG BIDIALECTAL LEARNERS

## Who are bidialectal students?

Bidialectalism is described as the ability to use two linguistic varieties of the same language and occurs when a regional or cultural dialect and a standard dialect of the same language are used within a single speech community (Wolfram \& Schilling-Estes, 2006; Yiakoumetti, 2007). Although the varieties have some differences, they also overlap in pronunciation, grammar, and lexicon. Because of the multiple similarities between the two varieties, the regional or cultural variety (often referred to as the native, home,
or informal dialect) is not treated as a foreign language. Nevertheless, much like bilingual learners, bidialectal learners gain understanding of the language elements of the standard variety (often referred to as the second, school, or formal dialect) both explicitly and implicitly through interactions in their language environment and often acquire oral and written fluency in the nonnative dialect. Thus, bidialectalism is achieved when one is able to effectively manipulate and use both linguistic varieties across multiple linguistic contexts, a skill often referred to as dialect shifting, style shifting, or code switching (Wolfram \& Schilling-Estes, 2006; Yiakoumetti, Evans, \& Esch, 2006).

Dialect formation is a naturally occurring phenomenon in language as groups of speakers move and interact; thus, bidialectalism exists across the world, with research on the language and literacy development and performance of bidialectal learners being completed in several communities, including the Australian Aboriginal English, Caribbean Creole-speaking immigrants in Britain, Appalachian English, Hawaiian Creole English, and Greek Cyprus community (Nero, 2006; Wolfram \& Schilling-Estes, 2006; Yiakoumetti, 2007). Notably, in all of the aforementioned communities, students are expected to matriculate throughout the educational system with only the use of the standard variety. The same holds true in the United States, where multiple dialects of American English are present among the school-aged population, but SAE is the only variety that is expected to be used in schools.
In the United States, the overwhelming majority of sociolinguistic, psychological, and reading research has focused on one group of bidialectal learners: African American children who speak AAE and SAE. African American English is a systematic, rulegoverned dialect of American English that varies from SAE in its language form, content, and use (Thompson, Craig, \& Washington, 2004; Wolfram \& Schilling-Estes, 2006). Importantly, AAE is considered a low-prestige dialect. That is, from a linguistic perspec-
tive, all dialects are equal, with none being more "appropriate" than others. However, in the United States, SAE varieties are considered more appropriate for formal contexts like the workplace and school and more commonplace among individuals with race, class, and social prestige. Meanwhile, AAE and other low-prestige dialects of American English are considered more informal and often perceived as incorrect or "bad" English. Researchers have also studied other non-SAE dialects, including Southern American English (e.g., Oetting \& Garrity, 2006); Appalachian English (Garn-Nunn \& Perkins, 1999), and Latino English (Gutiérrez-Clellen \& SimonCereijido, 2007).

Developmental trajectories of language among children who hear and speak AAE vary. It is estimated that most African American students across the United States begin school speaking varying amounts of AAE, from low-frequency to high-frequency use of features in speech. Identifying what is developmental and what is different in the spoken production of some nonstandard dialect features can be difficult, both because the dialects share many overlapping features with SAE and because some aspects of their production are a part of typical child language development. However, pioneering research on child AAE use over the last 20 years has been able to discern reliably differences that are associated with dialect variation, in particular, in the frequency and contexts in which features are produced. For example, researchers have observed significant relations between African American children's AAE use and gender, SES, age, grade, region, and discourse context (e.g., picture description compared with storytelling; Charity, Scarborough, \& Griffin, 2004; Craig \& Washington, 1994; Washington \& Craig, 1998).

Studies of specific language components have revealed some important dialect-related differences among AAE-speaking children. For example, preschool-aged African American children have been observed using various types of complex syntax, as would be expected for typically developing children;
however, it is the more dense AAE speakers who were observed to use more utterances with complex syntax (Craig \& Washington, 1994). AAE speakers have also been observed to produce phonological features differently in AAE than SAE, and at different rates and at different developmental time points than children who speak MAE; however, they do master these phonological features during the preschool years (Pearson, Velleman, Bryant, \& Charko, 2009).

Finally, bidialectalism has been observed among young children. That is, researchers have observed children shifting between AAE and SAE during early childhood, both over time and across linguistic contexts. Both cross-sectional and longitudinal studies have reported significant decreases in children's AAE or non-SAE use from preschool (i.e., $4-5$ years of age) to the early elementary (i.e., $8-10$ years of age) grades (Craig, Kolenic, \& Hensel, 2014; Craig \& Washington, 2004; Craig, Zhang, Hensel, \& Quinn, 2009; Terry et al., 2016; Terry, Connor, Petscher, \& Conlin, 2012). With regard to shifting across contexts, researchers have observed that school-aged children use less AAE than SAE in spoken compared with written tasks and on repetition and elicitation compared with spontaneous discourse tasks (Connor \& Craig, 2006; Craig et al., 2009; Craig et al., 2014; Ivy \& Masterson, 2001). Although significant positive correlations have been observed between changes in dialect use, and language, reading, and writing performance, it remains unclear whether that relationship is causal or reciprocal.

## EARLY READING PERFORMANCE AMONG BIDIALECTAL STUDENTS

Similar to language skills, developmental trajectories in reading among children who speak nonmainstream American English dialects like AAE vary. Many African American children who speak AAE develop reading and writing proficiency comparable with that of their SAE-speaking peers. However, because more dense AAE speakers tend to demonstrate
lower reading proficiency than that of their peers, AAE use is often associated with lower reading performance among young children (Gatlin \& Wanzek, 2015). On the most recent NAEP, only $18 \%$ of African American fourth graders were reading at or above the proficiency threshold, compared with 46\% of White students (NCES, 2015). There was not a significant change in the achievement gap from 2013 to 2015; the average score for African American students was still 26 points lower than that of White students.

In addition, African American students tend to demonstrate poorer academic outcomes than their peers that persist from early childhood through high school (e.g., grades, high school dropout rates, retention) and experience more risk factors (e.g., low parental education; poverty) that contribute to poor performance (Burchinal et al., 2011; Fryer \& Levitt, 2004; Gutman, Sameroff, \& Cole, 2003). African American children are also disproportionately represented in special education. Overall, more African American children tend to be served in special education than any other racial/ethnic group and more African American children are served than would be expected from their representation in the general school-aged population (Zhang, Katsiyannia, Ju, \& Roberts, 2014). However, overrepresentation tends to occur within the emotional/behavior disorders and mild intellectual disability categories, where African American students were 2.29 and 2.64 times more likely to be served than all other racial/ethnic groups combined, respectively (U.S. Department of Education, Office of Special Education and Rehabilitative Services, Office of Special Education Programs, 2012). African American children tend to be underrepresented in the learning disabilities category.

A growing empirical research literature has documented significant relations between children's spoken AAE or non-SAE dialect use, dialect shifting, and language and literacy achievement, including phonological awareness, vocabulary, syntax, morphological awareness, oral narration, decoding, word
reading, spelling, reading comprehension, and text composition (Charity et al., 2004; Craig et al., 2009; Johnson et al., 2017; Kohler et al., 2007; Terry et al., 2012; Terry et al., 2016; Terry, Connor, Thomas-Tate, \& Love, 2010). In a recent meta-analysis, Gatlin and Wanzek (2015) found a negative, moderate relationship between children's dialect use and reading and a negative, small relationship between spoken dialect use and spelling and writing; importantly, these relations were independent of both SES and grade level. Although negative relations are typically reported, with children who use more AAE in speech demonstrating poorer performance than children who use less AAE, researchers have also observed U-shaped relationships (Connor \& Craig, 2006; Terry et al., 2010, 2012). In these instances, children who spoke AAE very little (e.g., $10 \%$ of the time) or very frequently (e.g., $75 \%$ of the time) performed better on language and reading measures than did children who spoke AAE moderately (e.g., $50 \%$ of the time). Nevertheless, in most studies, researchers observe poorer language and literacy performance among children who are dense AAE speakers.

Finally, multiple studies have reported stronger reading and reading-related outcomes among children who shifted from more to less AAE use. For example, in a series of studies, Terry et al. (2012) found that, among first graders, change in AAE use was predicted by children's oral language skills and that children who did not decrease their AAE use by the end of first grade demonstrated less growth in word reading during first and second grades. Among second graders, Terry et al. (2016) found that children with stronger oral language skills were more likely to shift from more to less nonstandard dialect use than children with weaker oral language skills, that dialect shifting was more likely to be observed among children attending more schools, and that greater dialect shifting predicted gains in reading comprehension from fall to spring of the school year. In another series of studies, Craig et al. (2014) found that, among second graders, dialect shifting
was predicted by performance on phonological, morphological, and pragmatic awareness measures, even after controlling for oral vocabulary. Moreover, children's shifting from more AAE to more SAE on literacy tasks predicted reading outcomes in second grade, and that metalinguistic skills predicted dialect shifting. In a larger sample of primary-grade children, Craig et al. (2009) found that children's use of AAE features in writing (and not speech) was related negatively to reading outcomes.

## WHAT ARE THE CONSEQUENCES OF BILINGUALISM AND BIDIALECTALISM FOR LEARNING TO READ?

In a society that, since its formation, has experienced rapid and growing linguistic diversity, it is not surprising to find conflicting or evolving opinions on whether or not bilingualism and bidialectalism are risks for academic achievement in school. Historically, both have been viewed as risk factors for African American and Hispanic/Latino children in U.S. schools. For example, speaking a nonstandard English dialect was listed as one of the risk factors for reading difficulties in the National Research Council's seminal report, Preventing Reading Difficulties in Young Children (Snow et al., 1998). Alternatively, recent research findings of a "bilingual advantage" for various cognitive, economic, and social outcomes among individuals who read and write in two or more languages have led many to consider bilingualism and biliteracy as beneficial not only for the individual (Bialstylok, Craik, \& Luk, 2012; Petitto, 2009) but also for society as a whole (Mehisto \& Marsh, 2011). Meanwhile, emerging research findings have raised questions about whether dialect use itself causes reading failure. For example, researchers have observed that children who are more dense nonstandard dialect speakers demonstrate stronger reading performance than children who are less dense speakers (Connor \& Craig, 2006; Terry et al., 2016). Researchers have also found that dialect shifting is associated with skills that
predict reading performance above and beyond dialect density (Craig et al., 2014).

For these reasons, the conclusion that bilingualism or bidialectalism, in and of themselves, are risk factors for or causes of reading difficulty lacks nuance. It seems incomplete to argue that speaking a language or dialect other than SAE places a child at greater risk for experiencing significant reading difficulty in school. Nonetheless, language, and as a result language difference, has significant bearing on reading achievement. The relationship between oral language and reading has been well established (e.g., Catts, Fey, Zhang, \& Tomblin, 1999; National Early Literacy Panel, 2008; NICHD Early Child Care Research Network, 2005; Scarborough, 1990; Whitehurst \& Lonigan, 1998). Therefore, it is important to consider how these language differences might impact how children learn to read.

Prevailing concerns about language differences causing interference in the process of learning to read and write are not unfounded. It is not uncommon to observe that both EL and AAE speakers use features of their native language or dialect during oral reading, spelling, and writing tasks. Thus, it has been posited that this behavioral manifestation of interference is the evidence of the confusion children must be experiencing as they try to reconcile the rules of different languages or dialects and the additional cognitive load that must be necessary for them to navigate the reading process effectively. For example, historically, researchers have argued that learning two languages causes confusion, which, in turn, causes lower performance among bilingual immigrant children in comparison with U.S.-born English-speaking children on intelligence tests (see Diaz, 1983, for a review). Similarly, researchers have argued that speech-print mismatches make the reading process particularly difficult for AAE speakers, who will encounter many more mismatches than SAE speakers because SAE aligns better with written English orthography; as a result, AAE speakers have more difficulty
mapping phonemes to graphemes to decode words (e.g., Labov 1995; LeMoine, 2001).

Meanwhile, findings from reading research suggest that the quality of stored lexical representations of words is associated with variability in reading performance (Elbro, 1996; Perfett, 2007; Perfetti \& Stafura, 2014). Children draw upon information stored in their lexicons to read, including information about word pronunciation, meaning, and use. This information becomes more precise over time, allowing it to be more easily mapped onto print for word reading and more flexibly tied to meaning units and general knowledge for reading comprehension. These findings have particular significance for understanding how bilingual and bidialectal children learn how to read. Specifically, linguistic interference may be indicative of less precise information in the lexicon that impairs the reading process for both word reading and reading comprehension.

A growing body of research suggests that the lexical representations of bilingual and bidialectal readers may require different considerations for reading development. Among AAE speakers, the focus has been on phonological and morphosyntactic knowledge, as these features are most contrastive with SAE. For example, Terry and Scarborough (2011) and Terry (2014) found that the phonological representations of typically developing 4 - to 8 -year-old African American children included knowledge of both AAE and SAE, suggesting that, despite what African American children produce in overt speech, they have implicit knowledge of AAE and SAE to draw upon while learning to read. Keeping in mind that mastery of some phonological and morphosyntactic forms may be different for AAE and SAE speakers, it is plausible that it may take more time for their lexical knowledge to become more precise. However, these young children knew much about SAE receptively as they were learning to read, and it is this knowledge that would combat interference from speech-print mismatches that have been proposed to cause word reading difficulty.

Meanwhile, with regard to bilingual children, a substantial body of research has challenged the notion that dual language input causes confusion among children (Castro, Ayankoya, \& Kasprzak, 2011; DeHouwer, 2009; Paradis et al., 2011). To the contrary, early exposure and schooling in two languages appear to give to children an academic advantage, with bilinguals demonstrating stronger performance on language, cognitive, and reading measures than their monolingual peers (Campbell \& Sais, 1995; Hakuta, 1986; Petitto, 2009). For ELs, research has consistently demonstrated that language and literacy proficiency in the first language supports English language and literacy acquisition; however, many ELs do not have the opportunity to gain proficiency in both languages (August \& Shanahan, 2006).
When examining their lexical representations, gaps in expressive and receptive semantic knowledge are often the focus, as children typically begin school and formal reading instruction with limited lexical knowledge in English. For example, in a study with typically developing 7 - to 8 -year-olds who were good word readers and from literacy-rich homes with well-educated parents, Schwartz and Katzir (2012) found significant gaps between ELs and monolinguals in performance on measures of lexical breadth and depth of knowledge; however, these gaps closed on measures that tapped expressive knowledge and pragmatic use after a year of schooling in the second language, whereas gaps remained on measures that tapped receptive knowledge. These young children knew much about their second language expressively as they were learning to read, but it is their deep receptive knowledge that likely supports reading comprehension.

The impact that these differences in the lexicon have on reading performance is evident in the study by Labov and Baker (2010) of the oral reading errors of second, third, and fourth graders who were White, African American, Latino children who learned to read in English first, and Latino children who learned to read in Spanish first. All were struggling readers
who attended low-income schools in urban areas across the United States, and children in each group varied in the frequency with which they produced non-SAE dialect features from AAE or Latino English in spontaneous speech. Children's oral reading errors were analyzed by type and by their relation to the meaning unit immediately following the error. Results indicated that many of African American children's errors were related to spoken dialect differences that did not interfere with their understanding of the text. For example, African American children often omitted the plural marker -s while reading aloud, but their use of this form did not interfere with their understanding of the text that followed it. A different pattern was observed among Latino children, whose omission of plural markers was inconsistent with their native dialect or language and interfered with their understanding of the text that followed. Other divergent patterns were also observed. For example, although both African American and Latino children who learned to read Spanish first frequently omitted the past tense maker -ed while reading orally, the likelihood of this omission impairing comprehension of the text was much greater for Latino children; for African American children, the substitution typically reflected their spoken AAE use. In both groups, most phonologically based errors were associated with spoken language or dialect differences. However, for Latino children in both groups, almost all grammatical errors were true errors that impaired understanding of the text, whereas the reverse pattern was true for African American children. These differences suggest that bilingual and bidialectal children may differ in the way these forms are represented in the lexicon.

## CONCLUSION AND IMPLICATIONS

Because bidialectal and bilingual children are both language minority children in the United States, it makes sense to focus on similarities between them, especially when discussing how best to address their shared
persistent academic underachievement in schools. However, there is limited empirical evidence on whether or not children in these two distinct groups would benefit equally from the same kind of instruction or interventions to address early reading weaknesses. This review of the literature on both student populations has revealed some important points that should be considered.

First, the literature supports that both bilingual and bidialectal children experience multiple barriers to reading achievement, above and beyond language differences. Beyond negative perceptions of nonstandard dialect use and second language learning, disentangling the impact of these language differences on reading development and achievement is complicated by other risk factors also known to be associated with poor reading performance among children. Reviews of the literature reveal that both African American and Hispanic/Latino children are more likely to grow up in poverty, to attend lowperforming and underresourced schools, to have parents with lower educational achievement, and to demonstrate poorer academic performance at school entry and throughout schooling (Burchinal et al., 2011; Fryer \& Levitt, 2004; Gutman, Sameroff, \& Cole, 2003; Haskins, Greenberg, \& Fremstad, 2004; Hernandez, 2004; Jiang et al., 2016). Thus, it remains unclear what percentage of the gap in school readiness and achievement for bidialectal and bilingual EL children is a function of these risk factors and what percentage is a function of language differences.

Educational responses to mitigating these risk factors in the United States have been similar for both student populations. The search for malleable factors that, if intervened upon effectively, could improve reading achievement for both African American bidialectal learners and Latino/Hispanic bilingual learners often focuses on oral language proficiency. Whether focused on early intervention through federally or publicly funded preschool programs or advanced contentbased instruction in middle and secondary schools, language is a key component of in-
struction aimed at improving reading outcomes across schooling. There are a limited number of effective educational interventions specifically designed to support bilingual and bidialectal learners and countless reading intervention studies have reported positive language and reading outcomes for children in both groups (August \& Shanahan, 2006; National Early Literacy Panel, 2008; NICHD, 2000). Although much remains to be discovered about how best to support reading development for all children, we know much about how to teach children how to read; however, these advances have yet to result in significant advances toward improved educational outcomes for African American and Latino/Hispanic children.

It has been argued that addressing this research-practice gap may be prerequisite to addressing the achievement gap (Rosenfield \& Berninger, 2009). It is difficult to implement evidence-based interventions in schools with the level of implementation fidelity that can be achieved in research studies. Thus, it is not surprising that the positive results observed in these studies are not realized at scale, especially in high-needs schools. Unfortunately, there are no easy answers to these challenges. Ultimately, comprehensive solutions will be required to address the reading-achievement gap, including high-quality professional learning opportunities and preparation programs for educators and school leaders, effective engagement practices across the preschool-12th-grade pipeline for vulnerable children and families, and adequate, accessible, and aligned resources in high-need communities.

Second, bilingual and bidialectal children would benefit from instructional models and educational programming that reflect insights from the research literature and leverage strengths that these learners bring to the reading task. The language differences that AAE speakers and ELs bring to the schooling environment are often viewed as deficits, both because of sociocultural and sociopolitical dynamics surrounding race, language, and poverty in the United States and because

African American and Hispanic/Latino children tend to demonstrate poorer language and academic performance in school (Al Otaiba et al., 2008; Gatlin \& Wanzek, 2015). However, it bears repeating: bidialectalism and bilingualism, in and of themselves, are not risks. It is how they are leveraged that does or does not support student learning. There is ongoing debate about whether children's native dialects and languages should be used in U.S. schools (Hoff, 2012; Siegel, 1999; Yiakoumetti et al., 2006). Despite research evidence indicating positive language and reading outcomes for bilingual and EL children who participate in dual language instruction and AAE speakers who participate in dialect-informed instruction (August \& Shanahan, 2006; Johnson et al., 2017; Paradis et al., 2011), neither is commonplace (or perhaps feasible) in U.S. schools where multiple dialects and languages are spoken and mastery of American English is expected. Nonetheless, positive outcomes have been achieved with supplemental instruction as brief as 60 min a week (e.g., Fogel \& Ehri, 2000). Such promising results suggest that supporting oral language proficiency in African American and Latino/Hispanic children can be achieved by making use of their native language or dialect.

Finally, both bilingual and bidialectal children would benefit from high-quality instruction informed by principles of language development and differences and the science of reading development and instruction. Early and modern models of reading development in English highlight the importance of connections between oral language, decoding, and comprehension, noting that one must fluently and strategically use phonological and orthographic knowledge to identify words in print accurately and analyze the semantic and syntactic relationships among the words to understand text (e.g., Gough \& Tunmer, 1986; Hoover \& Gough, 1990; Perfetti \& Stafura, 2014; Scarborough, 2001). Reviews of the literature reveal that these skills are related to spoken dialect differences among African American children and language
differences among Latino/Hispanic children. Moreover, for children in both groups, their expressive knowledge may not match their receptive knowledge.

The available research suggests that spoken dialect differences have some bearing on the underlying phonological and morphosyntactic processes that support decoding and text comprehension (Johnson et al., 2017; Mansour \& Terry, 2014; Terry, 2014; Terry \& Scarborough, 2011). Importantly, these processes and their impact on reading may not be apparent from surface-level mismatches observed in overt speech, as these speechprint mismatches do not appear to interfere with text comprehension. Moreover, shifting from more to less AAE use in speech and in print in school contexts appears to be more consequential for reading achievement than dialect density itself. Notably, dialect shifting is a language-based skill; thus, perhaps it is not surprising that instruction that draws children's attention to contexts for language use appears to support both language and reading outcomes among dense AAE speakers who are struggling with reading (Johnson et al., 2017). An important finding from the research is that African American children who speak AAE have receptive knowledge of SAE (Mansour \& Terry, 2014; Terry, 2014). Results from Johnson et al. suggest that this knowledge can be leveraged to support reading.

Meanwhile, the available research suggests that Latino/Hispanic children who are bilingual or ELs face a different challenge. They not only must decode words that may be unfamiliar phonologically or morphosyntactically but also must decipher meaning from words for which they may not have adequate knowledge or context. For these children, learning to speak English undoubtedly provides a foundation in the language that contributes to learning to read English. However, this expressive knowledge is insufficient for comprehension without strong underlying receptive knowledge to support deep understanding of the content and context (August \& Shanahan, 2006). Thus, unlike African American children who speak AAE, Latino/Hispanic

EL learners must gain expressive and receptive proficiency with English to improve reading achievement in the language of instruction.

In sum, local and national data continue to indicate that many African American and Hispanic/Latino children struggle to acquire grade-appropriate reading skills (NCES, 2015). Among the many reasons offered to explain and address their reading difficulties, language differences and language proficiency are primary considerations. The research literature supports this inclination because many African American children enter school fluent in AAE and many Latino/Hispanic children enter school as ELs, and language variation is often negatively associated with reading achievement (Gatlin \& Wanzek, 2015; Hoff et al., 2012; Páez et al., 2007). Converging evidence of these negative associations has led to the assertion that the reading difficulties many bilingual ELs and bidialectal learners may experience in school may be caused by these language differences and may be considered a risk factor to reading achievement (Hoff, 2012; Snow et al., 1998). Indeed, this review of the literature suggests that both student populations struggle with language proficiency, which likely contributes to reading difficulty; however, we propose that the literature also suggests that bidialectalism and bilingualism are not risks to be intervened upon. Rather, our interpretation of the literature suggests that language differences are one of many compounding factors that contribute to poor reading performance in diverse learners, and that, when provided rich and robust language interactions in supportive environments, bidialectal and bilingual EL children thrive.

In addition, the available research evidence suggests that these language differences may not cause interference while children learn how to read (Bialstylok et al., 2012; Mansour \& Terry, 2014; Petitto, 2009; Terry, 2014). Rather, as with all speakers of less than transparent languages, both bilingual and bidialectal learners have speech patterns that may not align with the written orthography. That is,
all children learning to read English must reconcile differences between speech and print; those who do so successfully are typically supported by language interactions that promote learning (see Seidenberg \& MacDonald, 2017, in this issue). Moreover, although limited, empirical evidence from intervention studies suggests that bilingual and bidialectal EL children may require something different from these language interactions to support reading. Bilingual EL children require support to master a second language; thus, instruction and interactions that support their oral and written language proficiency with the second language can improve their literacy achievement (Al Otaiba et al., 2008; August \& Shanahan, 2006; Petitto, 2009). Meanwhile, bidialectal children have receptive and expressive knowledge of the language; thus, instruction and interactions that draw their attention to how language varies by context can support their ability to draw upon the knowledge they already have to read and write (Fogel \& Ehri, 2000; Johnson et al., 2017).

Despite these advances in research, bilingual and bidialectal learners' language experiences are not well supported in U.S. schools and become one of many barriers to school success in these student populations. Therefore, our interpretation of the available research literature presents a nuanced but not novel conclusion: language difference is not a deficit or a risk to reading achievement. Rather, we challenge to consider these alternatives: what if the language differences African American and Latino/Hispanic children bring to the reading task were simply viewed as unique but not risks? What if we focused our efforts not on fixing language that is not broken but rather on promoting high-quality language interactions and literacy instruction from preschool through high school graduation that is informed by the best of what we understand about language and reading development? What if we aligned resources and efforts within schools and communities to create conditions that engage families, support teachers, and inform school
leaders collectively? We find that the research literature suggests that if these conditions are met, bilingualism and bidialectalism can
be leveraged as strengths to support reading development and achievement of African American and Hispanic/Latino children.

## REFERENCES

Administration for Children and Families. (2016). Head Start program information report. Washington, DC: U.S. Department of Health \& Human Services.

Al Otaiba, S., Connor, C. M., Lane, H., Kosanovich, M., Schatschneider, C., Dyrlund, A. K., et al. (2008). Reading first kindergarten classroom instruction and students' early literacy growth. Journal of School Psychology, 46(3), 281-314. doi:10.1016=j.jsp .2007.06.002
August, D., \& Hakuta, K. (Eds.). (1997). Improving schooling for language-minority children: A research agenda. Washington, DC: The National Academies Press.
August, D., \& Shanahan, T. (Eds.). (2006). Developing literacy in second language learners: Report of the National Literacy Panel on language minority children and youth, executive summary. Retrieved from http://www.cal.org/resource-center/ publications/developing-literacy
Baker, C., \& Wright, W. E. (2017). Foundations of bilingual education and bilingualism (6th ed.). Blue Ridge Summir, PA: Multilingual Matters.
Bialstylok, B. E., Craik, F. I. M., \& Luk, G. (2012). Bilingualism: Consequences for mind and brain. Trends in Cognitive Sciences, 16(4), 240-250. doi:10.1016/j .tics.2012.03.001
Burchinal, M., McCartney, K., Steinberg, L., Crosnoe, R., Friedman, S. L., McLoyd, V., et al. (2011). Examining the black-white achievement gap among low-income children using the NICHD study of early child care and youth development. Child Development, 82(5), 1401-1420.
Buron, L., Beecroft, E., Bell, S., Price, C., \& Gemmen, E. (1998). Prospects: The congressionally mandated study of educational growth and opportunity. Final report on limited English proficient students. Washington, DC: Department of Education. (ERIC Document Reproduction Service No. ED427536)
Calderón, M., Slavin, R., \& Sanchez, M. (2011). Effective instruction for English learners. The Future of Children, 21(1), 103-127.
Campbell, R., \& Sais, E. (1995). Accelerated metalinguistic (phonological) awareness in bilingual children. British Journal of Developmental Psychology, 13(1), 61-68. doi:10.1111/j.2044-835X.1995.tb00664.x
Capps, R., Fix, M., Murray, J., Ost, J., Passel, J. S., \& Herwantoro, S. (2005). The new demography of America's schools: Immigration and the No Child Left Behind Act. Washington, DC: The Urban Institute. Retrieved from http://www.urban.org/sites/default/ files/publication/51701/311230-The-New-Demography -of-America-s-Schools.PDF

Castro, D., Ayankoya, B., \& Kasprzak, C. (2011). New voices, nuevas voces: Guide to cultural \& linguistic diversity in early childhood. Baltimore, MD: Paul H. Brookes.
Castro, D. C., Páez, M. M., Dickinson, D. K., \& Frede, E. (2011). Promoting language and literacy in young dual language learners: Research, practice, and policy. Child Development Perspectives, 5(1), 15-21. doi:10.1111/j.1750-8606.2010.00142.x
Catts, H. W., Fey, M. H., Zhang, X., \& Tomblin, J. R. (1999). Language basis of reading and reading disabilities: Evidence from a longitudinal investigation. Scientific Studies of Reading, 3(4), 331-361. doi: $10.1207=s 1532799 x s s r 0304 \_2$
Charity, A. H., Scarborough, H. S., \& Griffin, D. M. (2004). Familiarity with school English in African American children and its relation to early reading achievement. Child Development, 75, 1340-1356.
Colby, S. L., \& Ortman, J. M. (2015). Projections of the size and composition of the U.S. population: 2014 to 2060, current population reports, P25-1143. Washington, DC: U.S. Department of Commerce, U.S. Census Bureau. Retrieved from https://www .census.gov/content/dam/Census/library/publications /2015/demo/p25-1143.pdf
Connor, C. M, \& Craig, H. K. (2006). African American preschoolers' language, emergent literacy skills, and use of African American English: A complex relation. Journal of Speech, Language, and Hearing Research, 49, 771-792.
Craig, H. K., Kolenic, G. E., \& Hensel, S. L. (2014). African American English-speaking students: A longitudinal examination of style shifting from kindergarten through second grade. Journal of Speech, Language, and Hearing Research, 57, 143-157.
Craig, H. K., \& Washington, J. A. (1994). The complex syntax skills of poor, urban, African American preschoolers at school entry. Language, Speech, and Hearing Services in Schools, 25, 181-190.
Craig, H. K., \& Washington, J. A. (2004). Grade-related changes in the production of African American English. Journal of Speech, Language, and Hearing Research, 47, 450-463.
Craig, H. K., Zhang, L., Hensel, S. L., \& Quinn, E. J. (2009). African American English-Speaking students: An examination of the relationship between dialect shifting and reading outcomes. Journal of Speech, Language, and Hearing Research, 52, 839-855.
DeHouwer, A. (2009). Bilingual first language acquisition. Tonawanda, NY: Multilingual Matters.
Delgado, C. E. F., \& Scott, K. G. (2006). Comparison of referral rates for preschool children at risk for
disabilities using information obtained from birth certificate records. Journal of Special Education, 40(1), 28-35. doi:10.1177/00224669060400010301
Diaz, R. (1983). Chapter 2: Thought and two languages: The impact of bilingualism on cognitive development. Review of Research in Education, 10(1), 23-54. doi:10.3102/0091732X010001023
Dixon, L. Q., Wu, S., \& Daraghmeh, A. (2012). Profiles in bilingualism: Factors influencing kindergartners' language proficiency. Early Childhood Education Journal, 4O(1), 25-34. doi:10.1007/s10643-011-0491-8
Donovan, S., \& Cross, C. (2002). Minority students in special and gifted education. Washington, DC: The National Academies Press. Retrieved from http:// www.nap.edu/catalog.php?record_id=10128
Elbro, C. (1996). Early linguistic abilities and reading development: A review and a hypothesis. Reading and Writing: An Interdisciplinary Journal, 8, 453-485.
Federal Interagency Forum on Child and Family Statistics. (2017). America's children: Key national indicators of well-being, 2017. Washington, DC: U.S. Government Printing Office. Retrieved from https: //www.childstats.gov/pdf/ac2017/ac_17.pdf.
Fogel, H., \& Ehri, L. C. (2000). Teaching elementary students who speak Black English Vernacular to write in standard English: Effects of dialect transformation practice. Contemporary Educational Psychology, 25, 212-235.
Fryer, R., \& Levitt, S. (2004). Understanding the BlackWhite test score gap in the first two years of school. Review of Economic and Statistics, 86, 447-464.
Garn-Nunn, P. G., \& Perkins, L. (1999). Appalachian English and standardized language testing: Rationale and recommendations for test adaptation. Contemporary Issues in Communication Science and Disorders, 26, 150-159.
Gatlin, B., \& Wanzek, J. (2015). Relations among children's use of dialect and literacy skills: A meta-analysis. Journal of Speech, Language, and Hearing Research, 58(4), 1306-1318.
Gough, P. B., \& Tunmer, W. E. (1986). Decoding, reading, and reading disability. Remedial and Special Education, 7(1), 6-10. doi:10.1177/074193258600700104
Gutiérrez-Clellen, V. F., \& Simon-Cereijido, G. (2007). The discriminant accuracy of a grammatical measure with Latino English-speaking children. Journal of Speech, Language, and Hearing Research, 50, 968-981.
Gutman, L. M., Sameroff, A. J., \& Cole, R. (2003). Academic growth curve trajectories from 1st grade to 12th grade: Effects of multiple social risk factors and preschool child factors. Developmental Psychology, 39(4), 777-790.
Hakuta, K. (1986). The mirror of language: The debate on bilingualism. New York, NY: Basic Books.
Hammer, C. S., Davison, M. D., Lawrence, F. R., \& Miccio, A. W. (2009). The effect of maternal language on bilingual children's vocabulary and emergent literacy development during Head Start and kinder-
garten. Scientific Studies of Reading, 13(2), 99-121. doi:10.1080/10888430902769541
Hammer, C. S., \& Miccio, A. W. (2006). Early language and reading development of bilingual preschoolers from low-income families. Topics in Language Disorders, 26(4), 322-337. doi:10.1097/00011363-20061000000005
Hammer, C. S., Miccio, A. W., \& Wagstaff, D. A. (2003). Home literacy experiences and their relationship to bilingual preschoolers' developing English literacy abilities: An initial investigation. Language, Speech, and Hearing Services in Schools, 34, 20-30. doi:10.1044/0161-1461(2003/003)
Harry, B., \& Klingner, J. (2006). Why are so many minority students in special education? New York, NY: Teachers College Press.
Haskins, R., Greenberg, M., \& Fremstad, S. (2004). Federal policy for immigrant children: Room for common ground? [Policy brief]. Future of Children, 14(2), 1-5.
Hernandez, D. J. (2004). Demographic change and the life circumstances of immigrant families. Future of Children, 14(2), 17-47. doi:10.2307/1602792
Hoff, E. (2012). Interpreting early language trajectories of children from low-SES and language minority homes: Implications for closing achievement gaps. Developmental Psychology, 49(1), 4-14.
Hoff, E., Core, C., Place, S., Rumiche, R., Señor, M., \& Parra, M. (2012). Dual language exposure and early bilingual development. Journal of Child Language, 39, 1-27. doi:10.1017/S0305000910000759
Hoover, W. A., \& Gough, P. B. (1990). The simple view of reading. Reading and Writing, 2(2), 127-160. doi:10.1007/BF00401799
Ivy, L. J., \& Masterson, J. J. (2011). A comparison of oral and written English styles in African American students at different stages of writing development. Language, Speech, and Hearing Services in Schools, 42, 31-40.
Jiang, Y., Ekono, M., \& Skinner, C. (2016). Basic facts about low-income children: Cbildren under 18 Years, 2014. New York, NY: National Center for Children in Poverty, Mailman School of Public Health, Columbia University.
Johnson, L., Terry, N. P., Connor, C. M., \& ThomasTate, S. (2017). The effects of dialect awareness institution on nonmainstream American English speakers. Reading and Writing: An Interdisciplinary Journal, 30(9), 2009-2038. Advanced online publication. doi:10.1007/s11145-017-9764-y
Kohler, A. D., \& Lazarín, M. (2007). Hispanic education in the United States: Statistical brief. Washington, DC: National Council of La Raza. Retrieved from http://publications.nclr.org/bitstream/handle/ 123456789/1393/hispaniceducation_statbrief. pdf?sequence=1
Kohler, C. T., Bahr, R. H., Silliman, E. R., Bryant, J. B., Apel, K., \& Wilkinson, L. C. (2007). African

American English dialect and performance on nonword spelling and phonemic awareness tasks. American Journal of Speech-Language Pathology, 16, 157-168.
Labov, W. (1995). Can reading failure be reversed: A linguistic approach to the question. In V. L. Gadsden \& D. A. Wagner (Eds.), Literacy among African American youth (pp. 39-68). Cresskill, NJ: Hampton Press.
Labov, W., \& Baker, B. (2010). What is a reading error? Applied Psycholinguistics, 31, 735-757.
LeMoine, N. R. (2001). Language variation and literacy acquisition in African American students. In J. L. Harris, A. G. Kamhi \& K. E. Pollock (Eds.), Literacy in African American communities (pp. 169-194). Mahwah, NJ: Lawrence Erlbaum Associates, Publishers.
Mansour, S., \& Terry, N. P. (2014). Phonological awareness skills of young African American English speakers. Reading and Writing: An Interdisciplinary Journal, 27(3), 555-569. doi:10.1007/s11145-013-9458-z
McFarland, J., Hussar, B., de Brey, C., Snyder, T., Wang, X., Wilkinson-Flicker, S., et al. (2017). The condition of education 2017 (NCES 2017-144). Washington, DC: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics. Retrieved from https://nces.ed.gov/pubsearch/ pubsinfo.asp?pubid=2017144
Mehisto, P., \& Marsh, D. (2011). Approaching the economic, cognitive and health benefits of bilingualism: Fuel for CLIL. Linguistics Insights Content and Foreign Language Integrated Learning, 108, 21-48.
Morgan, P. L., Farkas, G., Hillemeier, M. M., \& Maczuga, S. (2012). Are minority children disproportionately represented in early intervention and early childhood special education? Educational Researcher, 41(9), 339351. doi: $10.3102=0013189 \times 12459678$

Musu-Gillette, L., Robinson, J., McFarland, J., Kewal Ramani, A., Zhang, A., \& Wilkinson-Flicker, S. (2016). Status and trends in the education of racial and etbnic groups 2016 (NCES 2016-007). Washington, DC: U.S. Department of Education, National Center for Education Statistics. Retrieved from http://nces. ed.gov/pubsearch
National Center for Education Statistics (NCES). (2015). The nation's report card: Mathematics and reading assessments 2015. Washington, DC: Institute of Education Sciences, U.S. Department of Education. Retrieved from https://www.nationsreportcard.gov/ reading_math_2015/\#reading?grade=4
National Clearinghouse for English Language Acquisition. (2017). Profiles of English learners. Washington, DC: U.S. Department of Education, Office of English Language Acquisition. Retrieved from http://www.ncela.us/files/fast_facts/ 05-19-2017/ProfilesOfELs_FastFacts.pdf
National Early Literacy Panel. (2008). Executive summary: Developing early literacy: Report of the National Early Literacy Panel. Washington, DC: Na-
tional Institute for Literacy. Retrieved from http:// lincs.ed.gov/publications/pdf/NELPSummary.pdf
National Institute of Child Health and Human Development (NICHD). (2000). Report of the National Reading Panel. Teaching children to read: An evidencebased assessment of the scientific research literature on reading and its implications for reading instruction (NIH Publication No. 00-4769). Washington, DC: U.S. Department of Health \& Human Services.
Nero, S. J. (2006). Dialects, Englishes, creoles, and education. Mahwah, NJ: Erlbaum.
NICHD Early Child Care Research Network. (2005). Pathways to reading: The role of oral language in the transition to reading. Developmental Psychology, 41, 428442. doi:10.1037=0012-1649.41.2.428

Oetting, J., \& Garrity, A. (2006). Variation within dialects: A case of Cajun marking within child SAAE and SWE. Journal of Speech, Language, and Hearing Research, 49, 16-26.
Páez, M. M., Tabors, P. O., \& López, L. M. (2007). Dual language and literacy development of Spanish-speaking preschool children. Journal of Applied Developmental Psychology, 28, 85-102. doi:10.1016/j.appdev.2006.12.007
Paradis, J., Genesee, F., \& Crago, M. (2011). Dual language development $\mathcal{E}$ disorders: A bandbook on bilingualism \& second language learning (2nd ed.). Baltimore, MD: Paul H. Brookes.
Pearson, B. Z., Velleman, S. L., Bryant, T. J., \& Charko, T. (2009). Phonological milestones for African American English-speaking children learning Mainstream American English as a second dialect. Language, Speech, and Hearing Services in Schools, 40, 229-244.
Perfett, C. (2007). Reading ability: Lexical quality to comprehension. Scientific Studies of Reading, 11(4), 357383.

Perfetti, C., \& Stafura, J. (2014). Word knowledge in a theory of reading comprehension. Scientific Studies of Reading, 18(1), 22-37.
Petitto, L. (2009). New discoveries from the bilingual brain and mind across the life span: Implications for education. Mind Brain and Education, 3(4), 185197.

Rosenfield, S., \& Berninger, V. (2009). Implementing evidence-based academic interventions in school settings. New York, NY: Oxford University Press.
Scarborough, H. S. (1990). Very early language deficits in dyslexic children. Child Development, 61(6), 17281743.

Scarborough, H. S. (2001). Connecting early language and literacy to later reading (dis)abilities: Evidence, theory, and practice. In S. B. Neuman \& D. K. Dickinson (Eds.), Handbook of early literacy research (pp. 97110). New York, NY: Guilford.

Schwartz, M., \& Katzir, T. (2012). Depth of lexical knowledge among bilingual children: The impact of schooling. Reading and Writing: An Interdisciplinary Journal, 25, 1947-1971.

Seidenberg, M. S., \& MacDonald, M. C. (2018). The impact of language experience on language and reading: A statistical learning approach. Topics in Language Disorders, 38(1), 66-83.
Shatz, M., \& Wilkinson, L. C. (2010). Introduction. In M. Shatz \& L. C. Wilkinson (Eds.), The education of Englisb language learners (pp. 1-22). New York, NY: Guilford Press.
Siegel, J. (1999). Creoles and minority dialects in education: An overview. Journal of Multilingual and Multicultural Development, 20(6), 508-531.
Snow, C. E., Burns, M. S., \& Griffin, P. (Eds.). (1998). Preventing reading difficulties in young children. Washington, DC: The National Academies Press.
Terry, N. P. (2014). Dialect variation and phonological knowledge: Phonological representations and metalinguistic awareness among beginning readers who speak nonmainstream American English. Applied Psycholinguistics, 35, 155-176.
Terry, N. P., Connor, C. M., Johnson, L., Stuckey, A., \& Tani, N. (2016). Dialect variation, dialect-shifting, and reading comprehension in second grade. Reading and Writing, 29(2), 267-295.
Terry, N. P., Connor, C. M., Petscher, Y., \& Conlin, C. R. (2012). Dialect variation and reading: Is change in nonmainstream American English use related to reading achievement in first and second grades? Journal of Speech, Language, and Hearing Research, 55, 55-69.
Terry, N. P., Connor, C. M., Thomas-Tate, S., \& Love, M. (2010). Examining relationships among dialect variation, literacy skills, and school context in first grade. Journal of Speech, Language, and Hearing Research, 53, 126-145.
Terry, N. P., \& Scarborough, H. S. (2011). The phonological hypothesis as a valuable framework for studying the relation of dialect variation to early reading skills. In S. A. Brady, D. Braze, \& C. A. Fowler (Eds.), Explaining individual differences in reading: Theory and evidence (pp. 97-117). New York, NY: Taylor \& Francis.
Thompson, C. A., Craig, H. K., \& Washington, J. A. (2004). Variable production of African American English across oracy and literacy contexts. Language Speech and Hearing Services in Schools, 35, 269-282.
Thordardottir, E., Rothenberg, A., Rivard, M.-E., \& Naves, R. (2006). Bilingual assessment: Can overall proficiency be estimated from separate assessment of two languages? Journal of Multilingual Communi-
cation Disorders, 4, 1-21. doi:10.1080/14769670500 215647
U.S. Department of Education. (2015). Thirty-seventh annual report to Congress on the implementation of the Individuals with Disabilities Education Act, 2015. Washington, DC: Office of Special Education and Rehabilitative Services, Office of Special Education Programs. Retrieved from https://www2.ed.gov/about/reports/ annual/osep/2015/parts-b-c/37th-arc-for-idea.pdf
U.S. Department of Education, Office of Special Education and Rehabilitative Services, Office of Special Education Programs. (2012). Implementation of the Individuals with Disabilities Education Act, 2009 (Report No. 31). Washington, DC: Author.
Vagh, S. B., Pan, B. A., \& Mancilla-Martinez, J. (2009). Measuring growth in bilingual and monolingual children's English productive vocabulary development: The utility of combining parent and teacher report. Child Development, 80(5), 1545-1563. doi:10.1111/j.1467-8624.2009. 01350.x

Wagner, R. K., \& Torgesen, J. K. (1987). The nature of phonological processing and its causal role in the acquisition of reading skills. Psychological Bulletin, 101(2), 192-212. doi:10.1037//0033-2909 .101.2.192
Washington, J. A., \& Craig, H. K. (1998). Socioeconomic status and gender influences on children's dialectal variations. Journal of Speech, Language, and Hearing Research, 41, 618-626.
Whitehurst, G. J., \& Lonigan, C. J. (1998). Child development and emergent literacy. Cbild Development, 69(3), 848-872.
Wolfram, W., \& Schilling-Estes, N. (2006). American Englisb: Dialects and variation (2nd ed.). Malden, MA: Blackwell.
Yiakoumetti, A. (2007). Choice of classroom language in bidialectal communities: To include or exclude the dialect? Cambridge Journal of Education, 37(1), 51-66.
Yiakoumetti, A., Evans, M., \& Esch, E. (2006). Language Awareness in a bidialectal setting: The oral performance and language attitudes of urban and rural students in Cyprus. Language Awareness, 14(14), 254-260.
Zhang, D., Katsiyannia, A., Ju, S., \& Roberts, E. (2014). Minority representation in special education: 5-year trends. Journal of Child and Family Studies, 23, 118127. doi:10.1007/s10826-012-9698-6


[^0]:    Author Affiliations: Urban Child Study Center and Department of Educational Psycbology, Special Education, and Communication Disorders (Dr Terry), Urban Cbild Study Center (Dr Jobnson), Georgia State University, Atlanta, Georgia; and School of Education, University of California, Irvine (Dr Gatlin).

    Preparation of this article was supported in part by the Eunice Kennedy Sbriver National Institute of Child Health and Human Development (Grant R24D075454). The opinions expressed are the authors' and do not represent the views of the funding agencies.

    The authors bave indicated that they bave no financial and no nonfinancial relationships to disclose.

    Corresponding Author: Nicole Patton Terry, PbD, The Urban Cbild Study Center and the Department of Educational Psycbology, Special Education, \& Communication Disorders, Georgia State University, P.O. Box 3979, Atlanta, GA 30302 (npterry@gsu.edu).

