

DISTINGUISHED SCHOLAR SERIES

Centering Children and Working Towards Equity: Teaching All Children to Read

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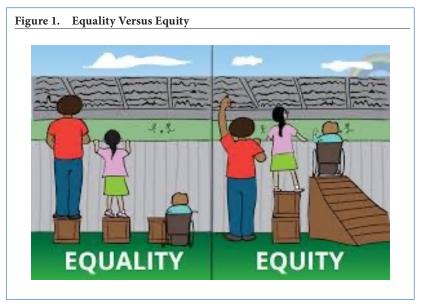
About the Author

Catherine Compton-Lilly is the John C. Hungerpiller Professor in the College of Education. Her interests include early reading and



writing, student diversity, and working with families. Throughout her career, Dr. Compton-Lilly has been a strong advocate for developing knowledgeable teachers that are committed to continual learning and improved practice. A member of the Reading Hall of Fame, she has published 13 books and publishes widely in academic journals. Internationally she has presented her research on five continents.

Editor's note: Content of this article was presented by the author as the Sunday keynote speaker at LitCon 2025 in Columbus, OH. In this article, I pose a question that has haunted me since my early years as a first-grade teacher. In my 18 years of public school teaching, at a school in an African American community, I struggled to understand why so many smart, creative, and charming children struggled to learn to read. After completing my EdD, I continued to teach for 5 years, hoping that I would be better prepared to serve the children. Sometimes I was successful, but not always. Notably and unfortunately, the challenges I faced as a teacher continue to be replicated across North America and have been part of our educational legacy since the first schools opened on our continent. Specifically: If the greatest challenge historically faced by North American educators is serving all children equitably, how can a single approach to teaching reading be the solution for children from a vast range of cultural, linguistic, socioeconomic, neurological, and experiential backgrounds?



If the greatest challenge historically faced by North American educators is serving all children equitably, how can a single approach to teaching reading be the solution for children from a vast range of cultural, linguistic, socioeconomic, neurological, and experiential backgrounds?

Here I argue that there are many forms of difference that matter for emerging readers and that it is absolutely essential that we see these differences and learn how they impact reading and readers. This is a first step in finding ways to draw on the strengths that all children bring to classrooms.

Central to my argument is a classic distinction often made between equality and equity. In short:

- Equality means everyone is treated in the same way, regardless of a person's needs or other individual differences.
- Equity means everyone is provided with resources specific to their needs in order to be successful.

To illustrate this distinction, scholars and educators have often shared variations of this image (see Figure 1). In the equality images, all people are provided with the same resources. In the equity images, people are centered, and different people are provided with different resources depending on what enables them to achieve the goal. In classrooms designed around equality, everyone is treated the same exact way, regardless of needs and differences. However, in child-centered approaches, children are recognized as having unique needs and the right to responsive

instructional approaches that draw on careful observation and analysis of children's reading and writing behaviors.

While "science of reading" (SOR) advocates often argue that providing children with the same foundation in phonics and phonemic awareness will even the playing field, this ignores differences that have plagued North American students and denies the impact of systemic injustices faced by children, families, and communities.

Notably, I am not dismissing research on how children learn to decode or quantitative studies that document the effects of reading interventions. These studies provide important information about how children negotiate particular dimensions of reading. However, based on a range of research studies that recognize differences, they are not complete. Recognizing that scientific investigations surrounding reading are vast and multidimensional, I challenge descriptions of SOR that present exaggerated, misleading, and, at worse, false claims promoted in the media by a small group of scholars, and educational activists, publishers, and journalists. These policies, practices, and claims are dangerous because they deny the diversity of children served in North American classrooms. These claims are impacting educational policy

limiting how teachers can respond to individual children, which is devastating for children who have been historically underserved by mainstream education systems.

In this article, I introduce readers to eight children who are different in ways that are characteristic of all humans. Their personalities, motivations, interests, passions, propensities, and dispositions characterize the vast range of humanity. While these particular children are NOT real, they really are in North American schools and classrooms. The children I describe today are composites of many children that my readers and I have taught. Some participated in research projects that I have conducted; none were created "from scratch." In addition, their stories are well-documented in research which has consistently confirmed that many forms of difference matter as children learn to read.

Relevant differences include the following:

- Developmental Differences
- Racial Differences
- Socioeconomic Differences
- Linguistic Differences
- Cultural Differences
- Physical Differences
- Neurological Differences
- Human Differences

To explore each dimension of difference, I will introduce one student and briefly discuss research that documents how this difference affects learning to read. Examples of how these differences play out in classrooms are shared.



Developmental Differences

Cindy (see Figure 2) is a tiny child, generally found at the edge of classroom activity. She is a sweet and quiet first-grade student. She never disrupts class but requires extra attention to ensure that she participates fully. She often needs extra help in getting started with activities and understanding instructions. Some tasks are difficult for her. If frustrated, she will stop and sit quietly. Cindy has a late birthday and is almost a year younger than the eldest children in her class.

When speaking, Cindy often misarticulates sounds switching /d/ for /th/ and /b/ for /v/ and these misarticulations are sometimes reflected in her writing. Her handwriting is less controlled than that of the other children, and she seems aware of this. She spends significant amounts of time trying to erase what she has written, sometimes giving up and staring into space. Her drawings are characterized by floating objects with no horizon. When she can, she avoids writing and drawing tasks altogether. To be clear, Cindy does not seem to have a particular learning difficulty and she is making progress with reading. She is just moving more slowly and seems younger and less mature than her peers.

The significance of developmental differences has long been recognized in reading and writing research. In the decades leading up to the 1970s, there was extensive discussion about reading readiness. Since then, scholars-including Jeanne Chall at Harvard-proposed stage models of reading and identified particular points in time when reading shifts from learning to read to reading to learn and identified what is now known as the "fourth-grade slump" (Chall, 1983). However, even as Chall proposed this age-based and relatively static model, other scholars (including Marie Clay) were contributing to emergent models of reading and writing that revealed the different patterns and rates of children's learning. While individual trajectories often fit these general patterns, scholars documented varied learning trajectories that are responsive to the particular literacy experiences and propensities that children brought to texts and stories. Just as many children learn to speak at different ages and are toilet trained at different times, children, like Cindy, vary in regard to when they become readers. Developmental variation is widely recognized as central to "the human condition."

The significance of developmental diversity is so well established that even AI was able to produce what I consider a highly accurate gloss. While I have never before used AI for any scholarly purpose (other than spell checking and grammatical editing), I offer it here:

"Developmental variation" refers to the natural range of

differences in how individuals develop across various aspects of their lives, including physical, cognitive, and social abilities, essentially signifying that not everyone develops at the same pace or in the same way, and this is considered a normal part of the human condition; it encompasses the idea that diverse developmental trajectories are inherent to human development and should not be automatically viewed as a disorder unless significant functional impairments are present. (Google AI Overview, January 25, 2025).

Developmental differences are human and have been documented in families and communities for thousands of years. Sometimes they seem linked to differential outcomes, but in many cases these differences do not appear to have long-term effects.

Racial Differences

Keisha is an African American third grader. As her self-portrait (Figure 3) suggests, she is an outgoing and happy child always willing to



engage with others. She finds humor in the daily activities of school. While her willingness to engage is clearly an asset, her questions and comments sometimes make her teachers uncomfortable. During a reading lesson she asked, "Why are all the people in this book white?" And when she saw a picture of a suburban home with a white picket fence and carefully trimmed hedges she commented, "My house not like that, rich people live there." Over time, her questions have become more poignant and more sophisticated, asking, "Why did they shoot Dr. King?"

Over time, Keisha became increasingly wary of her teachers and less willing to engage in instructional activities that she viewed as pointless. She often reported that the books that she read in school were boring. However, when Keisha encountered meaningful texts, she beamed, returning to those texts repeatedly and incorporating them into her own writing. The same week her teacher read the book, I Am Enough to the class, it showed up in her name poem and in her desk - literally and physically hidden in her desk. Keisha was aware. She noticed when she was included and when she was overlooked, and this affected her reading experiences in the classroom.

The significance of race relative to learning to read has been documented by researchers for decades. Forty-five years ago, reflective teachers were considering race, often awkwardly betraying the assumptions and stereotypes that they brought to their classrooms. Increasingly, these early attempts shifted to intentional efforts to highlight the strengths and abilities that children brought. Dyson (2003) recognized the need to attend to children's experiences, while Mohammad et al. (2017) reported on the wealth of literate activity that resulted when students were invited to draw on literacy practices from their communities. Finally, scholars (e.g., Lee, 2024) have recognized how literacy assessments, and other standardized instruments of instruction fail to adequately honor the abilities of African American children.

Importantly, the effects of race on reading achievement are not related to cognitive or intellectual deficiencies. Instead, as Johnston and Scanlon (2020) reported, higher rates of reading difficulty in racially different students' families are "related to a history of schooling and impoverished conditions with fewer family opportunities to acquire the foundations of literacy" (p. 9).

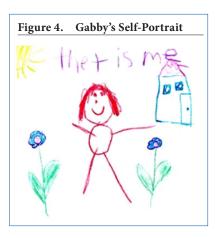
Richard Milner (2020) questioned whose voices have contributed to SOR and who has disseminated this information about learning to read:

... who builds this scientific evidence (i.e., the science of reading), and how might that evidence be enhanced by a more racially diverse cadre of researchers? What science is missed, ignored, overlooked, underexplored, misinterpreted, overgeneralized, and undernuanced about reading when knowledge construction is not diverse and representative of the varied racial identities of students under study? (p. S250)

While recognizing the affordances of quantitative studies for sorting, categorizing, and tracking students over time, Milner argued for qualitative accounts that document aspects of reading and learning that are difficult to measure. Milner explained, "Qualitative research tells the story behind the numbers and systematically contributes to what we know about reading comprehension and development" (p. S250). Qualitative research allows us to hear stories, like Keisha's.

Socioeconomic Differences

Gabby is also a first-grade student (Figure 4). She lives with her mother, who is physically disabled, and her brothers. Due to her mother's disabling condition, her mother rarely works, and they rely on social services and contributions from her eldest brother's part-time job for income. Gabby spends most of her time in the apartment with her mother when she is not at school. She helps to take care of her younger brother. The family moves every few months as they struggle to pay the rent and continuously seek more economical housing. There are very few children's books in the household. The books that Gabby shows me are dated and appear to be library discards. Her mother walks her to school early, so that she can partake in the school breakfast program.



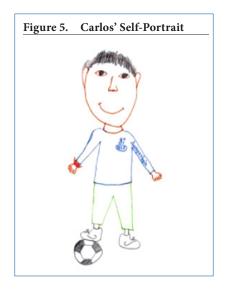
At school, Gabby consistently sports sweatpants and hand-medown shirts from her brothers. She comments on the frills and fashions worn by the other girls in her class saying, "I don't do pink, I am a more an action person." Gabby is more comfortable interacting with the boys in her class. Gabby dismisses many of the children's books shared by the teacher and enjoyed by her peers calling them "silly" and "boring." As she reported, "I only like books about animals and real stuff." When asked about her favorite book, she either shrugged or spoke about the photographs in the nonfiction books that she perused during independent reading time.

As we know, the 1960s were marked by social unrest and increased attention to equity as reflected in Johnson's War on Poverty, the Civil Rights Movement, and the integration of schools. It was during this time that reading scholars turned their attention to how socioeconomic status affects learning to read. Despite this attention, correlations between social class and academic under-achievement have continued. Chall and her colleagues (1990) sought to explain why poor children fall behind in reading. They compared above- and belowlevel readers to family/home data, classroom observations, and teacher interviews. They surmised that with responsive instruction, the fourthgrade slump could be avoided for children from low socioeconomic status families. They maintained that effective reading programs incorporated adjustments to the needs of different children, including gifted children, low achievers, average students, and second language learners.

At the same time, other scholars were using ethnographic methods to document the various literacy practices occurring in the homes of children from different backgrounds. These case studies provided detailed accounts of how socioeconomic status affected families and children in terms of neighborhood characteristics (e.g., safety, resources, educational opportunities) and family stressors (e.g., gainful employment, stable housing). Despite these challenges, these studies documented the strengths and knowledge possessed by members of low income families and revealed the efforts that parents made to support their children as readers, writers, and learners.

The significance of socioeconomic difference is ignored or perhaps denied when the contexts in which Gabby has lived since birth are not recognized. Struggles to provide food, shelter, and resources are real and have real effects on children in terms of nutrition, a sense of safety, and viewing oneself as a member of the classroom community, which involves ways of dressing, talking, and valuing. As Taylor and Dorsey-Gaines (1988) reported:

... problems arise when we ignore the social processes of (con)textual tying [how context affects children] and we take our traditional ways of thinking about literacy—the rigid hierarchies and taxonomies and predetermined sets of skills that we create—and place them in classrooms for children to learn. (p. 201)



Linguistic Differences

Carlos (Figure 5) is lucky. He has spent 3 years in a Spanish/English bilingual classroom with an excellent teacher who not only speaks both Spanish and English but is also intentional in helping her students to recognize and wonder at the differences between the two languages. Highlights of my visits to Carlos' classroom featured talk about cognates, differences between English and Spanish grammar, and laughter as students discussed idioms in the two languages. Carlos has made great progress with learning to read in both languages. Although he progressed more quickly in Spanish, his English reading caught up by Grade 5 and his teacher considered him fully bilingual and biliterate.

Talk about language was ubiquitous in Carlos' classroom. These connections built on the important bilingual knowledge of the students and their growing metalinguistic awareness. For example, during morning meeting, Carlos' teacher invited the students to consider the following idiom in English — "You can't put lipstick on a pig," noting

that it meant that some things are just not attractive no matter what you do. She then compared this to an idiom in Spanish — "Even if the monkey dresses in silk, she's still a monkey," noting its similar meaning. The children laughed at the two expressions and offered similar sayings in both languages. Across my visits, I often heard language comments including "Do you know a word like that in Spanish?" "What sound does 'j' make in Spanish? In English?" "Does that sound right in English?" "What is another way to say that?" "What is the meaning of that word in Spanish? In English? Are they the same?"

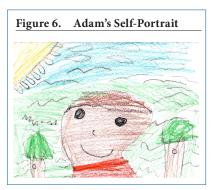
Reading research has clearly demonstrated that language differences play a critical role in learning to read. Starting with early studies that explored differences between how people learned informal versus academic English (Krashen, 1976) and the different ways literacy and language were practiced in different communities (Heath, 1983), researchers and practitioners have increasingly recognized the linguistic strengths that multilingual children bring to classrooms. These studies have described the contributions that first language knowledge can play not only in learning a second language, but also in learning to read in another language. Teacher qualifications for working with multilingual students, the need for schools and teachers to collaborate with families, and instructional responsivity to the cultural and linguistic backgrounds of students were identified as critical.

Noguerón-Liu (2020) challenged the effectiveness of SOR for bilingual and multilingual children. By documenting the miscues and retellings of bilingual children, she analyzed their translanguaging practices, describing their language approximations as agential, intelligent, and creative. She highlighted the abilities of bilingual/biliterate children as they learned to negotiate different ways of marking verb tense and making meaning across languages. As she noted, few studies referenced by SOR advocates involve emergent bilingual children or attend to the unique demands of learning to read in a new/additional language.

David Share (2021) worried that SOR was only a science of reading in English. As he noted:

... the field cannot indiscriminately generalize theories and findings to other languages and writing systems. Current frameworks for conceptualizing the challenges of learning to read across languages and orthographies (e.g., orthographic depth, psycholinguistic grain size theory) provide valuable insights into only one essential facet of a complex, multifaceted mosaic [that is learning to read]. Consideration of the complete picture of the world's writing systems reveals multiple dimensions of orthographic complexity, each liable to create obstacles for students learning to read and write. Furthermore, each of these dimensions has direct implications for practical issues such as assessment, diagnosis of difficulties, instruction, and intervention. (p. S398)

These linguistic differences matter for children like Carlos, and having a teacher who can help to negotiate linguistic and notational differences is a huge advantage for learners.



Cultural Differences

When asked to draw a self-portrait at age 6 (Figure 6), Adam drew himself in sunny Morocco. He wrote about his picture: "I am looking at the sky and I made a smile in Eid and I am happy in Eid." Across our interviews, Adam often spoke about his Muslim religion being careful to remind me that the vast majority of Muslim people are peaceful. Most of his teachers were not aware of his Muslim faith or his ability to speak, read, and write in Arabic. When he was in third grade, Adam showed me the app that he was using to memorize passages from the Qu'ran. At age 9, he surprised me by correctly recording cardinal directions (i.e., north, south, east, and west) on a map he drew of his school. My surprise shifted to understanding when I realized that awareness of directionality was essential for Muslim people so that they could direct daily prayers towards Mecca.

Adam spoke about some of the kids at school, saying, "People don't understand. Like I'm walking around the hall and I just hear people saying stuff like they don't even know what it means. Like they're just yelling like 'Allahu.' And I'm like, 'Do you even know what that means?' My friends are like 'Oh, it's something terrorists say.' I'm

like, that's not what it means at all. It's what we say in a prayer. It means 'God is great.' It's not something you say to spread hate or fear, but it's something like. . . 'Praise Jesus Christ.'"

In an ongoing review of historical documents related to literacy in the 1960s, my coresearcher and I noticed that it was not unusual to encounter references to cultural differences as problems. Research reports were filled with references to cultural deprivation, culturally deprived children, culturally disadvantaged homes, and cultural problems in classrooms. Successful students were often described as having been successfully acculturated to school.

Since then, researchers have documented the funds of knowledge — cultural resources that children bring to school from their home and communities. For example, focusing on multicultural and multilingual neighborhoods of London, Gregory and Williams (2002) documented the literacy practices of children and families. She dispelled myths that characterize immigrant communities as nonliterate, highlighting the involvement of parents in children's literacy activities and the potential of these literacies to inform school learning, noting that there is not one correct method for becoming literate.

Across this body of scholarship, the significance of culture for how people approach texts and make sense of text has been documented. For example, Skerrett (2020) reported:

There is wide recognition of sociocultural theory as a relevance-based framework for teaching and learning. This assertion holds for socioculturally based approaches to reading education for all students, and especially those from culturally and linguistically minoritized groups. Culturally and linguistically diverse students will continue having difficulties developing and demonstrating their reading competencies, including on standardized curricula and assessments that fail to account for sociocultural differences. (p. 341)

Culture is deeply embedded in how people—including children—see the world. It contributes to our beliefs, perspectives, actions, and uses of literacy. Attending to sociocultural differences and diverse literacy practices not only welcomes children to classrooms, but also draws on what they know and who they are.

Physical Differences

Lana is 6 years old (Figure 7); she has significant hearing loss, and thus, sometimes receives instructional support from a deaf education specialist. At other times



she receives help from a paraprofessional. Lana has been using sign language with her deaf parents since birth and uses sign language to read. Given her hearing issues, learning to read through phonics is complicated since she cannot hear the sounds articulated by her classroom teacher; however, the deaf education specialist is not always available to provide signed interpretation. The materials her teacher has access to and the activities that are mandated by the state and school district do not accommodate Lana. Thus, Lana often spends time drawing, looking at books, and doing activities on her iPad while the other children complete their daily phonics and phonemic awareness activities. Regardless, somehow-to her teacher's surprise-Lana is learning to read.

While Lana is doing well with reading, she is among the minority of deaf children who become strong readers. Among signing deaf children like Lana, only 22% of children are average readers, with 52% being described as extremely poor readers. In particular, many children struggle with the syntax of books due, in part, to differences in the syntactical structures used in American Sign Language (ASL) versus written English. Thus, one of the things we see with many deaf readers is low self-correction rates based on syntax in comparison to hearing students. Part of this is because ASL does not use articles, including "the," "a," and "an."

These differences affect the writing of deaf children who use ASL. In a writing sample collected by Trezek and Mayer (2015), a deaf child wrote the following:

You not wunted to the mouse awful stink bought real hate wouldn't people afraid in people scream in have mouse tail long. What number size Hate black white gray. My brother touch mouse foot real kill shoes mouse die traps. Fear mouse many 1, 2, 3, 4. baid Kill wall. (p. 298)

I am pretty good at reading first grade invented spellings, but this writing sample maps very differently onto the written English that is familiar to me; I do not sign. Specifically, while this student generally produces accurate spelling, there is an inconsistent use of articles (e.g., the, a, an), a confusion of "in" and "and," the use of few pronouns or named subjects, and word order that is not always consistent with written English. If I had a deaf child, or a hearing impaired child in my classroom, I would have much to learn and would need to think carefully about the student's strengths and weaknesses to teach that child. Practicing phonemic awareness and phonics exercises might not be best.

Finally, there is one more consideration for signing children. In some cases, transferring printed English text into sign can be challenging. For example, the ASL signs for "eat," "apple," "home," and "yesterday" are very similar. Thus, when a deaf reader is asked to "read" the English sentence, "I ate the apples at home yesterday" via signing, this is a relatively difficult text to process given that the signs in the translation are so similar in form.

Research with deaf children has identified various factors that complicate learning to read for deaf children — including syntactical differences between ASL and spoken English, children's abilities to hear and distinguish sounds, and challenges faced by children who were not raised by signing parents do not bring rich language systems to classrooms. Children with other physical differences sometimes face other challenges. For example, Kaneko (2007) explored the use of picture books designed for blind children that included tactile surfaces that were smooth, rough, or fluffy or included raised illustrative elements. He focused on children's hand movements that could be classified as searching, tracing, and their simultaneous use of two hands. Kaneko surmised that these tactile interactions supported reading comprehension. Burgstahler et al. (2011) drew on cases of three adults with mobility impairments, describing the technology that people found useful. These challenges are amplified for school-age children who are limited by the technologies available in their classrooms and their access to these same technologies in their homes.

Returning to hearing impaired children like Lana, Gabriel (2024) explained, "there is no single right way [to teach deaf and hardof-hearing children], and those approaches that privilege or retrofit sound-focused pathways may not just be irrelevant but harmful to deaf learners" (p. 556). As she warned, extending research conducted with hearing students to children whose hearing is limited is not only scientifically ungrounded, but also potentially dangerous to children who will be subjected to educational practices that will waste their learning time rather than serve their interests. Her point is not just about building SOR that addresses the needs and interests of deaf and hard-of-hearing children, but also about what we as reading scholars and educators might learn about reading when we understand and appreciate how deaf and hearingimpaired children learn to read and write. How is Lana learning to read?

While the example of deaf and hard-of-hearing students is particularly unsettling when we consider SOR, take a minute to consider what SOR practices might mean for kids who bring other physical differences related to

- coordination (e.g., holding books, using manipulatives, negotiating directionality, tracking words with their finger);
- mobility (e.g., moving to the carpet, sitting on the rug, pointing to words); and
- eyesight (e.g., seeing text, tracking text).

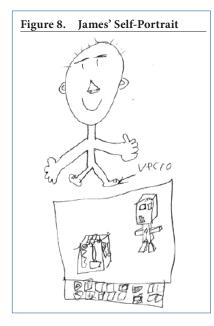
While children with profound physical differences often receive instruction in specialized schools, children with a range of physical differences—from minimal to profound—are in our classrooms and we must adapt instruction for them all.

Neurological Differences

While dyslexia is the most recognized neurological difference within SOR conversations, there are many other forms of neurological difference brought by young children including autism spectrum disorders and ADHD that are not recognized within this publicized and politized SOR. James (Figure

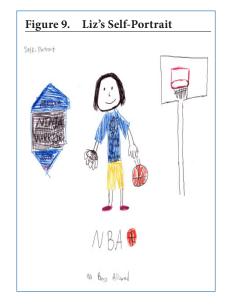
8) was diagnosed as a child with Asperger's when he was in Grade 4. When he was younger, he often argued with the other children and got into trouble with his teachers for not following instructions, sitting quietly, or getting along with others. His assignments were rarely complete. Sitting still and focusing on activities that he saw as meaningless were particularly difficult.

When the other children came to the carpet for phonics and phonemic awareness practice, James was required to stay in his seat and finish the work that he had not completed. However, James often co-opted classroom time for his own purposes. He read Captain Underpants books, created imaginative stories about Angry Birds, and wrote about confused fortune cookies who failed to produce predictions. James was one of the best readers in his class but found participating in skill and drill activities intolerable. Forcing him to participate resulted in misbehaviors, frustration, and his growing dislike of school.



Researchers have documented the challenges faced by many children who bring neurological differences. Taylor (1991) described the experiences faced by a child with ADHD and the challenges his family faced in negotiating with the school as he was tested for special education services. Similarly, Rogers (2003) applied discourses analysis to the transcript of a special education referral meeting in which "expert" views were privileged over the voices of the child's parents. Finally, Shalaby (2017) presents the case of a charming and clever student who struggled to adapt to the expectations of his classroom. In all three cases, as for James-whose neurodiversity was not related to dyslexia-instead of merely skill and drill with phonics and phonemic awareness, these differences require different types of accommodations and types of support.

While children with significant neurological differences are sometimes educated in specially designated and designed classroom, James and many other children with neurological differences are in regular classrooms. Many of these children are not dyslexic and the routinized and meaningless skill and drill of SOR programs designed for dyslexic children are antithetical the types of instruction that would benefit these children. As Milner (2020) reported, SOR efforts are complicated when "the field situates challenges in learning to read through a [particular] special education lens" (p. S250). These framings fail to, or refuse to, recognize the "language and literacy assets, strengths, skills, dispositions, mind-sets, and practices" (p. S250) of children whose neurological differences are not related to dyslexia.



Human Differences

Liz (Figure 9) does not have a named difference and she does not receive ELL services, although she is biracial.. She speaks English and Korean. Liz loves sports and excels in basketball and track. She has pictured herself as a "2018 Ninja Warrior" with a hedgehog in one hand while dribbling a basketball with the other. In large letters she wrote "NBA" at the bottom of her page and in small print ironically writes, "No boys allowed." Liz-and all of her peers-are a magnificent and unique mix of a million different dimensions. Liz just begins to represent the vast range of human differences, which all children bring to literacy learning.

Raised alongside her two brothers, unlike her siblings, she excels in school. Liz helps her mother at home and with the family garden while balancing a complicated schedule of team practices and school responsibilities. Rarely speaking up in class, Liz pays close attention and takes careful notes. While she is a wellbehaved and diligent student, her

real joy is sport. As she writes, "The thing I like about school is recess. I like to play tether ball, kickball, and after school we play soccer." The entire Bailey School Kids book series is displayed on her bedroom shelf. While these differences make Liz special, they are also ubiquitous. All children are different in remarkable and amazing ways.

While many scholars have described the many ways in which all children are unique and amazing, Marie Clay has been a leader in recognizing the differences that all children including normally progressing children-bring to learning to read. Writing in 1982, Clay reminded us that children inform our instructional efforts by showing us what they know, what they partially control, and what they are not yet attending to. In Literacy Lessons *Designed for Individuals*—written 23 years later-Clay reiterated this commitment to children. She dedicated an entire page to the following:

And in the end

it is the individual adaptation made by the expert teacher to that child's idiosyncratic competencies and history of past experiences that starts him on the upward climb to effective literacy performances.

(Clay, 2005, p. 63)

Clay's interest in the unique abilities and propensities of children was perhaps best captured in one of her least-known books, Quadruplets and Higher Multiple Births, published in 1989. In this book, Clay brought together what is known from historical records and reports in the medical, psychological, and popular press. Perhaps most interesting to us is her longitudinal report on the Auckland quadruplets, whom she followed for 6 years. Among the data she reported on these quads and others were the different times when children learned to sit, pull themselves up, and walk. In the case of the quintuplets depicted here, differences of four months were not unusual for when toddlers took their first steps. Clay herself documented differences in children's abilities to draw a circle at age 3 and copy an image at age 7. She documented their directionality with text as they entered school and tracked their reading behaviors over time. Clay ranked their test scores from ages 6 to 12, noting that children shifted in when their reading accelerated and plateaued.

Research with twins and other multiple births is particularly significant as we consider human diversity. While children who are twins, triplets, or quadruplets are born at different weights and sometimes with particular health concerns, they share the same genes and the same environment, helping us to better understand that even with important similarities, children are all different. All of us who have siblings or multiple children of our own know that the children in our families are different and that these differences sometimes affect learning to read and write.

Conclusions

Some may say that some of my examples are problematic and that some of the children I describe may not be served in general education or interventions classrooms or they will have specialists who work with them on learning to read. However, in many cases—especially those related to racial, cultural, and linguistic differences-many children bring differences to regular classrooms. In the case of neurodiversity, young readers are often not yet diagnosed and provided with special educational services when they are first learning to read. In addition, while totally blind or deaf children are often educated in specialized schools and classrooms, children with less profound physical difference are in our general education classes and our intervention programs and they must be served.

Others may note that the research I draw on is not comprehensive. This is true; my goal is to offer a corrective to narrow and incomplete descriptions of SOR that present exaggerated, misleading, and at worse false claims promoted in the media by a small group of scholars, and educational activists, publishers, and journalists. I am not dismissing research on how children learn to decode or quantitative studies that document the effects of reading interventions.

My claim is that the studies I reference exist and that these studies are systematic, detailed, and their claims are based on data. Most are case studies that tell the stories of the children we teach. These studies and these children matter. Narrow policies, practices, and claims are dangerous because they deny the diversity of children served in North American classrooms.

As an active scholar who closely follows discussions of SOR, I worry when people suggest that SOR must reconcile itself with diversity or just attend a bit more to issues of equity. While adding attention to differences to SOR might be possible, it would require fundamental changes to claims espoused by SOR advocates. The following claims must be questioned:

- Heavy doses of phonics and phonemic awareness are universally appropriate for all children.
- Scripted curriculum is appropriate.
- Narrow instructional mandates from districts and state education departments are valid.
- Educators should value fidelity over flexibility.

While many SOR advocates claim to support "wiggle room" or some degree of differentiation, the ways SOR is often implemented in actual schools and classrooms does not allow these deviations from mandated practice. These claims are false and antithetical to child-centered instruction.

The science of reading is not settled, mostly due to human diversity. People are different. Children are different. Languages and notational systems are different. Trajectories are different for children who speak different languages. There is no one trajectory that defines any instance of human development from learning to speak to becoming elderly. While trajectories are inevitably marked by cultural, linguistic, and experiential differences, they are always unique and personal, even among members of the same socioeconomic level, race, culture, or family.

If it were just phonics, the children served in Reading First classrooms would have become skillful readers who could decode and comprehend Honoring the differences that children bring to classrooms is not about tweaking a set of universally mandated practices. Human difference is an inconvenient truth, and our job is to teach the children, not the programs.

at rates beyond children in other programs. This was not the case. Johnston and Scanlon (2020) agreed that "the problem lies in the instruction not accommodating the student's unique complexities" (p. 17). They advocated a "thorough analysis of instructional interactions" between children and their teachers with attention to the unique backgrounds, opportunities, knowledges, and interests that children bring to classrooms.

When SOR advocates blame teachers for reading failure within underserved communities, they shift the lens of research and public concern away from historical and contemporary inequalities—income differences, housing, nutrition, educational opportunities—relieving politicians, policymakers, and the larger society from fiscal and humanitarian obligations.

However, a more nefarious inclination may underlie SOR arguments. Alongside recent efforts to silence discussions of Critical Race Theory, the obliteration of DEI, deporting immigrants, and banning books, SOR directs our attention away from inequities. As Aydarova (2024) noted:

Instead of providing financial or social support for impoverished families and communities, legislators discussed literacy reform as a means of ensuring that those who come from historically underserved communities could "take care of themselves," "find employment," and "move out of poverty." In the chain of SOR signifiers, "explicit phonics instruction" became a substitution for investing in communities and creating the safety nets that were necessary for families to climb out of poverty. (p. 573)

Equality in reading classrooms means providing all children with the same curriculum and activities, regardless of their abilities or other individual differences. Equity in reading classrooms means that all children are provided with resources and experiences specific to their abilities and goals. Honoring the differences that children bring to classrooms is not about tweaking a set of universally mandated practices. Human difference is an inconvenient truth, and our job is to teach the children, not the programs.

References

- Aydarova, E. (2024). What you see is not what you get: Science of reading reforms as a guise for standardization, centralization, and privatization. *American Journal of Education*, 130(4), 653–685.
- Burgstahler, S., Comden, D., Lee, S. M., Arnold, A., & Brown, K. (2011). Computer and cell phone access for individuals with mobility impairments: An overview and case studies. *NeuroRehabilitation*, 28(3), 183–197.

Chall, J. S. (1983). *Stages of reading development*. McGraw Hill.

- Chall, J. S., Jacobs, V. A., & Baldwin, L. E. (1990). *The reading crisis: Why poor children fall behind*. Harvard University Press.
- Clay, M. M. (1989). Quadruplets and higher multiple births (Vol. 107). Cambridge University Press.
- Clay, M. M. (2005). *Literacy lessons* designed for individuals: Teaching procedures. Heinemann.
- Dyson, A. H. (2003). The brothers and sisters learn to write. Popular literacies in childhood and school culture. Teachers College Press.
- Gabriel, R. (2024). The science of reading and deaf education. *Journal* of Deaf Studies and Deaf Education, 29(4), 556–557.
- Gregory, E., & Williams, A. (2002). *City literacies: Learning to read across generations and cultures*. Routledge.
- Heath, S. B. (1983). Ways with words: Language, life, and work in communities and classrooms. Cambridge University Press.
- Johnston, P., & Scanlon, D. (2020). An examination of dyslexia research and instruction. Literacy Research Association.

- Kaneko, T. (2007). Educational activities using of picture books for blind children: A case study. *NISE Bulletin*, 8, 37–57.
- Krashen, S. D. (1976). Formal and informal linguistic environments in language acquisition and language learning. *TESOL Quarterly*, 10(2), 157–168.
- Lee, A. (2024). The science of language and anti-Blackness: Accounting for Black language in reading instruction, interventions, and assessment. *The Journal of Reading Recovery*, 24(1), 5–15.
- Milner IV, H. R. (2020). Disrupting racism and whiteness in researching a science of reading. *Reading Research Quarterly*, 55, S249–S253.
- Mohammad, G. E., Mason Chisholm, G., & Starks, F. D. (2017). Exploring #BlackLivesMatter and sociopolitical relationships through kinship writing. *English Teaching: Practice & Critique*, 16(3), 347–362.
- Noguerón-Liu, S. (2020). Expanding the knowledge base in literacy instruction and assessment: Biliteracy and translanguaging perspectives from families, communities, and classrooms. *Reading Research Quarterly*, *55*, S307–S318.

- Rogers, R. (2003). A critical discourse analysis of family literacy practices: Power in and out of print. Routledge.
- Shalaby, C. (2017). *Troublemakers: Lessons in freedom from young children at school* (pp. 41–72). The New Press.
- Share, D. L. (2021). Is the science of reading just the science of reading English? *Reading Research Quarterly*, 56, S391–S402.
- Skerrett, A. (2020). Social and cultural differences in reading development: Instructional processes, learning gains, and challenges. In E. B. Moje, P. P. Afflerbach, P. Enciso, & N K. Lesaux (Eds.). *Handbook of reading research, volume V* (pp. 328–344). Routledge.
- Taylor, D. (1991). *Learning denied*. Heinemann.
- Taylor, D., & Dorsey-Gaines, C. (1988). *Growing up literate: Learning from inner-city families*. Heinemann.
- Trezek, B. J., & Mayer, C. (2015). Using an informal reading inventory to differentiate instruction: Case studies of three deaf learners. *American Annals* of the Deaf, 160(3), 289–302.



About the Cover

Fatma's enthusiasm is contagious. She was beaming when she shared that *Put Me in the Zoo* is her favorite book "because I can read it!" Outside of school, she's a fan of Fortnite, particularly when she can build structures in the game. Sure to bring her eagerness and smile wherever she goes, she plans to be a math teacher when she grows up.