



California Council on Teacher Education

CCTE White Paper: ScienceS of Reading

As a collective body, the California Council on Teacher Education (CCTE) agrees that reading is a civil right and that all students deserve the opportunity to learn to read. In 2021, California's legislature felt so strongly about this right that members passed SB 488, which led to *California's Teaching Performance Expectation (TPE) 7: Effective Literacy Instruction for All Students*. TPE 7 covers the depth and breadth of literacy instruction (i.e., from evidence-based foundational reading skills to meaning-making that is culturally and linguistically sustaining) and has been designed to integrate with current California English Language Arts and English Language Development standards at all grade levels.

Once again, however, the debate over appropriate reading instruction is in full force. We saw this most recently with California's proposed AB 2222, legislation that would have mandated "science of reading"-only instructional approaches in grades PK-5. By "science of reading," the legislation focused almost exclusively on instruction in phonics in service of ensuring children can decode text. Yet reading goes well beyond being able to pronounce the words on a page. Indeed, TPE 7 calls for a broader approach to literacy instruction that includes more than decoding. We argue that educators should focus, instead, on the "ScienceS of Reading," highlighting that, like in any area, our knowledge is continually evolving; there is no one science of reading.

What do we mean by reading?

We want to begin by defining what we mean by reading. While we agree that reading includes decoding the words on a page, we argue that reading also includes making meaning of those words. If a student can decode the words but does not understand what those words mean, is that student fully literate? Our answer is no. Without language comprehension or word knowledge, decoding can lead to insufficient comprehension of the text. In alignment with this understanding, the International Dyslexia Association's 2018 *Knowledge and Practice Standard 4f* states that readers need to "Know/apply in practice considerations for factors that contribute to deep comprehension" (p. 10).

Our broader definition of reading concurs with the 2026 National Assessment of Educational Progress (NAEP) *Reading Assessment Framework* (NAGB, 2021), which states:

Reading comprehension is making meaning with text, a complex process shaped by many factors, including readers' abilities to

- engage with text in print and multimodal forms;
- employ personal resources that include foundational reading skills, language, knowledge, and motivations; and
- extract, construct, integrate, critique, and apply meaning in activities across a range of social and cultural contexts.

What constitutes robust reading/literacy instruction?

Given this broader definition of reading, the teaching of reading/literacy must go beyond just instruction in decoding. While phonics propels the learning of letter-sound relationships and readers' ability to pronounce pseudo-words, this approach alone does not enhance reading comprehension. It offers little support for young readers' abilities to read for meaning (Tierney & Sheehy, 2005), failing to support emergent readers to make sense of their world and the world of others through written language. "To dismiss the use of context as an over-reliance on 'guessing' or 'predicting' ignores important evidence. The essence of most theoretical models of reading involves semantic, syntactic, and orthographic processing" (Tierney & Pearson, 2024, p. 65). Thus, instruction must focus on developing vocabulary, writing, and academic language while attending to multilingualism, background knowledge, motivation, culturally sustaining pedagogies, diverse texts, and assessments, all areas delineated in TPE 7.

Specifically, reading/literacy instruction should include the following developmental facets:

1. Foundational skills (including letter-sound knowledge and phonemic awareness);
2. Language (especially the language of schooling);
3. Knowledge (especially knowledge of the natural, social, and cultural worlds in which we live);
4. Writing (so students benefit from moving back and forth between oral and written language registers);
5. Motivation (so students are highly engaged in their reading); and

—continued on next—

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6. Relevance (so all students can capitalize on their cultural and personal assets in learning to read (Tierney & Pearson, 2024).

Finally, readers' background experiences must also be considered, as they are key determinants of meaning-making.

Why should the sociocultural contexts of reading be considered?

A focus on the simplified version of the Science of Reading fails to account for the developmental, cultural, contextual, and historical diversity of learners, the sociocultural factors that contribute to the inequities in reading achievement, and the individual needs of struggling readers. We argue for a view of reading that sees literacy as a set of practices grounded in a sociocultural context (Street, 1985), in which individuals use texts to interact with one another and society. This view of reading aligns with the International Dyslexia Association's 2018 *Knowledge and Practice Standard 1.5*, which states "Identify (and explain how) environmental, cultural, and social factors contribute to literacy development" (p. 9).

Quality reading instruction must consider these sociocultural aspects of literacy development. Understanding students' backgrounds, languages, cultures, lived experiences, and contexts is essential for quality literacy instruction. Indeed, teaching reading can be a method of creating a space for learners to explore meaning-making with culturally diverse tools and partners, building upon and advancing learners' use of their cultural repertoire of experiences and strategies in culturally relevant and responsive ways, and allowing them to make connections between the words on the page and their own experiences (Tierney & Pearson, 2024). The goal for teachers is to bridge the gap between community and classroom to support meaning-making activities.

In addition, "As Johns (2023) stated: 'Much that the modern science of reading investigates and everything that it claims to know about the practice, turns out to be cultural 'all the way down.' This is all the more apparent as the science and history of this field converge on a shared understanding—an understanding that reading is indefinitely multiform and unsettled. It is shaped by cultural experience, by history itself'" (Tierney & Pearson, 2024, p. 426).

Recommendations & Next Steps

In conclusion, we believe that reading instruction and the preparation of teachers to teach reading must be open and inclusive. The ScienceS of Reading are not settled and will continue to evolve. As such, there is no one right way to teach every child to read. Instead, teachers must be prepared with a full repertoire of strategies so they may respond to the individualized needs of the full classroom of learners before them.

To best serve our students, we must commit to reviewing and conducting research faithfully and without bias. Second, we must commit to using valid and research-based instructional strategies. Third, we must resist any action or policy that would make reading instruction more restrictive than what is recommended by the full body of research (Tierney & Pearson, 2024). Using multiple evidence-based approaches is the only way to serve the needs of every learner.

We recommend that teacher educators ensure that, in their programs and in their preparation and professional development of teachers to teach reading, they incorporate the full range of instructional approaches we have highlighted here. We also recommend that members take action: Reach out to colleagues, educational organizations, and policymakers to inform them of all that effective reading instruction includes. And finally, stay abreast of the ScienceS of Reading because, as we have highlighted, this is an evolving field. CCTE will continue to be engaged in these efforts.

Note on construction of CCTE's White Paper: The ScienceS of Reading

In response to proposed AB 2222, the California Council on Teacher Education developed a literacy working group, with an initial call for interested members at the 2024 CCTE Spring Policy Action Network. The working group met in April and May of 2024 to review research and collaboratively construct this white paper. The group consists of the following members:

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Suggested Further Reading

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