

Strengthening Colorado’s Implementation of the Science of Reading through Teacher Preparation

Literacy is critical for success in school, work, and civic engagement. Research finds that reading failure can be reduced to fewer than 1 in 10 students when teachers provide scientifically based reading instruction.¹ In the wake of learning loss experienced in the COVID-19 pandemic, now more than ever, we must ensure aspiring teachers are prepared to teach children to read using scientifically based reading instruction.

The stakes for students in Colorado

In Colorado, only **38% of 4th grade students read proficiently** based on the most recent National Assessment of Education Progress (NAEP). That number falls precipitously for some of Colorado’s historically underserved students. This dismal data has nothing to do with the students and families and everything to do with **inequities in access to effective literacy instruction**.

Colorado’s Reading Data

Student group	# of students in Colorado	% who read proficiently in 4th grade
ALL STUDENTS	849,703	38%
Hispanic students	305,646	20%
Black students	40,166	21%
English language learners	96,490	7%
Students with disabilities	106,887	12%
Students eligible for National School Lunch Program	371,748	19%

Teacher prep programs are key to implementing and sustaining science of reading at scale.

Are Colorado’s teacher prep programs ensuring aspiring teachers learn the most effective methods to teach reading?

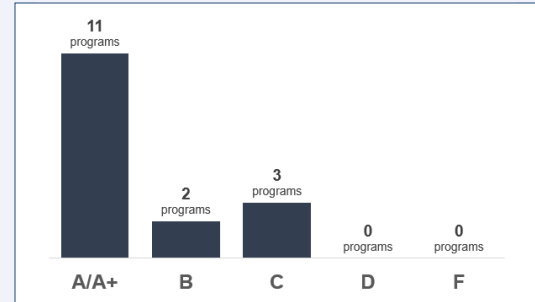
The National Council on Teacher Quality, a research and policy nonprofit, evaluated nearly 700 programs across the country, including 16 in Colorado, on how well they prepare aspiring elementary teachers to teach reading.

This review considered attention to **the five core components of scientifically based reading instruction**—phonemic awareness, phonics, fluency, vocabulary, and comprehension—across four different instructional approaches (instructional hours, background materials, objective measures of knowledge, and opportunities to practice).

The review also deducted points when programs teach aspiring teachers content contrary to research-based practices; and considered whether programs provide instruction in how to support a range of learners (struggling readers, English language learners, and students who speak language varieties other than mainstream English).

¹ See [appendix](#) for citation for this statement and data included throughout.

In Colorado, 69% of the 16 programs evaluated earn an A for preparation in reading, meaning they adequately teach all five components of reading and provide little or no instruction on content contrary to research-based practices.



Colorado ranks best in the nation for the average number of components of reading its programs adequately address. In Colorado:

- Programs are most likely to cover **comprehension** and least likely to cover **phonemic awareness**.
- **Two of 16 programs provide at least one practice opportunity** in each of these components.
- There is one program in Colorado that teaches **multiple** techniques or approaches contrary to research-based practices, which can inhibit the reading progress of many students.
- Ten programs devote some instructional time to supporting **Struggling readers**.
- Seven programs devote some instructional time to supporting **English language learners**.
- **Exemplary (A+) programs in Colorado include the undergraduate programs at the Fort Lewis College, University of Colorado Boulder, University of Colorado Denver, and Western Colorado University, and the graduate program at the University of Northern Colorado.**

Better teacher preparation is essential to ensure all students effectively learn to read.

State policy question	Answer for Colorado
Does Colorado have standards for teacher prep programs that address all five core components of scientifically based reading?	Yes, the standards address all five core components with details related to the knowledge and skills needed to teach them
Does Colorado require a licensure test that addresses reading?	Yes, the state requires a reading licensure test
What are the required or optional licensure tests that address reading?	Praxis Teaching Reading (5205)
Does Colorado require the review of reading course syllabi as part of preparation program renewal?	Yes

“Every child has the right to read. Sending teachers into the classroom without the science behind how kids learn to read puts everyone in an unfair position. As teachers, we are in this profession to always do what is best and necessary. If we aren’t properly taught by the institutions we put our trust and dollars into, we are made ineffective.”

- Virginia Quinn-Mooney, First grade teacher

Recommendations for state leaders:

- Set specific, explicit, and comprehensive preparation standards for scientifically based reading instruction.
- Incorporate a specific evaluation of reading instruction in program renewal or reauthorization processes, and take action if programs are not aligned to the state’s standards for scientifically based reading instruction.
- Require a reading licensure test aligned with scientifically based reading instruction for any PK–5 teachers to earn licensure, and publish the pass rates.
- Deploy a comprehensive strategy to implement scientifically–based reading instruction, and prioritize teacher prep.
- Use the bully pulpit to draw attention to the importance of teacher prep to sustain implementation of improved reading instruction.

For more detail on these recommendations, visit www.nctq.org/review/standard/reading-foundations.

Questions? Contact Shannon Holston, NCTQ Chief of Policy and Programs at shannon.holston@nctq.org.

Program grades in Colorado

School	Program Level	Grade	Adequate coverage of core components: Graded (Up to 12 points per component; 8 points for adequate coverage; 4 or more contrary practices results in letter grade deduction)						Support for a range of learners: Ungraded (Up to 8 points per group)		
			Phonemic Awareness	Phonics	Fluency	Vocabulary	Comprehension	Count of Contrary Practices (out of 9)	Struggling readers	ELLs	Speakers of language varieties
Adams State University	UG	A	Yes (9.5 pts)	Yes (10.5 pts)	Yes (11 pts)	Yes (12 pts)	Yes (9 pts)	1	4 pts	4.75 pts	0 pts
Colorado Christian University	UG	A	Yes (11 pts)	Yes (10 pts)	Yes (10 pts)	Yes (9 pts)	Yes (8 pts)	2	6 pts	6 pts	2 pts
Colorado Mesa University	UG	A	Yes (10.64 pts)	Yes (9 pts)	Yes (9 pts)	Yes (9 pts)	Yes (8.25 pts)	1	6 pts	4.75 pts	2 pts
Colorado Mountain College	UG	A	Yes (8 pts)	Yes (10.25 pts)	Yes (8 pts)	Yes (10 pts)	Yes (9 pts)	1	5 pts	3.5 pts	2 pts
Colorado State University - Pueblo	UG	A	Yes (10 pts)	Yes (10 pts)	Yes (10 pts)	Yes (10 pts)	Yes (9.5 pts)	0	2 pts	2 pts	2 pts
Fort Lewis College	UG	A+	Yes (11.36 pts)	Yes (11 pts)	Yes (11 pts)	Yes (12 pts)	Yes (11 pts)	0	5.5 pts	7.5 pts	8 pts

View this data online at nctq.org for more details. Data updated September 2023.

School	Program Level	Grade	Adequate coverage of core components: Graded (Up to 12 points per component; 8 points for adequate coverage; 4 or more contrary practices results in letter grade deduction)						Support for a range of learners: Ungraded (Up to 8 points per group)		
			Phonemic Awareness	Phonics	Fluency	Vocabulary	Comprehension	Count of Contrary Practices (out of 9)	Struggling readers	ELLs	Speakers of language varieties
Metropolitan State University of Denver	UG	B	No (7.96 pts)	Yes (12 pts)	Yes (10 pts)	Yes (8.62 pts)	Yes (10 pts)	0	2 pts	2 pts	0 pts
Metropolitan State University of Denver	G	B	Yes (8.64 pts)	Yes (11.81 pts)	No (7.69 pts)	Yes (8.88 pts)	Yes (8.25 pts)	0	2 pts	2 pts	0 pts
University of Colorado Boulder	UG	A+	Yes (9.93 pts)	Yes (12 pts)	Yes (9.25 pts)	Yes (11 pts)	Yes (10 pts)	0	6 pts	3 pts	0 pts
University of Colorado Colorado Springs	UG	C	No (7.29 pts)	No (7.69 pts)	Yes (9 pts)	Yes (9 pts)	Yes (8 pts)	1	0 pts	4 pts	0 pts
University of Colorado Colorado Springs	G	C	No (7.29 pts)	No (7.69 pts)	Yes (9 pts)	Yes (9 pts)	Yes (8 pts)	1	0 pts	4 pts	0 pts
University of Colorado Denver	UG	A+	Yes (8.96 pts)	Yes (11 pts)	Yes (9 pts)	Yes (11 pts)	Yes (11 pts)	0	5.67 pts	5.67 pts	0 pts
University of Colorado Denver	G	C	No (6.32 pts)	Yes (8.25 pts)	Yes (9 pts)	No (7.88 pts)	Yes (8.5 pts)	0	8 pts	6.5 pts	0 pts
University of Northern Colorado	UG	A	Yes (10 pts)	Yes (10 pts)	Yes (9 pts)	Yes (9 pts)	Yes (11 pts)	0	6 pts	8 pts	1 pt
University of Northern Colorado	G	A+	Yes (9.71 pts)	Yes (12 pts)	Yes (11 pts)	Yes (9 pts)	Yes (9 pts)	0	6 pts	2 pts	2 pts
Western Colorado University	UG	A+	Yes (11.75 pts)	Yes (11.75 pts)	Yes (11.75 pts)	Yes (11.75 pts)	Yes (11.75 pts)	0	2 pts	1.67 pts	0 pts

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