



THE STATE OF LITERACY IN COLORADO 2017



STAND
for children

| COLORADO



The ability to read is critical for success in school and life. Take a minute to think about how different your life would be if you couldn't read. Simple tasks, like taking medication correctly, following a recipe, or browsing the internet would suddenly become complicated without strong reading skills. Finding and keeping a job would become almost impossible. The long-term impacts of low literacy are devastating. Individuals with limited literacy skills are more likely to drop out of school before obtaining a high school diploma,¹ have significantly lower employment rates and monthly earnings,² and have children who also struggle with reading.³ The effects of low literacy have far-reaching consequences—“Low literacy costs the U.S. at least \$225 billion every year in non-productivity in the workforce, crime, and loss of tax revenue due to unemployment.”⁴

Unfortunately, Colorado is not exempt from these trends. While our state has enjoyed a faster-than-average economic recovery from the Great Recession, Colorado struggles to ensure students are graduating from high school ready for college or work. The strength of our state's workforce is largely due to the influx of well-educated individuals moving from out of state to fill open positions. However, our own students are less likely to earn the education required to fill and be successful in those positions, a phenomenon called the Colorado Paradox.⁵

There are many measures of literacy skills among the state's population, and they all affirm how much work needs to be done to improve the literacy skills of children and adolescents. The measures also clearly show the persistent inequities in outcomes between different groups of students, especially between White students and students of color and between students in higher income households and those living with the effects of poverty, as measured by qualifications for federal free-or-reduced lunch (FRL). However, the state data show only part of the picture about how we are serving all students in Colorado. We will explore what the data tell us about literacy in Colorado and share some of the feedback we received from educators during a statewide listening tour about literacy instruction in Colorado. This listening tour was conducted over the course of six months in early 2017. Their insights underscore problems uncovered in the data.

In this report, we will explore different measures of how we are doing as a state in preparing students to read proficiently by the end of third grade, a critical milestone for a child's academic success. We will also look at students who are still struggling to read proficiently after third grade. Colorado's early literacy policy, the Reading to Ensure Academic Development (READ) Act of 2012, is an excellent step toward improving our literacy rates for all students. However, the data show, and educators affirm, that Colorado needs to do even more to meet the literacy needs of all students. There are some gaps in implementation and student outcomes, which if addressed properly, could be game changing toward the goals of all students reading by the end of third grade and eventually graduating high school prepared for success.

Through our listening sessions with more than 100 educators across the state of Colorado, we heard about the areas where we can improve implementation of the READ Act and also heard about innovative solutions driven by educators. This report only highlights some of the feedback we heard during the listening sessions. We will release a more comprehensive list of findings from the sessions in the coming months.



LITERACY RATES IN COLORADO: WHAT DO THE NUMBERS TELL US?

The National Assessment of Educational Progress (NAEP) is a widely respected test of students' knowledge and skills that offers long-term snapshots of student outcomes.⁶

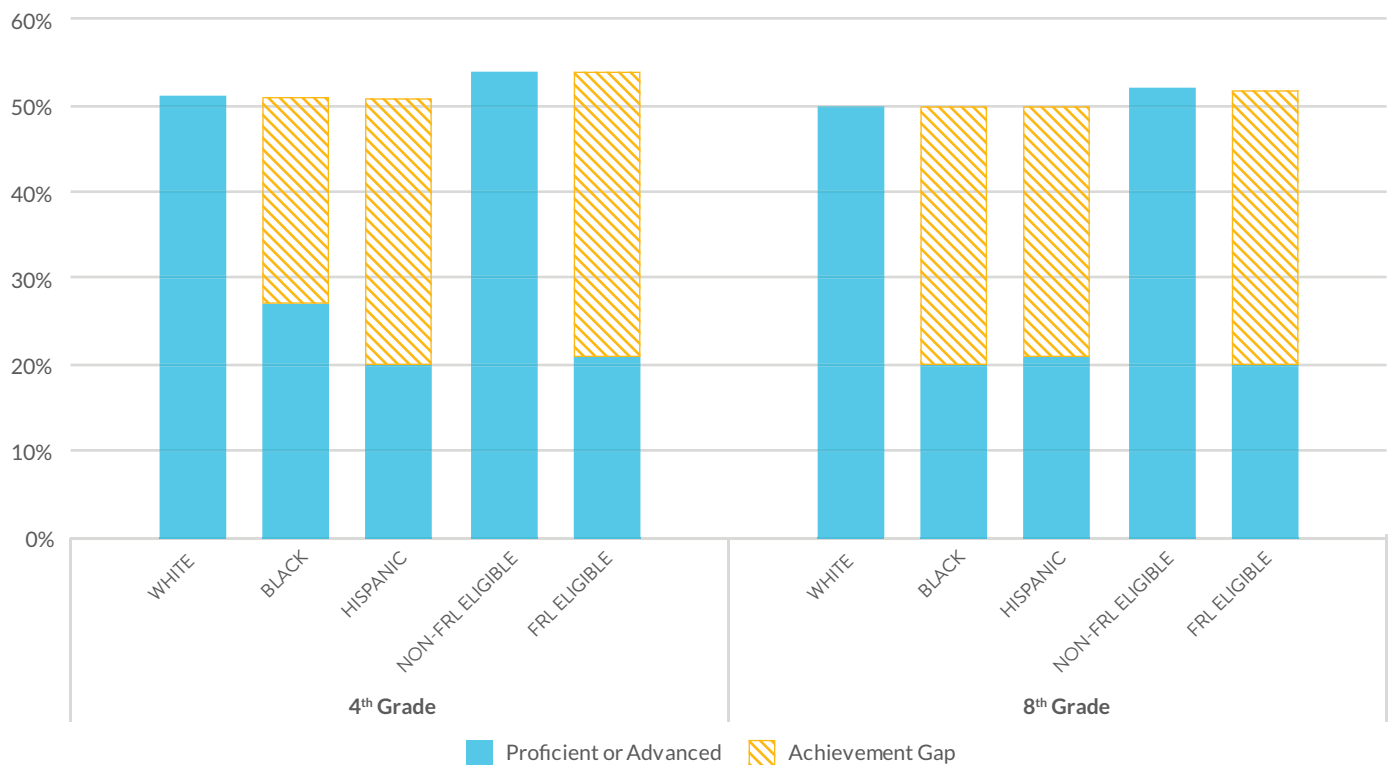
Colorado's most recent NAEP scores show that less than 40% of fourth grade students are proficient in reading and related skills. The trends are even more troubling for groups of historically underserved students. Barely 20% of Black and Hispanic students score proficient or above on the NAEP assessment. Although overall scores have improved over time, gaps in performance between different groups of students have not been significantly reduced since 1998. In fourth grade, the average gap between White students and Black students was 21 points, 29 points between White students and Hispanic students, and 30

points between students ineligible and eligible for free- or -reduced lunch. Indefensibly, these gaps have remained over time and persist into the later grades.

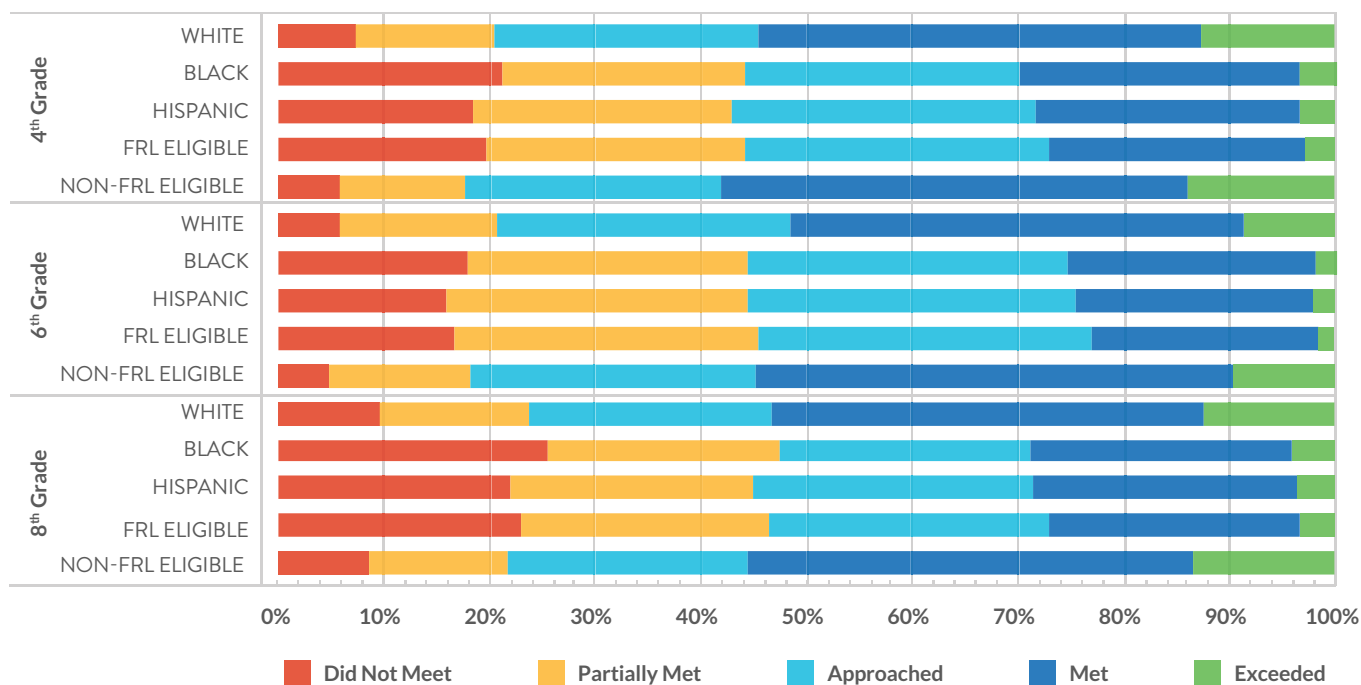
Other measures of student achievement, the Colorado state tests, also expose the persistent gaps between student groups. For example, the English Language Arts (ELA) test measures reading and related skills. Data from the most recent year of the state ELA assessment show that groups of historically underserved students are less likely to meet expectations than their peers.

In every grade, students of color and students who are eligible for free-and-reduced lunch are less likely than their peers to meet or exceed expectations on the state ELA

Gaps Between Subgroups of Colorado Students Scoring Proficient or Above on 2015 NAEP Reading



Proficiency Levels of Student Subgroups on 2017 Colorado State ELA Assessment



test. Examples from the fourth, sixth, and eighth grade test results show gaps of up 32% to between groups of students meeting or exceeding expectations.

Unfortunately, students who fall behind in the early grades are unlikely to catch up in the later grades. As struggling students stay in the education system past middle school and through high school, they often continue performing lower than those students who met expectations in the early grades.

Even when Colorado students graduate from high school, many likely do not have adequate literacy and related skills to enter college without the need for remedial courses. College remediation rates measure how many high school graduates enrolled in two- and four-year institutions of higher education need additional preparation to be ready for college-level work. Unfortunately, Colorado has high remediation rates, which indicate that students are not adequately prepared for college in the education system.

In the 2015-2016 school year, 36.1% of Colorado's high school graduates needed college remediation.⁷ For groups of historically underserved students, nearly 60% of Black

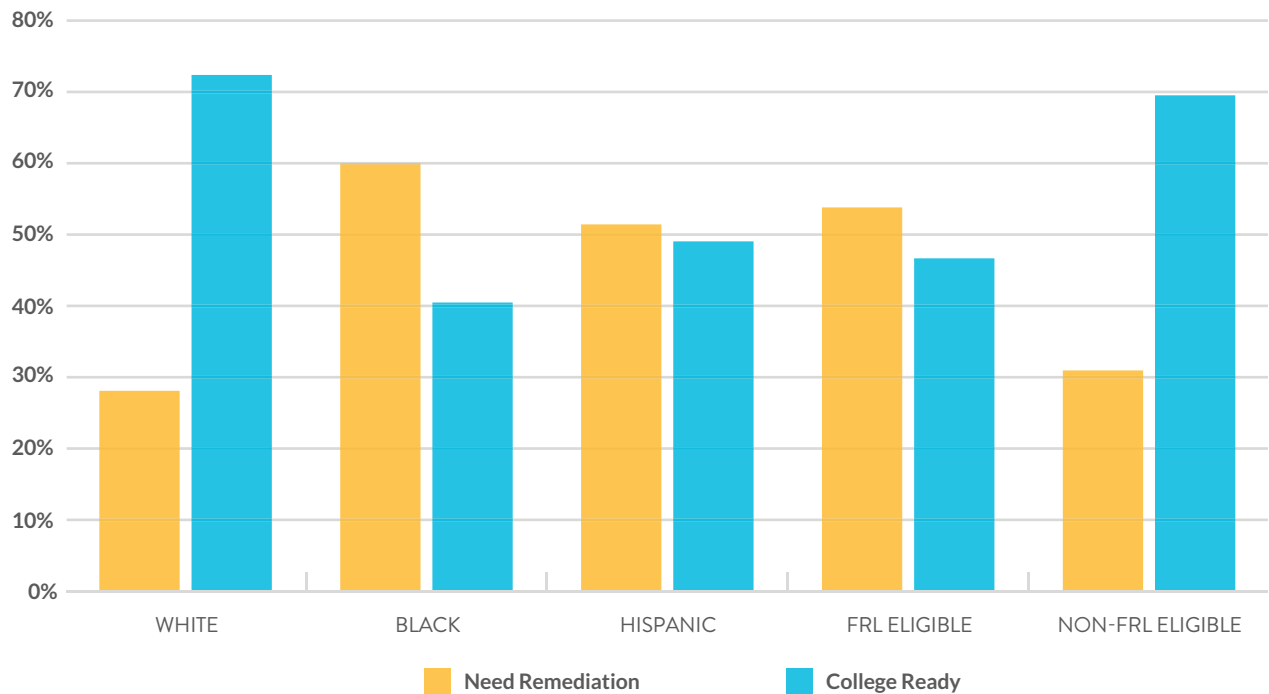
students, 51% of Hispanic students, and 54% of students who qualify for free- or-reduced lunch needed remedial education in Colorado two- and four-year institutions of higher education. These high remediation rates result in tremendous costs to the state and students. Remediation cost nearly \$70 million in the past two academic years alone, \$29.6 million in 2015-2016 and \$39.3 million in the prior year.⁸

These troubling trends continue into Colorado's adult population. Even with the Colorado Paradox, the most recent estimates indicate that in Colorado 10% of adults lack the most basic literacy skills.⁹

THE READ ACT IS A GOOD FOUNDATION

Amid the concerning statistics, Colorado started to take steps in the right direction to improve literacy rates among young readers. Recognizing that the ability to read is learned in school, specifically in the early grades, and that academic success after third grade is dependent on strong literacy skills, Colorado adopted a robust, statewide

Remediation Rates Across Student Subgroups at Colorado 2- and 4-year Colleges



RESEARCH TELLS US THE BEST WAY TO TEACH READING

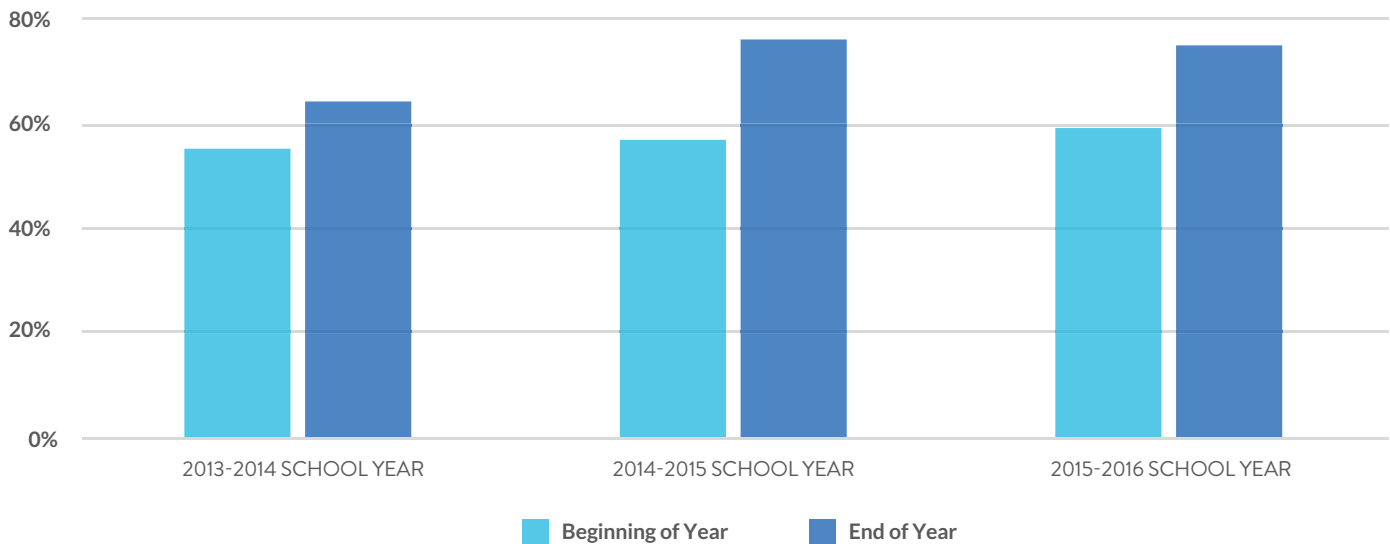
For decades, there has been strong scientific consensus on the most effective ways to teach reading. The evidence clearly shows that students, especially students at risk for reading difficulties, do best when they receive instruction based in Scientifically Based Reading Research (SBRR). At its core, SBRR teaches students through direct, explicit instruction in the skills necessary for reading:

- 1. PHONEMIC AWARENESS:** Phonemic awareness is being able to hear, recognize, and differentiate between sounds.
- 2. PHONICS:** Phonics is the relationship between sounds and letters. Basically, it's how you know that the sound /f/ is written "F" or "f" or how "cat" begins with the letter "C".
- 3. VOCABULARY:** Vocabulary is a knowledge of words—to read words, it is critical to know what they mean.
- 4. FLUENCY:** Fluency is the ability to read with speed, accuracy and expression.
- 5. READING COMPREHENSION:** Reading comprehension is understanding what you are reading. If you have the other building blocks of literacy, comprehension is the last piece of the reading puzzle.

early-literacy policy. The Reading to Ensure Academic Development (READ) Act was passed in 2012 with the goal of ensuring all students read proficiently by the end of third grade. The READ Act is grounded in a comprehensive body of scientific research that identifies the most effective methods to teach the foundational skills of reading. It targets state resources for students in kindergarten through third grade who are identified as having a significant reading deficiency (SRD) to ensure they receive scientifically based reading interventions. To date, more than \$120 million has been spent through the READ Act to support struggling readers in Colorado. Although there is more work to do to improve implementation of the law, the READ Act has already ushered in improvements in student reading.

The first group of students to receive the full benefit of the READ Act, meaning scientifically based reading support from kindergarten through third grade, had a 60.1% reduction in the prevalence of significant reading deficiencies at the end of third grade.¹⁰

Early Literacy Grant Schools: Increases in K-3 Students Reading at Grade Level



Educators are noticing these improvements in students' skills over time. As one educator in a rural district said during our listening tour, "we've been saying that over and over again this year about the third graders that came to us: [they] just have so much more of those foundational skills in place. Even my red kids [significantly at-risk], they know how to chunk words, they know how to do their graphing mapping. They know all those things have been in place and you can definitely see that evidence that they've been getting that the years before, it's definitely filtering up positively." Another Colorado educator in a rural district said, "I think it's [READ Act] been a great tool to put us all kind of on the same page and have a way to do that. I also have really enjoyed the support at play, our literacy coach in our building and different PD that we've had has been very, very helpful and beneficial, and I feel like a lot of teachers have been using it. I feel like it's drastically changed the way we teach literacy at my school."

In addition to supporting students with significant reading deficiencies, the READ Act has a separate grant program, the Early Literacy Grant (ELG). The ELG program fosters intensive improvements in a school's literacy curricula, assessments, and interventions and increases educators' knowledge of scientifically based reading research and

instruction. ELG schools have shown success in reducing the number of students with SRDs. Of the students identified with SRDs in kindergarten in ELG schools, less than half continued to have an SRD by second grade.

In addition to supporting the most struggling readers, schools in the ELG program also demonstrated year-over-year success in increasing the percent of students meeting grade-level expectations from the beginning to the end of the year in kindergarten through third grade.

Through the READ Act, Colorado educators and students are making progress toward third grade reading proficiency. ELG schools, in particular, are showing extraordinary growth.



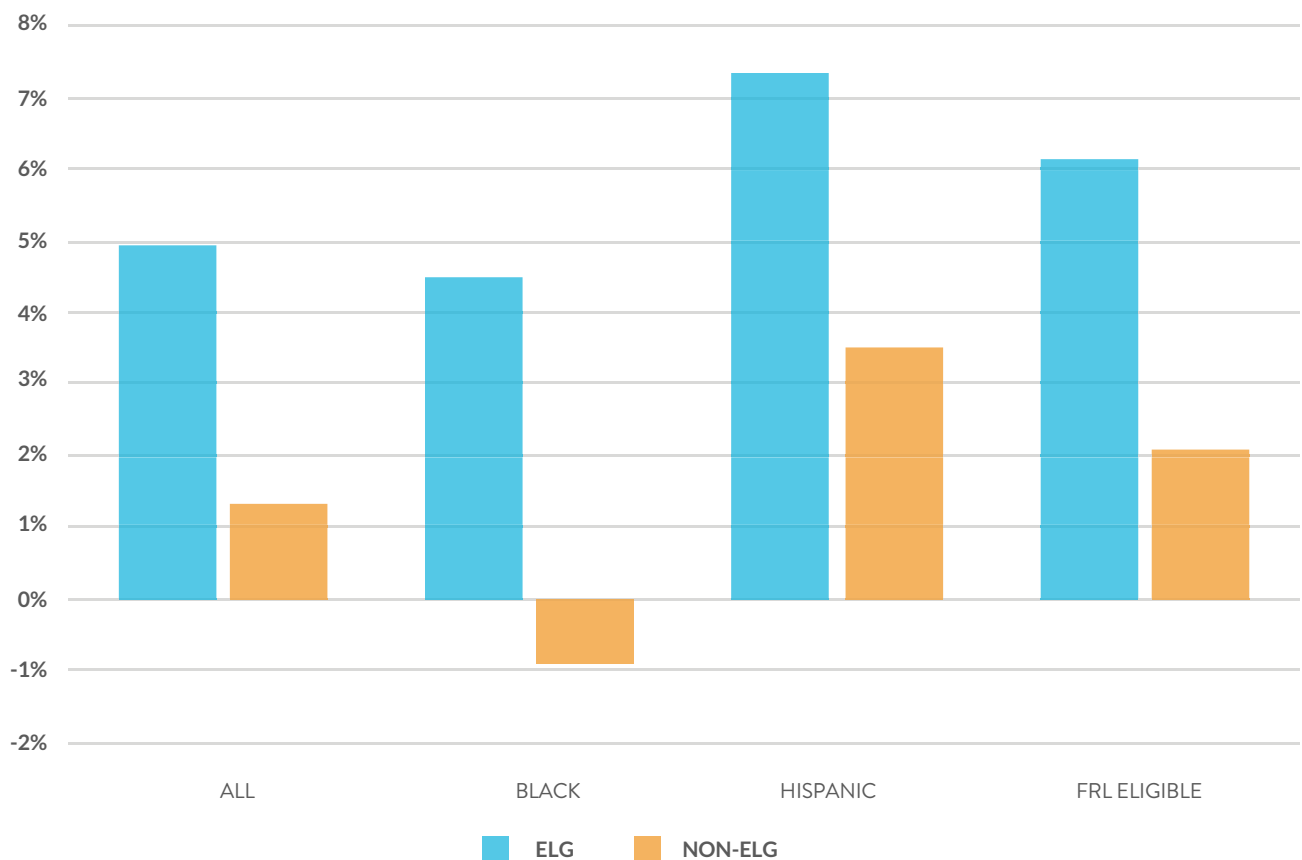
COLORADO STUDENTS NEED MORE LITERACY SUPPORT

Colorado has laid a strong foundation of support for our most struggling readers in the early grades, but if the state wants to improve literacy rates for all students from kindergarten through high school and beyond, more needs to be done. Based on Stand's policy work, educator feedback, and data, we have identified three gaps in the state's literacy landscape due to inequities in resources and student outcomes. We believe that if addressed appropriately, closing these gaps would have a powerful impact on improving literacy rates in Colorado.

GAP ONE: IMPLEMENTATION DISPARITIES AMONG DISTRICTS AND SCHOOLS

Districts throughout the state vary widely in nearly every regard — for instance, size, location, student demographics, budget, and personnel. In addition, our state values local control in education, a sentiment that is enshrined in the Colorado Constitution. These factors contribute to discrepancies in policy implementation, which means that

**Decrease in SRD Identifications for K-3 Students
Between ELG and Non-ELG Schools: 2013-2016**



some districts and schools are doing very well in implementing the READ Act and assisting struggling readers, while others are not. During our listening tour, one teacher in the Denver-Metro area noticed that districts introduced READ Act requirements to educators very differently, “from my understanding and talking with other teachers from other schools, there has been a lot of inconsistency about how this has been presented to schools.” Another teacher from a rural school district saw differences in how READ Plans were being implemented across her district, **“there are schools that use those READ Plans well. Several in our district, and they are doing great. They have curriculum for all their education, for all of their teachers, for all these things. And so, I think that there’s a real disservice in the way we’re showing teachers about the READ Plan.”**

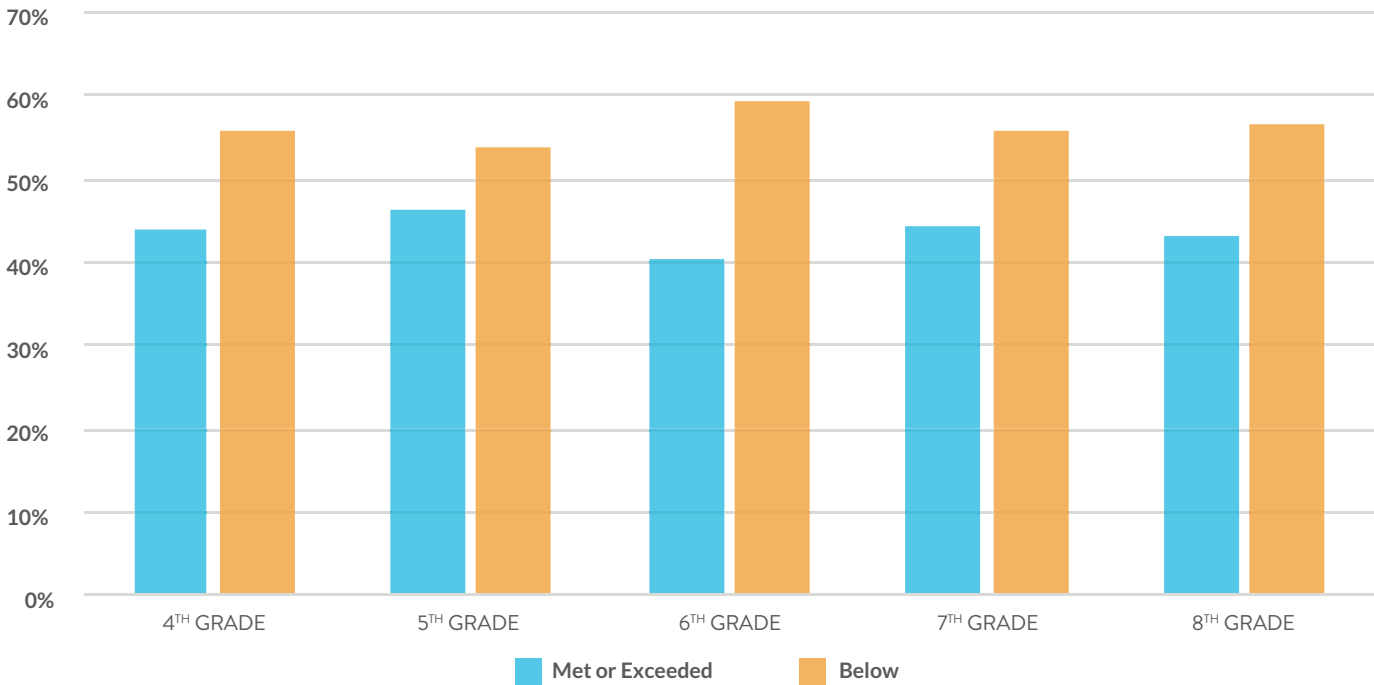
Although implementation varies throughout the states, in ELG schools, implementation fidelity is closely monitored and verified by Colorado Department of Education (CDE). ELG schools provide examples of what student outcomes can be achieved when the READ Act is working to its full potential. ELG schools have better student literacy outcomes than schools with varying degrees of READ Act

implementation, and they also have better outcomes for groups of historically underserved students. As the graph below shows, ELG schools decreased SRD identification among subgroups of students more significantly than non-ELG schools. Among Black students, the rate of SRD identification in non-ELG schools increased, while SRD identification among the same student group in ELG schools decreased by nearly 5%.

As the early data suggest, the READ Act can have a powerful positive impact on students’ reading ability. However, without consistent implementation, not all students receive the benefits of the law.



Student Achievement on 2017 Colorado State ELA Assessments



GAP TWO: STRUGGLING STUDENTS NOT RECOGNIZED AS HAVING AN SRD

Currently the majority of state resources for literacy are appropriately focused on the most struggling readers, but there are other learners who are falling behind in the early grades. The READ Act only identifies students who are the furthest behind in their literacy abilities and have a significant reading deficiency (SRD). These students are at the highest risk for missing critical reading milestones. However, simply not being identified as having an SRD does not mean that a student is on track to be a strong reader. Students who are on track to be reading at grade level are called “at benchmark.” Many students fall “below benchmark” but are not identified as having an SRD, and therefore, are not targeted for specific interventions under the READ Act. These students do not receive additional state resources but may still need individualized interventions to become proficient readers. According to cross-referenced READ Act and state ELA assessment data, just over 17% of third graders have an SRD, and 40% met or exceeded grade-level expectations in reading and related skills. ***This means that roughly 27,000 third grade students are not reading on grade level but are not eligible for additional reading supports through the state.***

Teachers made it clear that they work to serve all students, regardless of SRD designation, but indicated that resources are scarce and it can be difficult to adequately address the needs of all struggling readers. One educator in the Denver-metro area shared her experience trying to meet the literacy needs of every student in her classroom. “In some cases, it’s we need to work with the students who are on the READ Plans, because that’s our priority. And in some cases it’s we need to move as many students quickly as we can, so we’re going to talk about the cusp kids who are pretty close. And the READ Plan students get a little bit less support while we bump these guys up, then try to meet them. But we realize these ones needed more support.” Colorado students who are between having an SRD and reading on grade level are also at risk of falling behind without targeted support.



GAP THREE: ADOLESCENT STRUGGLING READERS

In addition to focusing on the most at-risk readers, the READ Act also focuses on students in kindergarten through third grade. While research indicates that reading proficiently by the end of third grade is a crucial milestone for literacy development and significant resources should be dedicated to meeting the needs of students in the early grades, struggling readers beyond third grade also need effective literacy interventions. Unfortunately, under current statute, the many struggling readers beyond third grade in Colorado do not receive any specific state literacy support. In addition to the state ELA assessment scores that indicate only 40.1% of the state’s third graders and 43.3% of eighth graders met expectations in English Language Arts,¹¹ we know that more than 30,000 students past third grade continue to have READ Plans because they are not reading proficient. These students are at significant risk for dropping out of school and for lifelong consequences of low literacy.¹²

Educators across the state work with older students who are still struggling to read beyond third grade. An educator in southern Colorado said, “the biggest issue we’re seeing now, ... ***we’re having our READ Plans carry over to middle school which has inadequate literacy services, I would say.*** As far as research-based interventions, those aren’t happening, at the middle school level. I think that’s just

because a lot of these interventions are seen as elementary interventions, which is definitely not true. Middle schoolers would benefit from any of those research-based programs.”

Unfortunately, teachers in the later grades do not always feel like they have the necessary skills to support struggling readers. A Denver-Metro area teacher said, “I taught sixth grade and needed to teach phonics with some of my students. I don’t expect every teacher in the district, teaches every grade up through eighth grade...to learn how to be a reading teacher expert, but there is some need for some of these skills to go beyond just our kinder and first-grade teachers and even at that level, develop the skills more.” Data show that many Colorado students are still struggling with literacy skills beyond third grade. There are not state-level systems or support to help older students become proficient readers in later grades.



CONCLUSION

Students learn to read early on so they can read to learn throughout the rest of their education. The ability to read is arguably the most foundational skill students need to be successful in school and life. This paper examined a variety of measures that show that while we are supporting our state's most struggling readers and are implementing extraordinary literacy instruction in some areas, there is more work to do. Less than half of the Colorado's fourth graders are reading on grade level, a critical academic milestone, and data also show persistent and significant gaps between groups of students that must be addressed.

Decades of research have shown there are five skills children must develop to become proficient readers by the time they enter fourth grade. There is also a lot of research about how teachers can help students build these skills to become proficient readers. Fortunately, the state has used this research to lay a strong foundation to improve reading outcomes for Colorado students by adopting the READ Act. The READ Act, when implemented with fidelity, has demonstrated success in improving literacy rates. Ensuring consistent implementation of best practices in literacy throughout the state, supporting students with an SRD, as well as students not reading proficiently, and supporting students who enter fourth grade (or later) reading below proficiency are key areas that, if addressed, could play a powerful role in improving literacy rates. Colorado can and must do more to improve literacy outcomes for every student.



ENDNOTES

- 1 The Annie E. Casey Foundation. (2010). *Early Warning! Why Reading by the End of Third Grade Matters*. Baltimore, MD: Fiester, L. Retrieved from www.aecf.org
- 2 U.S. Department of Education. Institute of Education Sciences, National Center for Education Statistics. (2015). Median annual earnings, number, and percentage of full-time year-round workers 25 years old and over, by highest level of educational attainment and sex: 1990 through 2014. *Digest of Education Statistics*. Retrieved from www.iecs.ed.gov
- 3 Goodling Institute. (2017). *Changing the Course of Family Literacy*. State College, PA: Clymer, C., Willson Toso, B., Grinder E. & Parrish Sauder, R. Retrieved from <https://ed.psu.edu/goodling-institute/policy/changing-the-course-of-family-literacy>
- 4 ProLiteracy. (2017). *Adult Literacy Facts*. Retrieved from <https://proliteracy.org/Resources/Adult-Literacy-Facts>
- 5 Deruy, E. (2016, May 25). The Colorado Paradox: The state has low unemployment and more and more jobs, but its future workforce may not be equipped to fill them. *The Atlantic*. Retrieved from <https://www.theatlantic.com/education/archive/2016/05/a-city-that-imports-college-educated-workers-tries-to-grow-its-own-talent/484325/>
- 6 "National Assessment of Educational Progress (NAEP) is a continuing and nationally representative measure of trends in academic achievement of U.S. elementary and secondary students in various subjects. It is the largest continuing and nationally representative assessment of what our nation's students know and can do in select subjects. It was first administered in 1969 to measure student achievement nationally."

U.S. Department of Education. (2017). NAEP Overview. Institute of Education Sciences, National Center for Education Statistics. Retrieved from https://www.nationsreportcard.gov/focus_on_naep/
- Graph 1: Gaps Between Subgroups of Colorado Students Scoring Proficient or Above on 2015 NAEP Reading, page 3. Data from U.S. Department of Education. (2017). NAEP Overview. Institute of Education Sciences, National Center for Education Statistics. Retrieved from https://www.nationsreportcard.gov/focus_on_naep/
- Graph 2: Proficiency Levels of Student Subgroups on Colorado 2017 State ELA Assessment, page 4. Data from Colorado Department of Education. (2017). CMAS ELA and Math (PARCC) 2016-2017 Achievement Results. Denver, CO. Retrieved from www.cde.state.co.us
- 7 U.S. Department of Education. (2017). NAEP Overview. Institute of Education Sciences, National Center for Education Statistics. Retrieved from https://www.nationsreportcard.gov/focus_on_naep/
- 8 Colorado Department of Higher Education. (2017). *Legislative Report on Developmental Education for the High School Class of 2015*. Denver, CO: Hunter Reed, K. Retrieved from www.highered.colorado.gov
- 9 U.S. Department of Education. (2003). *National Assessment of Adult Literacy*. Institute of Education Sciences, National Center for Education Statistics. Retrieved from www.nces.ed.gov/naal/

Trends from the Programme for the International Assessment of Adult Competencies (PIAAC), a more recent international measure of adult literacy, continue to demonstrate low levels of literacy and numeracy among adults in the US. However, PIAAC does not disaggregate data at the state level.
- Graph 3: Remediation Rates Across Student Subgroups at Colorado 2- and 4-year Colleges, page 5. Data from Colorado Department of Higher Education. (2017). Legislative Report on Developmental Education for the High School Class of 2015. Denver, CO: Hunter Reed, K. Retrieved from www.highered.colorado.gov
- 10 Colorado Department of Education. (2017). *Annual Report on the Colorado READ Act*. Denver, CO: Dorman, A. Retrieved from www.cde.state.co.us
- Graph 4: ELG Schools: Increases in K-3 Students Reading at Grade Level, page 6. Data from Colorado Department of Education. (2017). Annual Report on the Colorado READ Act. Denver, CO: Dorman, A. Retrieved from www.cde.state.co.us
- Graph 5: Decrease in SRD Identifications for K-3 Students Between ELG and Non-ELG Schools: 2013-2016, page 7. Data from Colorado Department of Education. (2017). Data Request for SRD Identification in ELG and Non-ELG Schools. Denver, CO.
- Graph 6: Student Achievement on Colorado State ELA Assessments, page 8. Data from Colorado Department of Education. (2017). CMAS ELA and Math (PARCC) 2016-2017 Achievement Results. Denver, CO. Retrieved from www.cde.state.co.us
- 11 Colorado Department of Education. (2017). *CMAS ELA and Math (PARCC) 2016-2017 Achievement Results*. Denver, CO. Retrieved from www.cde.state.co.us
- 12 The Annie E. Casey Foundation. (2010). *Early Warning! Why Reading by the End of Third Grade Matters*. Baltimore, MD: Fiester, L. Retrieved from www.aecf.org

Stand for Children Colorado is passionately committed to promoting early literacy and increasing literacy rates because the ability to read is foundational to a child's education and success in life.

Here are some examples of how we have worked to improve literacy outcomes for Colorado students:

- In 2012, Stand Colorado co-led a coalition of groups advocating for Colorado's nationally recognized, early literacy policy, the Reading to Ensure Academic Development (READ) Act. Since its passage, Stand Colorado has actively worked at the state and district level to support implementation of this law.
- In 2015-2016, our team studied what could be done to improve early literacy in Colorado and better support educators who are responsible for teaching reading. Our report, *Improving Early Literacy in Colorado: Realizing the Promise of the READ Act* outlines three specific recommendations for regulatory improvements. We have made progress on every recommendation and fully completed two.
- During the 2016-2017 school year, we started working with school leaders, educators, and parents to learn how we could better support early literacy instruction at the school level. As part of this work, we hosted literacy workshops for parents of students in Denver Public Schools and developed a pledge to help parents monitor and support their child's reading progress. Our workshops have reached over 200 parents in southwest Denver and continue currently.
- In the spring of 2017, we launched Read Now Colorado, an online resource, to support parents across the state as they help their children develop their literacy skills.
- In the summer of 2017, we sponsored a summer reading pilot program with at-risk students attending middle and high schools in West Denver. The pilot maximized student time spent in summer school by providing access to LightSail, an iOS program designed to help struggling readers make rapid progress. More than 45 students participated and a majority made a least one year's worth of reading progress over the summer.
- For six months in the beginning of 2017, our team conducted a statewide listening tour with educators and education stakeholders to understand their perspectives on the READ Act and literacy instruction in Colorado. Findings from those sessions will be released later this year.
- In fall of 2017, we released *The 2017 State of Literacy in Colorado* report, analyzing the most recent student achievement data and identifying gaps that if closed could have a profound impact on improving Colorado's literacy rates.
- In the winter of 2017, we will release recommendations for policy changes to strengthen the READ Act. These recommendations will be the foundation for 2018 legislation to continue improving literacy outcomes for Colorado students.



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