

Colorado Preschool Program Legislative Report 2017

Submitted to: Colorado General Assembly



COLORADO Department of Education

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Content

Welcome to Colorado Preschool Program 1
CPP in 2015-2016: By the Numbers
Expanding Access to CPP: Early Childhood At-Risk Enhancement (ECARE) 5
High Quality in Kindergartens Funded by ECARE 6
Measuring Outcomes in the Preschool Years 8
Highlights: Assessment of Preschool Outcomes
READ Act Results
Grade Retention Results
Colorado Measures of Academic Success (CMAS) Results
High Quality and Colorado Shines
CPP-Funded Programs and Colorado Shines Ratings
Expanding Quality to CPP: Professional Development Information System (PDIS)
ppendix

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Welcome to the Colorado Preschool Program (CPP) Legislative Report for 2017



COLORADO Department of Education

High quality early learning experiences provide a lifetime of benefits for Colorado's children. Through strong partnerships with districts and communities, the Colorado Department of Education delivers results for our first goal: Start Strong. The 2017 report provides highlights about the implementation and effectiveness of the Colorado Preschool Program (CPP) during the 2015-2016 school year. Local investment of CPP funding in both district and community sites increases choice for families and these strong collaborations result in positive outcomes for children. This year's report shares district success stories and outcomes through data providing a detailed account of the benefits children receive through CPP including preparing a strong foundation for continued success in school. The education and care of our youngest learners is a priority for the Colorado Department of Education. Together with the Colorado General Assembly, we are committed to promoting a lifetime of positive outcomes for all children in Colorado. Thank you for your continued support for the Colorado Preschool Program.

Respectfully,

Katy Anthes, Ph.D. Commissioner of Education

State Board of Education Description of School Readiness

School readiness describes both the preparedness of a child to engage in and benefit from learning experiences, and the ability of a school to meet the needs of all students enrolled in publicly funded preschool or kindergarten. School readiness is enhanced when schools, families, and community service providers work collaboratively to ensure that every child is ready for higher levels of learning in academic content.



CPP is a state-funded early childhood education program administered by the Colorado Department of Education.

CPP provides the opportunity to attend high-quality preschool for young children who are at risk for starting elementary school unprepared. Each year the General Assembly provides preschool funding for 20,160 children who have certain risk factors in their lives that are associated with later challenges in school. In 2013 and 2014, the General Assembly expanded CPP through the Early Childhood At-Risk Enhancement (ECARE) program which provided more flexible funding for half- or full-day preschool and kindergarten for an additional 8,200 young children. With the expansion, CPP can serve as many as 28,360 eligible children each year.

CPP in 2015-2016: By the Numbers

CPP Eligibility Factors

Children are determined eligible for CPP based on certain **risk factors present in their lives**, which have been shown to be associated with later challenges in school.



FOUR-YEAR-OLD STUDENTS

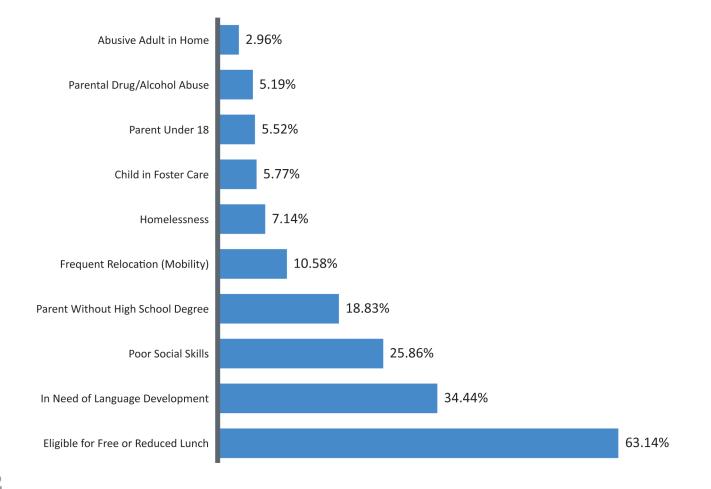
Four-year-old students must have at least one risk factor present, although most children served show two or more.

THREE-YEAR-OLD STUDENTS

Three-year-olds must have at least three factors present.

Figure 1: CPP Risk/Eligibility Factors

Each line represents the percentage of CPP-funded children with that risk factor



FAMILY ENGAGEMENT AND PARTNERSHIP

As a unified staff, our team members have developed a Family Involvement Practice. Using Colorado Department of Education's six standards of family involvement, staff and standards are divided into teams of focus. Staff participate in professional development around family involvement. Using our data-based resources, staff developed and follow a Family Involvement Guide of mindful practices and habits of interacting, engaging, and supporting families, unifying our staff to family interactions for smooth transitions into grade levels. During teacher workdays, time is set aside for our Family Involvement Resources for Education developments, or as we call our "FIRE works."

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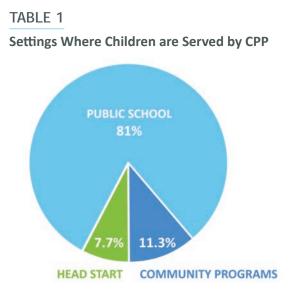


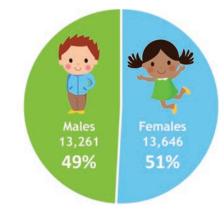
TABLE 3

Race/Ethnicity of Children Served by CPP

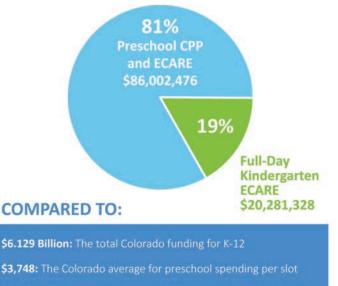
RACE/ETHNICITY	CHILDREN SERVED BY CPP	PERCENTAGE
American Indian or Alaska Native	200	1%
Asian	775	3%
Black	2,127	8%
Hispanic	14,403	54%
White	8,561	32%
Hawaiian/ Pacific Islander	45	<.01%
Two or More Races	796	3%
Total	26,907	100%

TABLE 2

Gender of Children Served by CPP



Total CPP Funding: \$106,283,804



\$4,521: The national average of state preschool spending per slot (Source:The State of Preschool 2015, National Institute of Early Education Research)

Estimated Unmet Need for CPP

Using data from the State Demography Office and state pupil counts, CDE has calculated that as many as 8,397 at-risk four-year-olds had no preschool available to them through either CPP or Head Start in the 2015-2016 school year. This calculation factors in the average number of children in first through eighth grade who are eligible for free or reduced price lunch as a percentage of the total first through eighth grade student population.

Children on Local CPP Waiting Lists: 4,140

Districts have self-reported that 4,140 children are on their waiting lists. Not all school districts keep waiting lists so this number may not represent the actual unmet need.

Charter School Participation

In the 2015-2016 school year, 301 children with CPP funding were served through Charter School Institute and district charter schools in Adams-Arapahoe 28J, Clear Creek RE-1, West End RE-2, Denver County 1, Park County RE-2, and St. Vrain Valley RE1J school districts.

School Districts Participating in CPP: 98%



CPP Slots Authorized by the Legislature:

СРР	ECARE
20,160	8,200

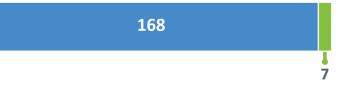
Total Enrollment: 26,907*

Enrollment by Age:

3 Y/O 5,429	4 Y/O	KDG.
5,429	15,704	5,411

Children under 3-years-old - 363**

Districts Providing Vision and Hearing Screenings: 96%



Enrollment by Length of Day:

20,043		5,411
 Half-Day Preschool Full-Day Preschool 	1,45	3
Full-Day Kindergarten		

*Number of children enrolled is lower than authorized slot total because some children are served full-day using two CPP slots.

** Some districts are able to serve younger children through a waiver granted at the initiation of the Colorado Preschool Program.

This option is no longer statutorily available.

LIFE-LONG LEARNERS

Gunnison Lake School provides a developmentally appropriate program based on sound early-childhood education research and best practices. We believe that children learn through play, exploration and discovery; that positive and supportive relationships are critical; and that a safe, warm and engaging environment enables children to explore and learn with confidence. Our aim is to develop lifelong learners in a safe, caring environment by providing individualized, standards-based instruction in a developmentally appropriate manner.

Gunnison District Philosophy

Expanding Access to CPP: Early Childhood At-Risk Enhancement (ECARE)

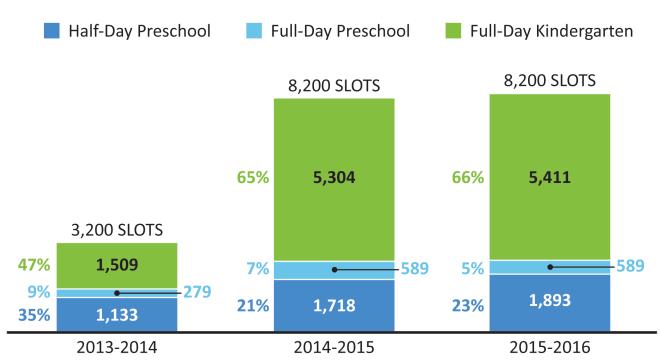


Figure 2: ECARE Slot Usage

Each line represents the percentage of CPP-funded children with that risk factor

School districts may change the usage of their allotted ECARE slots from year to year based on the needs of their early childhood population.

They may serve half-day preschool, full-day preschool, or full-day kindergarten.

The combined number of children in each line is lower than slot total because some children are served full-day using two CPP/ECARE slots.

High Quality in Kindergartens Funded by ECARE

High quality kindergarten must provide an environment in which learning is both rigorous and developmentally appropriate. Young children learn best through handling of materials and hands-on experiences carefully planned and facilitated by knowledgeable teachers.¹ While this learning may look to an observer as simple child's play, imaginative play is vital to a child's cognitive development.²

According to CDE's 2016-2017 Kindergarten Handbook, the Colorado Academic Standards (CAS) should be supported by a kindergarten program rich in classroom experiences that promote higher level thinking skills, while stimulating curiosity, experimentation, brainstorming, and problem solving. Play should serve as the driving force for learning, especially with the emphasis on 21st Century Skills within the CAS. Child-initiated play based activities and teacherdesigned experiences that incorporate play should frame kindergartners' learning throughout the school day. Competence and skill development in all learning areas are optimized from these experiences. ECARE funds may be used to enhance the quality of kindergarten classrooms in order to make intentional learning through play possible. Moffat County RE: No 1, Custer County C-1, Montrose County RE-1J, Manitou Springs 14, and Alamosa RE-11J school districts use ECARE funding to hire co-teachers so that the student-teacher ratio is reduced. Garfield 16 use ECARE funds to open additional kindergarten classrooms so that class sizes are reduced. This reduction in class size and ratio allows teachers to develop closer relationships with each child and make detailed plans for differentiation of instruction for them. This ensures the development of early literacy and mathematics skills leading to more favorable academic outcomes.

Professional development and access to materials play their parts in a high-quality kindergarten. In Canon City RE-1, ECARE funding is utilized for teacher training on child development and understanding developmentally appropriate practice in kindergarten. The Centennial R-1 district has added learning centers and materials to support quality programming.

Quotes from teachers in high-quality kindergarten classrooms to further illustrate the investment of ECARE funds.

I believe it is my role as a kindergarten teacher to provide a safe and nurturing environment in which each child is given individualized instruction to meet their academic as well as social and emotional needs. Kindergarten is a place in which students are able to find a love for learning through play as well as hands-on experiences.

> Erin Lohmeier Cripple Creek-Victor Kindergarten Teacher

¹ Gronlund, G. (2001). Rigorous Academics in Preschool and Kindergarten? Yes! Let Me Tell You How. Young Children, 56(2), 42-43. Retrieved from http://www.jstor.org/stable/42727922

² Kaufman, S. B., Ph.D. (2012, March 06). The Need for Pretend Play in Child Development [Web log post]. Retrieved December 08, 2016, from https://www.psychologytoday.com/blog/beautiful-minds/201203/the-need-pretend-play-in-child-development

What Research Tells Us

High quality kindergarten curriculum is anchored in state academic standards, principles of child development, and age appropriate teaching strategies.³ Research indicates that play supports children as they learn important concepts and skills in kindergarten, including academic and communication skills, persistence, creativity, curiosity, cooperation and self-confidence, all of which are essential to a child's future success in school and in life.⁴

In order to meet the academic and developmental needs of the kindergarten child, a high-quality classroom needs to provide a balance of teacherdirected activities, child-initiated play, and focused, experiential learning with daily time for playful, intentional learning centers. Classroom instruction dominated by worksheet activities, pre-determined topics, and/or scripted themes provides little opportunity for lessons that promote higher level thinking skills. These non-research based practices also tend to disengage children's interests, blocking the development of internal motivation needed to be a lifelong learner.

As a part of CDE's move to develop Multi-Tiered Systems of Supports (MTSS) in the state's schools, the department acknowledges the importance of both the academic and the developmental domain. The Office of Early Learning and School Readiness works closely with the Office of Learning Supports to encourage MTSS in systems that include our youngest learners.

My philosophy of teaching is that children have authentic hands-on experiences of the world in which they incorporate reading, writing, and math in their discoveries. I believe children are curious, and I promote the inquiry method of learning in my classroom. Several times a year children are able to choose their own research project, and children have returned years later and continued to remember and comment on what they studied in kindergarten! My teaching philosophy is closely aligned to the Reggio Emilia Approach to early childhood and the ideals embodied by Early Learning Education. Children learn best when they make connections to content, what they already know, and people. They thrive with hands-on activities and when provided multiple opportunities to express what they know in a variety of ways.

> Holly Pratz Silverton Kindergarten Teacher

Suzanne Cash Durango Kindergarten Teacher

³ Gullo, D.F. (2006). K Today: Teaching and learning in the kindergarten year. Washington, DC: National Association for the Education of Young Children.

⁴ Phillips, E. C., & Scrinzi, A. (2013). Basics of developmentally appropriate practice: An introduction to teachers of kindergarten. Washington, DC: National Association for the Education of Young Children.

STRONG CHILD OUTCOMES

The NWEA fall data for the 2015-2016 school year was collected and analyzed. The results were as follows: 82% of the former CPP students in first grade performed at average, above average or advanced in math compared to 81% of the entire first grade class. Eighty-two percent of former CPP students in first grade performed average or above compared to 88% of the entire class. Seventy-five percent of former CPP students performed at average, above average or advanced in math compared to the entire second grade class at 77% average and above. In reading, the second grade students that were formerly CPP students outperformed the entire second grade class with 75% at average, above average or advanced, compared to 64% of the entire second grade class.

McClave RE-2

Measuring Outcomes in the Preschool Years

All programs serving children funded through CPP use formative assessment to monitor progress, individualize instruction, and illustrate growth. Teachers and families observe children in the course of their everyday routines and activities. Their progress is then measured in key areas of learning and development between fall and spring.

Using assessment data, we can get a picture of how children are performing throughout the school year. One measure is to analyze the percentage of four-year-olds (in the year before kindergarten) who are meeting or exceeding widely held expectations in each of six overall developmental domains: social-emotional, physical, language, cognitive, literacy and mathematics. Often there are different ways to analyze the same data. Results in **Figure 3** demonstrate outcomes broadly across areas. However, CDE sought a more sensitive method of measuring outcomes at the end of school year. This method helps determine readiness on specific indicators and measure state-level performance improvement over time.

Using this method, **Figures 4-6** look more specifically at indicators within each area in spring. The disaggregated results help identify patterns across several key demographic subgroups. Below each chart the average difference in scaled scores between spring and fall is provided. This "difference score" is a proxy for growth in each subgroup. A higher difference score equals greater growth. Colored growth scores indicate subgroups with higher growth. This provides greater context for interpreting the spring percentages.

Important Note for Figures 4-6:

In these analyses, "Most Readiness Indicators" is defined as at or above the assessment's readiness benchmark in at least 80% of the objectives within an area. For example, language development is comprised of eight objectives. Therefore, a child must meet the readiness benchmark in at least seven of the eight language-related objectives to be considered "meeting age expectations" for language overall.

Language and Literacy reflect scores on language and literacy objectives as assessed in English, not necessarily the child's native language. This partially explains the disproportionately large gaps in language development by primary language and ethnicity.

Figure 3: 2015-2016 Percentage of CPP Four-Year-Olds Meeting or Exceeding Widely Held Expectations

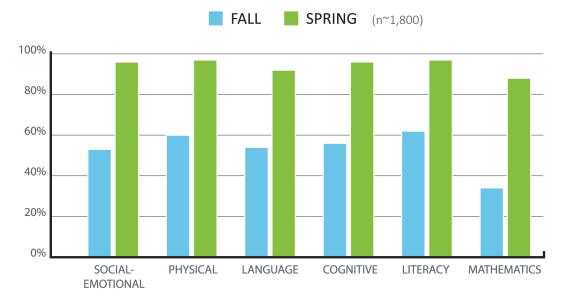
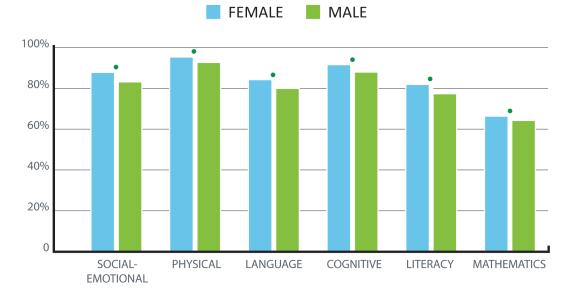


Figure 4: Percentage of CPP Four-Year-Olds Meeting Age Expectations In Most Readiness Indicators in Each Area by Gender (Spring 2016)

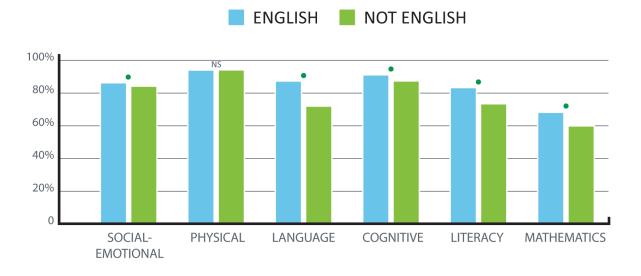


Average Difference in Scaled Scores: Spring Minus Fall (Higher=Greater Growth)

	Social-Emotional	Physical	Language	Cognitive	Literacy	Mathematics
Female (n~5,000)	92.3	82.5	96.6	104.8	87.6	84.4
Male (n~5,700)	89.7	81.7	94.4	102.9	87.2	84.3
Significant Difference?	•	NS	•	NS	NS	NS

• = statistically significant, p<.05 NS = not statistically significant

Figure 5: Percentage of CPP Four-Year-Olds Meeting Age Expectations In Most Readiness Indicators in Each Area by Primary Language (Spring 2016)



Average Difference in Scaled Scores: Spring Minus Fall (Higher=Greater Growth)

	Social-Emotional	Physical	Language	Cognitive	Literacy	Mathematics
English (n~7,600)	87.3	78.8	94.1	100.7	84.2	80.4
Not English (n~4,200)	97.8	88.1	98.1	109.6	93.2	91.4
Significant Difference?	•	•	•	•	•	•

High Outcomes

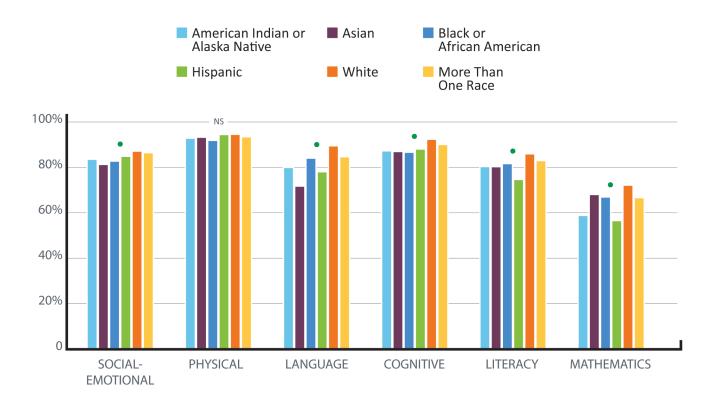
Our End of Year (EOY) DIBELS (a reading assessment) data from last year's CPP vs No CPP cohort is very encouraging. The data shows that 75% of CPP students ended kindergarten at or above grade level in literacy compared to 68% of non-CPP (with similar risk factors) students.

School District 27J

• = statistically significant, p<.05 NS = not statistically significant

10

Figure 6: Percentage of CPP Four-Year-Olds Meeting Age Expectations in Most Readiness Indicators in Each Area by Race/Ethnicity (Spring 2016)



Average Difference in Scaled Scores: Spring Minus Fall (Higher=Greater Growth)

	Social-Emotional	Physical	Language	Cognitive	Literacy	Mathematics
American Indian o Alaska Native (n~55		68.1	92.4	95.4	76.3	77.8
Asian (n~250) 86.5	73.6	89.8	99.0	83.5	80.2
Black or Africa American (n~670		73.4	87.0	90.23	77.0	74.3
Hispanic (n~4,600) 89.6	80.5	92.8	100.7	84.6	81.0
White (n~3,950) 86.9	78.8	95.1	101.1	83.6	80.4
More Tha One Race (n~185		71.3	85.5	95.3	78.1	78.8
Native Hawaiian o Other Pacific Islande		sed N<16				
Significant Differenc	e •	•	•	•	•	•

Highlights: Assessment of Preschool Outcomes for Children Funded by CPP

Key findings:

- 1. Significant disparities exist across gender, race, and ethnicity as early as preschool, even among children in CPP who by definition are already at risk for school failure.
- On average, female children funded by CPP score significantly higher than male children funded by CPP at the end of the school year across all six major developmental and academic domains. Female children funded by CPP show greater growth during the year in social-emotional and language development, suggesting that the gender gap may be widening in those areas.
- 3. On average, compared to four-year-olds funded by CPP whose primary language is English, CPP fouryear olds whose primary language is *not* English score significantly lower at the end of the school year in all areas except physical development. English language learners show greater growth in every domain, suggesting the English language learner gap may be narrowing.
- 4. In terms of meeting age expectations at the end of the school year, significant racial and ethnic disparities exist across most domains (except physical development). These disparities are especially pronounced in language development and mathematics.
- 5. In terms of growth, significant racial and ethnic disparities exist across all domains. Black children funded by CPP tended to show significantly less growth than white children in most domains (except physical development). In addition, black children on average showed significantly less growth than Hispanic children in most domains (except language development). No other combinations of race/ ethnicity were statistically significant in terms of growth scores. The evidence from both achievement and growth scores suggests the white/black gap may be widening.
- 6. Children funded by CPP are more likely to function within age expectations by the end of the school year in physical development than other areas. There is also much less variation in growth in this area among demographic groups.
- 7. Overall, children funded by CPP are much less likely to end the school year demonstrating age expectations in math than in other areas.



Features of a High Quality Preschool Environment

Boulder Valley School District received a Temple Buell grant with a multiyear plan to implement the Classroom Assessment Scoring System (CLASS) for preschool through 2nd grade classrooms. The district created a CLASS Leadership Cadre with preschool through 2nd grade teachers, Early Childhood Education department leadership, Literacy Director, English Language Development (ELD) Director, elementary principals, literacy and ELD teachers on special assignment, and Executive Director of Elementary School. This leadership team will be the first to receive the PK and K - 3 **CLASS Observational Training and** Certified Training classes. The CLASS Leadership Cadre will be the team that trains preschool through 2nd grade teachers and principals. **Boulder Valley RE-2**





READ Act Results

The Reading to Ensure Academic Development (READ) Act focuses on improving early literacy by providing intervention supports to K-3 students identified as having a significant reading deficiency (SRD). Children determined to have an SRD require the most intensive instructional supports. These children will not make sufficient progress with core instruction and differentiation alone.

READ Outcomes for Colorado Preschool Program

Figure 7 illustrates SRD rates in the 2014-2015 school year among four consecutive cohorts of children in CPP from 2010 to 2013. SRD rates are also compared to grade-matched comparison groups of children who were at risk (free or reduced lunch – FRL – in first grade) but did not have any history of publicly funded preschool.

Key findings:

- While CPP graduates demonstrate higher SRD rates than the state overall, SRD rates for CPP graduates are on average significantly lower compared to other at-risk children who had no history of publicly funded preschool.
- SRD rates for all students are similar in grades 1-3 while kindergarten SRD rates are significantly lower.
- On average, students are being identified with a SRD at a lower rate than in the first year of data collection (use caution when interpreting trends over multiple years as this is a new data collection).
- In general, children who are retained (held back) are more likely to have a SRD.
- These data show patterns similar to other analyses in this report.

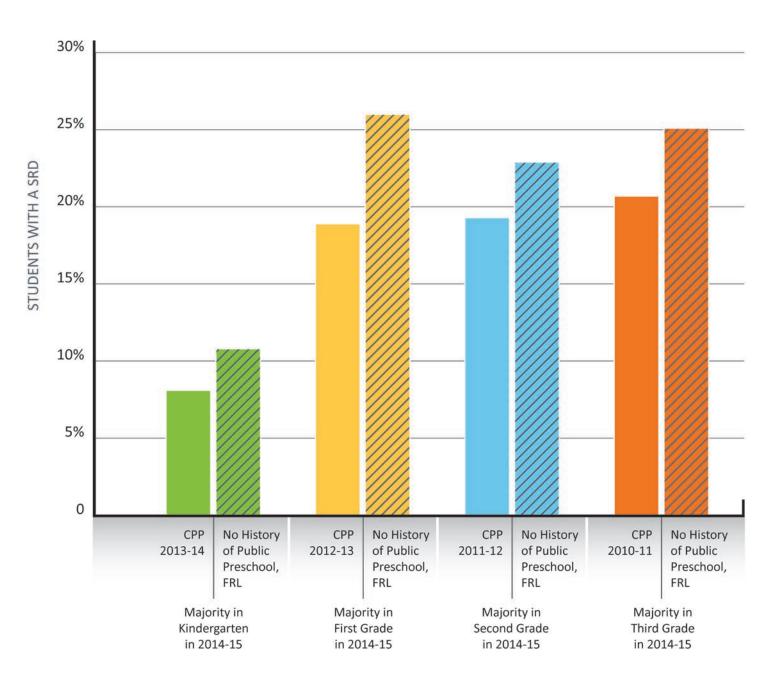


Figure 7: Students with a Significant Reading Deficiency

Cohorts vary across grades due to analysis of 2015 READ data only

More information including N sizes in Data Appendix, p. 24.

Grade Retention Results

Grade retention (holding students back) is one of several tools in a school's toolbox of interventions. Supporting children who have fallen behind puts pressure on school resources and requires additional expenditures. Retention costs Colorado taxpayers an extra year's worth of perpupil spending as the education system pays the cost of remediation. Children are also impacted by missed opportunities and lower self-confidence in their own learning abilities.

While high-quality preschool requires a significant investment, it is often less costly than retention. The data below and throughout this report suggests a return on investment in CPP.

Grade Retention Outcomes for Colorado Preschool Program

Figure 8 shows the overall proportion of children from three different cohorts who were held back at any point in grades K-3 (i.e., cumulative retention rate). **Figure 9** breaks it down further, showing retention rates in each grade (K-3). Key findings include:

- Compared to similar groups of at-risk children who did not attend publicly funded preschool, CPP is associated with a reduced need for retention by as much as one-third in first grade and a lower rate in subsequent grades.
- 2. Overall, retention rates are highest in first grade.
- 3. Trends are consistent across multiple cohorts.

Evidence of Outstanding Financial Braiding

Limon RE4J - Our preschool classrooms are totally blended. We have funding from Head Start, Colorado Childcare Assistance Program, special education, tuition and Colorado Preschool Program. An allocation plan is used to allocate income and expenses between our different funding sources.

Sheridan 2 - The Sheridan Early Childhood Center primary funding sources, CPP and Head Start are cost allocated based on student service hours for the school year. The current allocation is 77% Head Start and 23% CPP. Special education funding supports the specialists and the special education paraprofessionals. **Poudre RE-1** - The Poudre School District Early Childhood Preschool Program is proud to offer children and families the opportunity to participate in integrated classrooms under multiple funding sources and program eligibilities including Head Start, Colorado Preschool Program, Early Childhood Integrated Services (Special Education), tuition and general funds. Braiding funds in this way allows the program to serve more children in many locations, which provides choice to families. Pouder RE-1 values children's and families' exposure to a myriad of cultures and experiences, and we find that together with our families, we can support the education of our youngest learners.

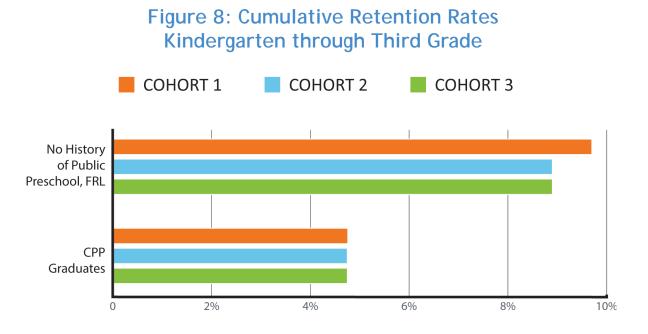
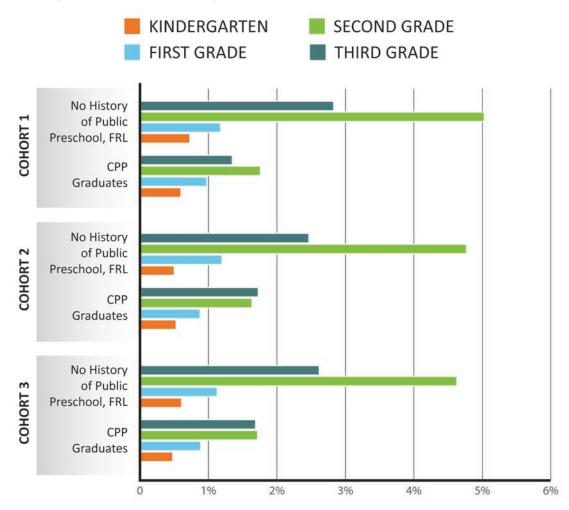


Figure 9: Percentage Who Repeated Each Grade



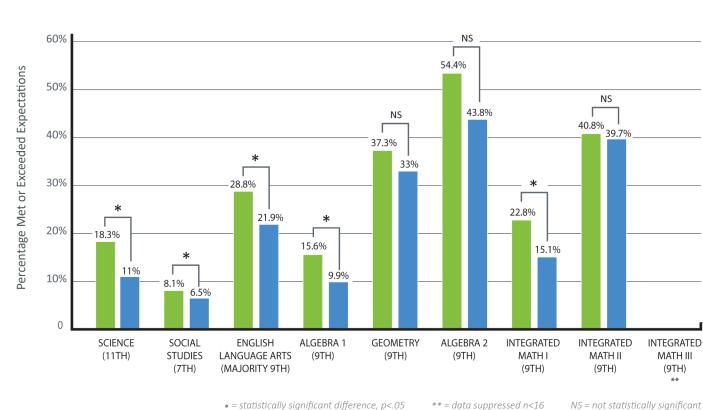
Colorado Measures of Academic Success (CMAS) Results

CPP "GRADUATES"

Figure 10: 2016 CMAS Results

Grades and cohorts vary across subject areas due to limited years of CMAS data available

NO HISTORY OF PUBLIC PRESCHOOL, FRL



• = statistically significant difference, p<.05

More information including N sizes in Data Appendix, p. 25

CMAS results show that on average, CPP graduates are more likely to meet or exceed expectations in most subject areas compared to their at-risk peers who have no history of public preschool, even as far out as eleventh grade in the case of science. Differences were statistically significant in science, social studies, English language arts, Algebra I, and Integrated Math I. The other four mathematics test subjects where differences were statistically insignificant had the smallest N count and thus low statistical power.

18

Methodological notes and limitations:

Most of the subject areas in **Figure 10** are only assessed in certain grades. Science is only administered in 5th, 8th, and 11th grades. Social studies is only administered in 4th and 7th grades. Algebra I-II, Geometry, and Integrated Math I-III is administered mostly in 9th grade with the exception of a few children in 7th/8th grade who have the flexibility to take high school math exams. In contrast, English Language Arts is administered in every grade 3-9. The majority of children presented in Fig. 10 in ELA were in 9th grade. However, about 20% of children reported here in the CPP cohort and 8% in the non-CPP cohort took the ELA assessment in 7th or 8th grade because they were either held back at some point or in the case of CPP, they may have attended CPP as a three year-old. CMAS data availability is limited. CMAS science and social studies have been administrated for three years. CMAS ELA and math have only been administered for two years. Therefore, different cohorts were used depending on the subject area.

2016 statewide participation rates varied widely by subject area and grade: Science (11th grade) = 58.1%, Social Studies (7th) = 88.3 %, ELA (9th) = 73.9%, Algebra I = 74.5%, Geometry = 72.9%, Algebra II = 68.0%, Integrated Math I = 84.1%, Integrated Math II = 75.1%, Integrated Math III = 53.1%.

Social Studies was administered on a sampling basis with approximately one-third of schools participating.



Investment in Professionalism

Weldon Valley School District developed a professional development plan in the Colorado Shines Quality Rating Improvement System. Staff registered in the Professional Development Information System (PDIS) and received a Colorado Early Childhood credential. Upon completion of a Colorado Shines evaluation, the program is now recognized with a Level 5 rating. The lead preschool teachers who hold a current and valid Colorado teaching license are paid the same beginning base pay and annual step increases, based on experience, as K-12 teachers.

Weldon Valley RE-1J

High Quality and Colorado Shines

Preschool classrooms funded with CPP dollars are required by law to be licensed through the Colorado Department of Human Services. In past years, the licensing process focused primarily on health and safety compliance. The state has moved from this model to Colorado Shines, the state's quality rating and improvement system (QRIS), which considers more than the basics. Colorado Shines rates Colorado's licensed early learning programs, connects programs with families looking for quality child care or preschools for their children, and helps programs improve their quality level.

To determine the level of quality of Colorado's early learning programs, Colorado Shines evaluates how each organization works to:

- Support children's health and safety
- Ensure their early childhood professionals are well-trained and effective
- Provide a supportive learning environment that teaches children new skills
- Help parents become partners in their child's learning
- Demonstrate strong leadership and business practices

THE NUMBER SCHOOL DISTRICTS WITH PROGRAM RATINGS OF **3**, **4** OR **5**



Once a rating has been established, Colorado Shines gives participating early learning programs the tools and support needed to consistently improve their quality. Ratings are from 1 to 5, with 5 being programs of the highest quality. At the time of printing, 12 programs funded by CPP have earned a 5-star rating.

Quality Monitoring

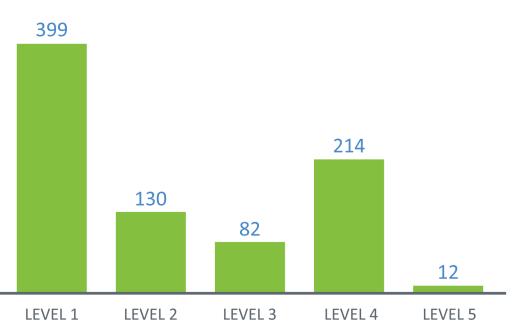
The CPP Coordinator visits each classroom twice a year. The CPP Coordinator is a certified Classroom Assessment Scoring System Observer. It provides the strongest feedback for teaching staff on where their teaching skills need improvement. In the spring, a section of the Quality standards is also employed for teacher self-reflection and feedback. Finally, all of our community providers have also participated in the new Colorado Shines program.

Alamosa RE-11J

CPP-Funded Programs and Colorado Shines Ratings

Programs that serve children funded by CPP and participate in Colorado Shines demonstrate that Colorado's most at-risk children are being served in high-quality preschool programs. Colorado Shines provides a comprehensive approach to evaluate Colorado's early childhood programs in areas such as health and safety, training and teacher effectiveness, positive learning environment, continuing education and leadership all characteristics that point to a program's level of quality, which leads to improved child outcomes.

> Figure 11: Distribution of CPP-Funded Programs by Colorado Shines Ratings as of 2016



Expanding Quality to CPP: Professional Development Information System (PDIS)

Research demonstrates that well-trained and well-educated professionals are key indicators of quality early learning programming¹. In Colorado, the Professional Development Information System (PDIS) is the workforce registry that provides an online learning system and career development supports for early childhood professionals. Colorado Shines, the state's quality rating and improvement system, evaluates early learning programs in areas such as health and safety, training and teacher effectiveness, positive learning environments, continuing education and leadership.

Key Findings from the PDIS about highly rated CPP sites:

- 52% of the Level 5 Colorado Shines rated sites serve children funded by the Colorado Preschool Program.
- Programs funded by CPP are administered by highlyqualified leaders who have earned the highest levels in the Early Childhood Professional Credential.
- Teaching staff in CPP sites routinely complete higher levels of education and participate in ongoing professional development.

¹ Reference: Institute of Medicine and National Research Council. 2015. Transforming the Workforce for Children Birth Through Age 8: A Unifying Foundation. Washington, DC: The National Academies Press. doi: 10.17226/19401.

Excellence in Staff Qualifications and Salaries

Dragon's Wagon is a private non-profit preschool program located in the Holyoke RE-1J School District. We contract with the district for our CPP slots and our Special Education children. The preschool board has made it a priority beginning with the 2016-2017 school year to pay our Director/ Teacher and Assistant Director/Teacher a comparable salary to school district staff. The Dragon's Wagon now has a Salary Schedule. This is a huge step for our nonprofit program and shows the dedication and support from the Dragon's Wagon Board of Directors in how much they value the work the Directors/Teachers put into our Early Childhood Program.

Holyoke RE-1J

District lead teachers are paid on an annual salary that is prorated and paid over 12 months. The salary range is dependent upon the years of experience as well as the educational level of the teacher that is hired. This can range from a first year teacher with a BA degree (\$36,800) to a first year teacher with an MA degree (\$41,900) to a first year teacher with an EDD/PhD degree (\$47,100). Steps are granted for years of service up to a maximum of eight years. Teachers new to the district who have a BA with *8 years of experience start at \$41,500 and new* teachers with an MA and 8 years of experience will start at \$46,600. In addition, new teachers are paid a \$500 signing bonus and a \$500 stipend at the beginning of the school year to compensate them for professional development requirements throughout the year.

Quality Monitoring

During the 2015-2016 school year several additions were made to the district advisory council on-site visits to district and community partner sites. Council members were provided with a short presentation about the curriculum used In our preschool classrooms, The Council learned about the development of the curriculum, the alignment to state preschool standards and state early learning guidelines. Council members were introduced to the Early Childhood Instructional Models for Literacy and Mathematics. As council members visited classrooms with Early Learning Coaches, and Child Development Center Coordinators, evidence of how the classroom activity observed could be found within the Instructional model.

Adams-Arapahoe 28J



Data Appendix

Supplemental notes, descriptive statistics, and cohort definitions for READ, grade retention, and CMAS results:

READ Act: Important Notes

- "At Risk, No History of Publicly Funded Preschool" = grade-matched comparison group defined as children eligible for free or reduced price lunch in first grade during the same expected year as the matched CPP cohort, with no history of preschool in fall pupil counts. CDE does not track whether children had other preschool experiences besides CPP and preschool special education.
- Each cohort includes a small percentage of children who did not follow a normal grade progression because they were either held back or skipped a grade, and thus may have appeared in a higher or lower grade for the 2014-2015 READ data collection.
- A small fraction of students not identified with SRD were English Language Learners who initially showed a SRD on one of the interim assessments but were determined not to have a SRD based on other English Language Development data and/or ACCESS scores (determined locally).
- Calculations do not include children who were exempt from READ assessment, third-graders who took the CoAlt, and K-2 students who were eligible to take the CoAlt.
- 2015 was the third year of READ data collection. As with any new data collection, data quality improves over time. Therefore, please use caution when interpreting changes between years. CDE has worked to resolve complications and ensure the data is more valid and reliable.

Cohort Definitions

Majority Kindergarten:

- **CPP** = CPP in 2013-2014
- At Risk, No History of Public Preschool = No history of publicly funded preschool, eligible for free or reduced price lunch in first grade in 2015-2016

Majority First Grade:

- CPP = CPP in 2012-2013
- At Risk, No History of Public Preschool = No history of publicly funded preschool, eligible for free or reduced price lunch in first grade in 2014-2015

Majority Second Grade:

- **CPP** = CPP in 2011-2012
- At Risk, No History of Public Preschool = No history of publicly funded preschool, eligible for free or reduced price lunch in first grade in 2013-2014

Majority Third Grade:

- **CPP** = CPP in 2010-2011
- At Risk, No History of Public Preschool = No history of publicly funded preschool, eligible for free or reduced price lunch in first grade in 2012-2013

CO Statewide Rates of Significant Reading Deficiency				
	2016 Statewide			
Grade	SRD Rate			
К	6.4%			
1	16.9%			
2	15.4%			
3	16.1%			

N	Size Chart	• •
Cohort	CPP	Comparison
Majority K	12,461	15,236
Majority 1st	10,776	16,757
Majority 2nd	10,735	15,941
Majority 3rd	10,442	14,817

Grade Retention: Cohort Definitions

- **Cohort 1: CPP** = CPP in 2007-08, K in 2008-2009
 - At Risk, No History of Public Preschool = No history of publicly funded preschool, eligible for free or reduced price lunch in first grade in 2009-2010
- **Cohort 2: CPP** = CPP in 2008-09, K in 2009-2010
 - At Risk, No History of Public Preschool = No history of publicly funded preschool, eligible for free or reduced price lunch in first grade in 2010-2011
- **Cohort 3: CPP** = CPP in 2009-10, K in 2010-2011
 - At Risk, No History of Public Preschool = No history of publicly funded preschool, eligible for free or reduced price lunch in first grade in 2011-2012

CMAS: Important Notes

- "At Risk, No History of Publicly Funded Preschool" = grade-matched comparison group defined as children eligible for free or reduced price lunch in first grade during the same expected year as the matched CPP cohort, with no history of preschool in fall pupil counts. CDE does not track whether children had other preschool experiences besides CPP and preschool special education.
- Each cohort includes a small percentage of children who did not follow a normal grade progression because they either attended preschool for multiple years, were held back, or skipped a grade. The effect on 2016 grade distribution varies depending on the CMAS subject. English Language Arts is assessed in grades 3-9, where about 20% of the CPP cohort and 7% of the comparison cohort were assessed in a grade lower than 9th in 2016. In contrast science and social studies are not assessed every year. 100% of children reported in science and social studies were in 11th grade and 7th grade, respectively. However, some children from the original cohorts were in a grade higher or lower than 11th grade by 2016, meaning they would not be assessed at all in science or social studies that year. Until more years pass, these children cannot be reported in science and social studies.

Cohort Definitions

Science (11th Grade):

- **CPP** = CPP in 2003-2004
- No history of public preschool = no history of publicly funded preschool, eligible for free or reduced price lunch in first grade 2005-2006

Social Studies (7th Grade):

- **CPP** = CPP in 2007-2008
- No history of public preschool = no history of publicly funded preschool, eligible for free or reduced price lunch in first grade 2009-2010

ELA (Majority 9th Grade):

- **CPP** = CPP in 2005-2006
- No history of public preschool = no history of publicly funded preschool, eligible for free or reduced price lunch in first grade 2007-2008

Mathematics (All Test Subjects-9th Grade):

- CPP = CPP in 2005-2006
- No history of public preschool = no history of publicly funded preschool, eligible for free or reduced price lunch in first grade 2007-2008

	N Size	
	СРР	Comparison
Cohort 1	10,808	17,642
Cohort 2	10,798	16,856
Cohort 3	11,553	16,920

Colorado Statewide Results				
Subject	2016 Statewide Average—% Met or Exceeded Expectations			
Science (11th)	24.3%			
Social Studies (7th)	18.1%			
ELA (9th)	37.2%			
Algebra I	32.4%			
Geometry	58.8%			
Algebra II	70.9%			
Int. Math I	33.4%			
Int. Math II	52.4%			
Int. Math III	66.3%			

	N Size	
Subject	CPP	Comparison
Science	3.783	6,863
Social Studies	2,211	4,315
ELA	5,433	10,590
Algebra I	2,873	6,256
Geometry	553	876
Algebra II	88	112
Int. Math I	786	2,242
Int. Math II	120	272
Int. Math III	N<16	N<16

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