



Colorado Preschool Program Legislative Report 2018

Submitted to:
Colorado General Assembly



COLORADO
Department of Education

By:
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CONTENT



Welcome	1
State Board of Education Description of School Readiness	
About the Colorado Preschool Program	
CPP in 2016-2017: By the Numbers	2
Expanding Access to CPP: Early Childhood At-Risk Enhancement (ECARE)	6
CPP Outcomes in 2016-2017 School Year: Overall Trends	7
CPP Outcomes in 2016-2017 School Year: Uncovering Disaggregated Trends	8
Highlights: Assessments of Preschool Outcomes for Children Funded by CPP	12
Case Studies in Using Data to Make Decisions	13
How Local School Districts Use Data to Enhance Relationships	14
How CDE Uses Data to Allocate Resources	16
READ Act Results	18
Grade Retention Results	20
Colorado Measures of Academic Success (CMAS) Results	22
Colorado Shines and Colorado Preschool Program	24
Colorado Shines: Alternative Pathways for School District-based Preschool Programs	26
Colorado Shines and Early Childhood Council Work	27
Staff Qualifications and Salary Parity in Classrooms Funded by CPP	28
Findings from Colorado's Early Childhood Workforce Survey	30
Preschool Funding in Colorado: Combining Resources to Create Positive Outcomes	32
Data Appendix	34

CDE wishes to acknowledge the contributions Dr. Cathrine Floyd made to this report and to the Colorado Preschool Program.

WELCOME

to the Colorado Preschool Program (CPP) Legislative Report for 2018

Our vision at the Colorado Department of Education is for all students to graduate high school ready for college or careers and prepared to be productive citizens of our state.

While graduation from high school may seem like a long time away from preschool, we know that students must have a strong foundation for their continued success in school. That's why high quality early learning is one of our most important initiatives.

The Colorado General Assembly has made a financial commitment to building a strong foundation for students through the Colorado Preschool Program (CPP), creating a positive impact for families all across the state. In this year's report, you can read about the positive impact the Colorado Preschool Program has on our youngest students throughout the state. These stories strengthen our understanding of evidence-based approaches to helping children become lifelong learners who are fully ready to succeed in school.

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.

About the Colorado Preschool Program

The Colorado Preschool Program (CPP) is a state funded preschool program administered by the Colorado Department of Education (CDE). Enacted by the Colorado General Assembly in 1988, CPP currently provides funding for up to 28,360 young children who have certain risk factors 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 flexibility to use 8,200 slots—29 percent of the current total slot allocation—for either half- or full-day preschool or full-day kindergarten. Children who are eligible for CPP attend high-quality early childhood programs. These may be located in school district settings, local child care centers, community preschools or Head Start programs.

CPP in 2016-2017: BY THE NUMBERS

CPP Eligibility Factors

Children are eligible for CPP funding based on certain **risk factors in their lives** that are associated with later challenges in school.¹ Figure 1 shows the risk factors and percentage of students with each of the eligibility factors. Children may qualify for CPP with more than one risk factor; therefore, the percentage may add up to more than 100 percent. Four-year-olds are eligible by having at least one risk factor, and three-year-olds are eligible by having at least three risk factors.

Figure 1: CPP Eligibility Factors

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

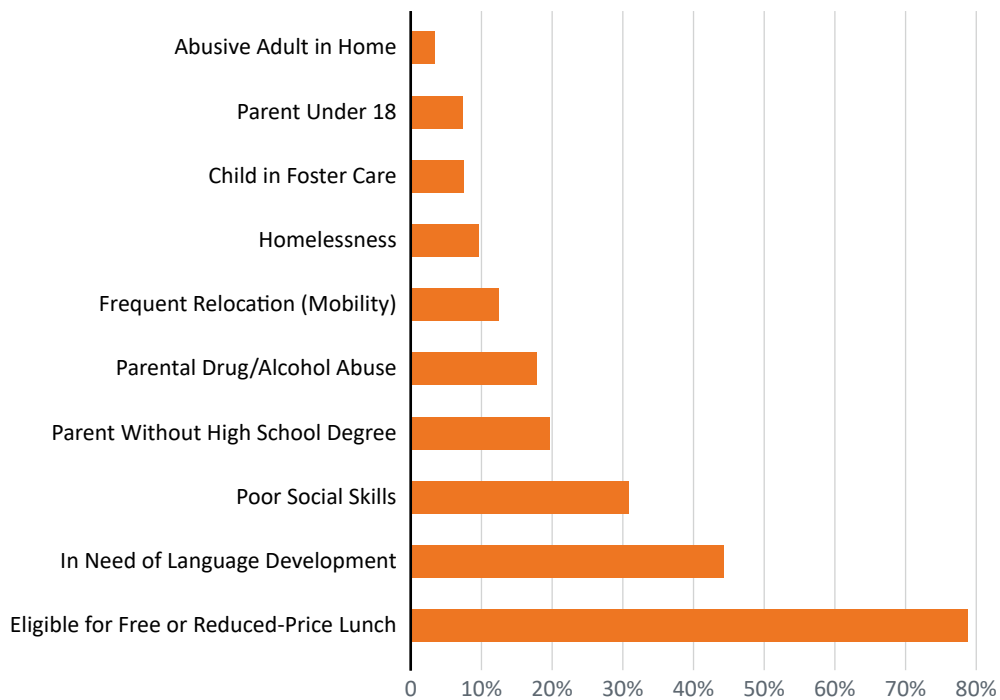


Figure 2: Settings in Which Children Are Served by CPP

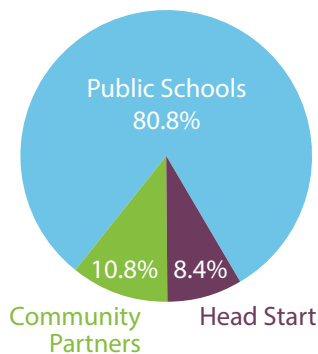
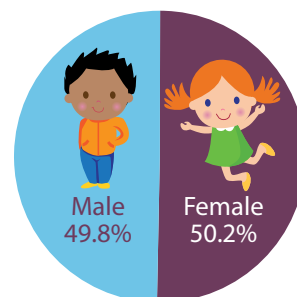


Figure 3: Gender of Children Served by CPP



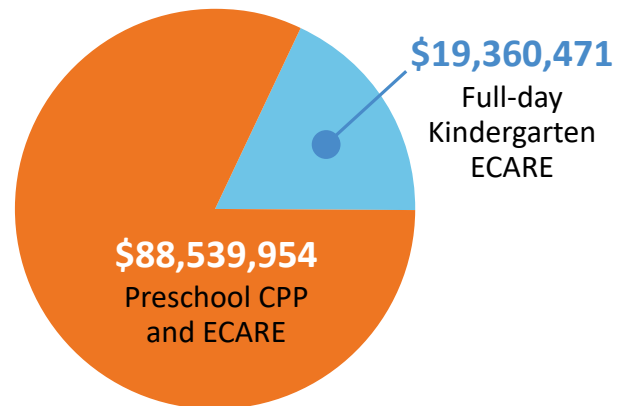
¹ C.R.S. 22-28-106.



Figure 4: Race/Ethnicity of Children Served by CPP

RACE/ETHNICITY	CHILDREN SERVED BY CPP	PERCENTAGE
American Indian or Alaska Native	224	1%
Asian	779	3%
Black or African American	1,957	7%
Hispanic or Latino	14,434	54%
White	8,437	32%
Native Hawaiian or other Pacific Islander	63	0%
Two or More Races	832	3%

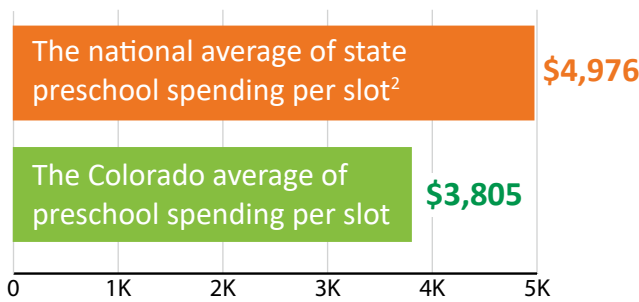
Total CPP Funding:
\$107,900,426



Compared to \$6.37 Billion:
Total Colorado K-12 education funding

CPP in 2016-2017: BY THE NUMBERS

Spending Per Slot:



Estimated Unmet Need for CPP

Using data from the State Demography Office and state pupil counts, CDE has calculated that as many as 8,925 at-risk four-year-olds had no preschool funding available to them through either CPP or Head Start in the 2016-2017 school year. This estimate is based on 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.

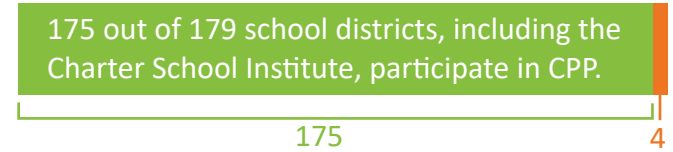
Children on Local CPP Waiting Lists: 3,704

Districts have self-reported 3,704 children on their individual waiting lists. Not all school districts keep waiting lists so this number may not represent the actual unmet need.

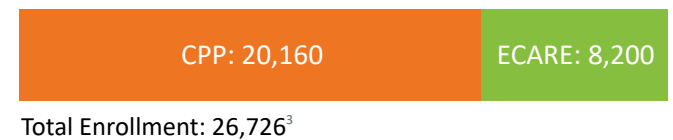
Charter School Participation: 16 Schools

In the 2016-2017 school year, 358 children were served with CPP funding through the Charter School Institute and district charter schools in Adams-Arapahoe 28J, Canon City RE-1, Clear Creek RE-1, Denver County 1, Park County RE-2, St. Vrain Valley RE1J, and West End RE-2 school districts.

Percent of School Districts Participating in CPP: 98%



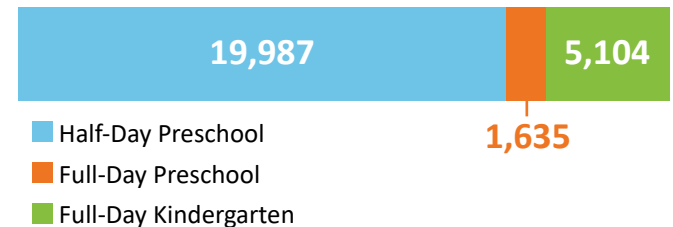
CPP Slots Authorized by the Legislature: 28,360



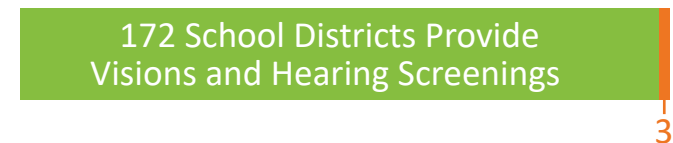
Enrollment by Age:



Enrollment by Length of Day:



Districts Providing Vision and Hearing Screenings: 98%



² Barnett, W. S., Friedman-Krauss, A. H., Weisenfeld, G. G., Horowitz, M., Kasmin, R., & Squires, J. H. (2017). The State of Preschool 2016: State Preschool Yearbook. New Brunswick, NJ: National Institute for Early Education Research.

³ Number of children enrolled is lower than authorized slot total because some children are served full-day using two CPP slots.

⁴ 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.



We offer full-day services to children who are selected through our enrollment process for CPP slots and qualify for special education services. Each year we have several families that decline special education services to attend full-day preschool through our Head Start or CPP dual enrollment. We were happy to learn the state reinterpreted rule 5.08 so no longer would the neediest children not get the services they need.

EAGLE COUNTY RE 50

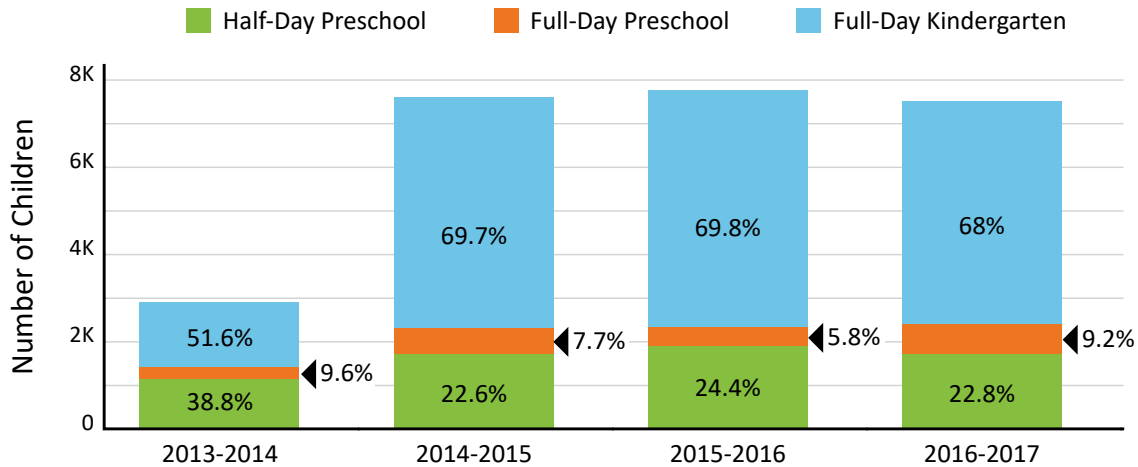
Children in Special Education who had a CPP slot for full-day services benefited greatly from the extra time in a classroom setting. We are very fortunate to have this opportunity to add additional services for the children who are most vulnerable.

CANON CITY RE-1

EARLY CHILDHOOD AT-RISK ENHANCEMENT (ECARE)

In 2013 and 2014, the General Assembly approved an additional 8,200 half-day CPP slots through the Early Childhood At-Risk Enhancement (ECARE) program. These additional slots can be used flexibly from year to year to serve eligible children through half-day or full-day preschool or full-day kindergarten. Figure 5 illustrates ECARE slot usage for each school year that the program has been in place.

Figure 5: ECARE Slot Usage



School districts may change the usage of their allotted ECARE slots from year to year based on the needs of their early childhood population. The combined number of children in each line is lower than slot total because some children are served full-day using two ECARE slots.

Alamosa is one of the highest poverty areas in Colorado. If CPP/ECARE funding were not available, 85 percent to 90 percent of Alamosa families would not be able to afford tuition. Alamosa’s 38 ECARE slots are used to provide quality enhancements to kindergarten children who are most at-risk for academic failure. This funding supports about 2 percent of the full-day kindergarten enrollment in our school. ECARE funds were used to purchase materials to create dramatic play centers for the kindergarten classrooms that can be rotated throughout the year. The kindergarten paraprofessionals (funded by ECARE) were given instruction and support on social-emotional development and appropriate early childhood practices.

ALAMOSA RE-11J

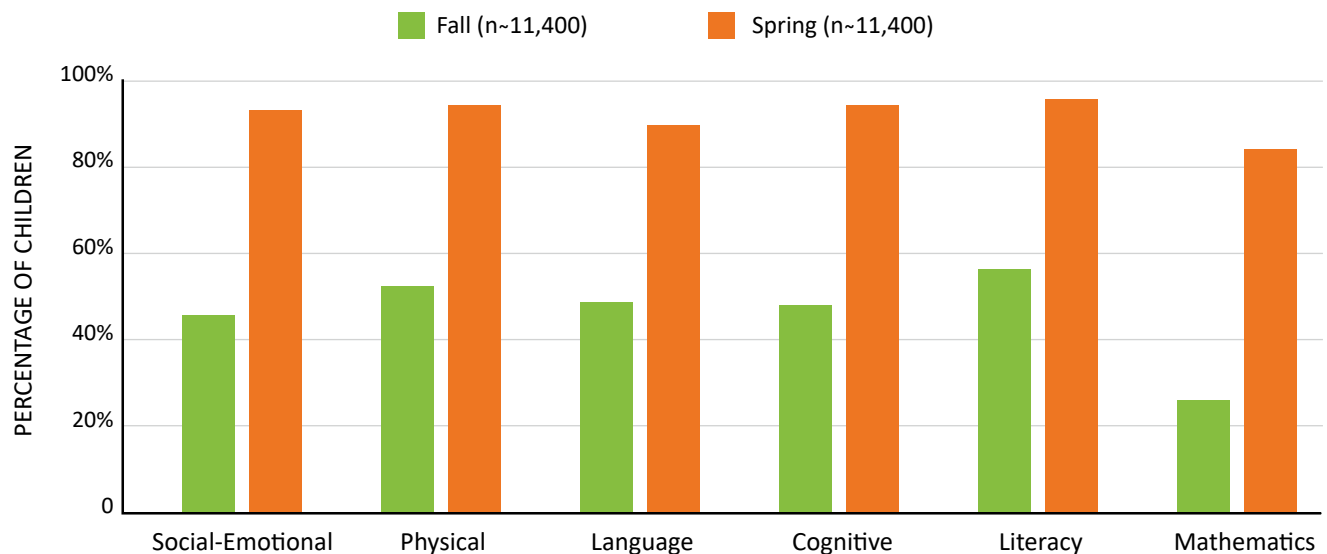
CPP Outcomes in 2016-2017 School Year: OVERALL TRENDS

All programs serving children funded through CPP use authentic observational child assessment through the Results Matter program to monitor progress, individualize instruction, and illustrate growth. Educators 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 in the fall and spring.

Using assessment data, programs 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. Results in Figure 6 demonstrate these outcomes broadly across each domain. In each area, children make significant overall gains in learning and development over the course of the school year.



Figure 6: Percentage of CPP Four-Year-Olds Meeting or Exceeding Widely Held Expectations in 2016-2017





CPP Outcomes in 2016-2017 School Year: **UNCOVERING DISAGGREGATED TRENDS**

Often there are different ways to analyze data. Take baseball, for example. Think of the many statistics derived from a single at-bat: batting average, strikeout rate, and slugging percentage just to name a few.

In the spirit of digging deeper, CDE developed a more sensitive, granular method of measuring readiness on specific indicators within each domain.* Using this method, Figures 7-12 look at results in each area in spring across several key demographic subgroups: gender, race/ethnicity, and primary language. Below each bar chart, a line graph of the average difference in scaled scores between fall and spring is provided. This line graph looks at the “difference score” which reflects growth in each subgroup. A higher difference score equals greater growth on average for the specified subgroup. These growth scores provide greater context for interpreting the bar charts.

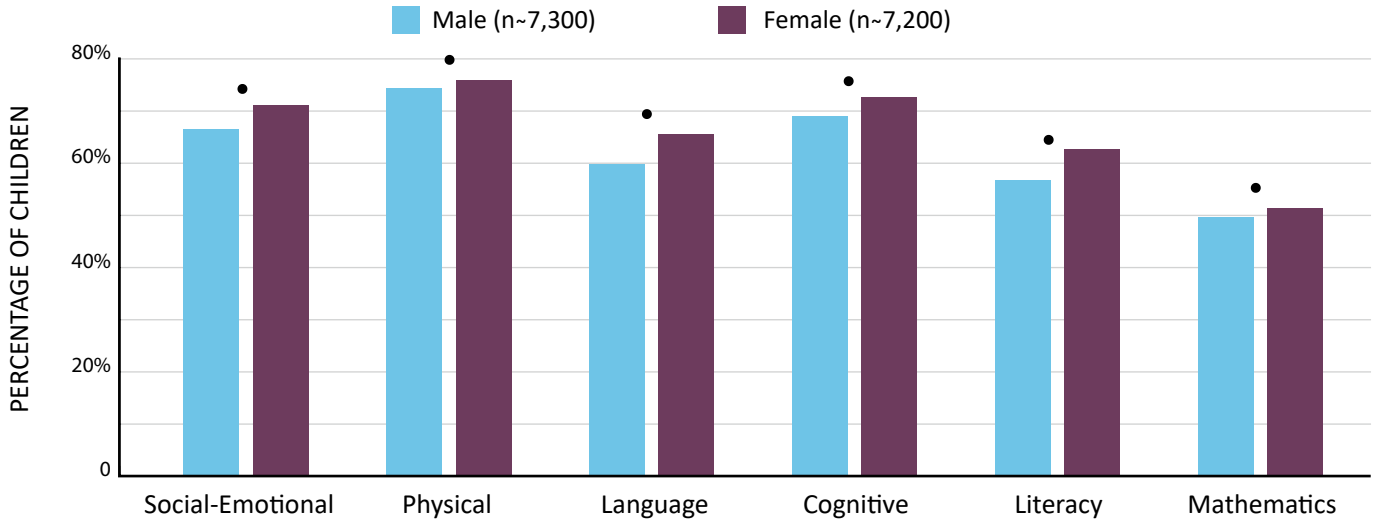


Important Note for Figures 7-12

In these analyses, the term “Most Readiness Indicators” is defined as at or above the assessment’s readiness benchmark in at least 80 percent 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. Also, the domains of 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.

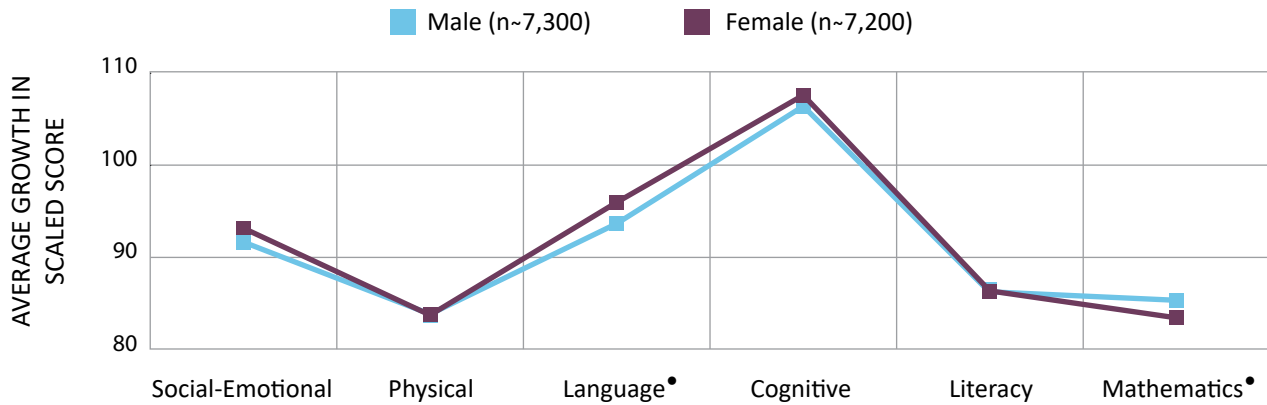
As illustrated by Figure 7, the majority of females met age expectations in most readiness indicators in each area by the spring of 2017. The majority of males also met age expectations in most readiness indicators in each area by spring, except for mathematics. As demonstrated below, just under half of males met age expectations in mathematics by the spring of the academic year. All differences shown below are statistically significant.

Figure 7: Percentage of CPP Four-Year-Olds Meeting Age Expectations in Most Readiness Indicators in Each Area by Gender (Spring 2017)



The average rate of growth between fall and spring across domains was fairly consistent across genders. Slight differences in growth can be seen below. However, the only domains with statistically significant differences were language and mathematics, with females having slightly higher average growth in language, and males having slightly higher average growth in mathematics.

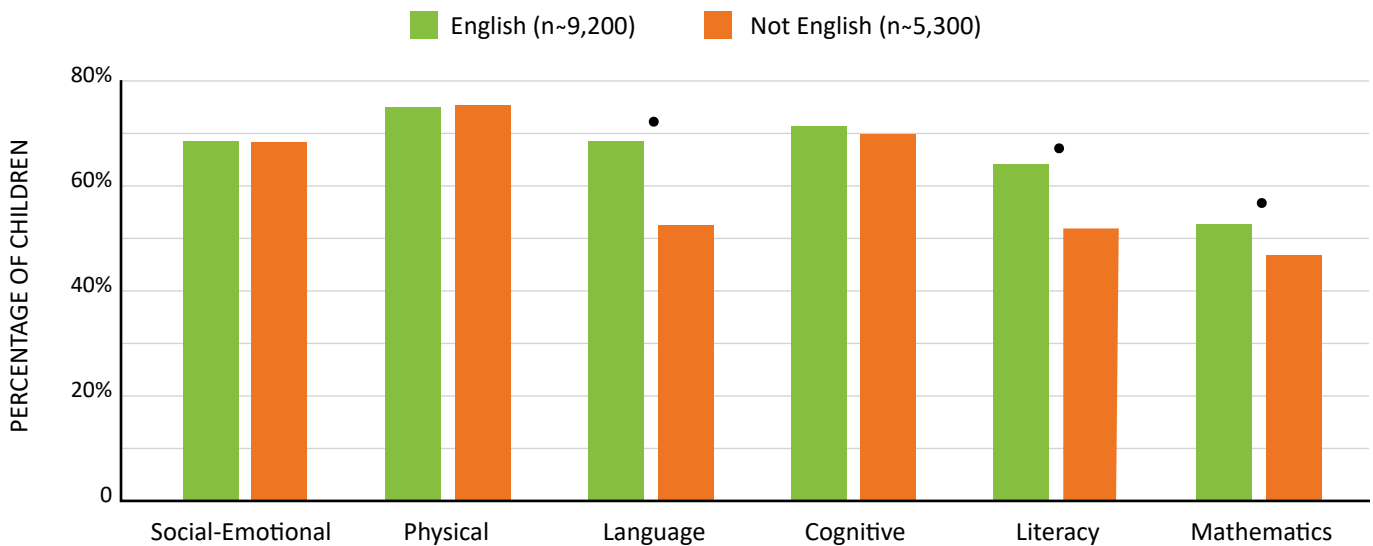
Figure 8: Average Growth in Scaled Scores between Fall 2016 and Spring 2017 by Gender



* = Statistically Significant, $p < .05$

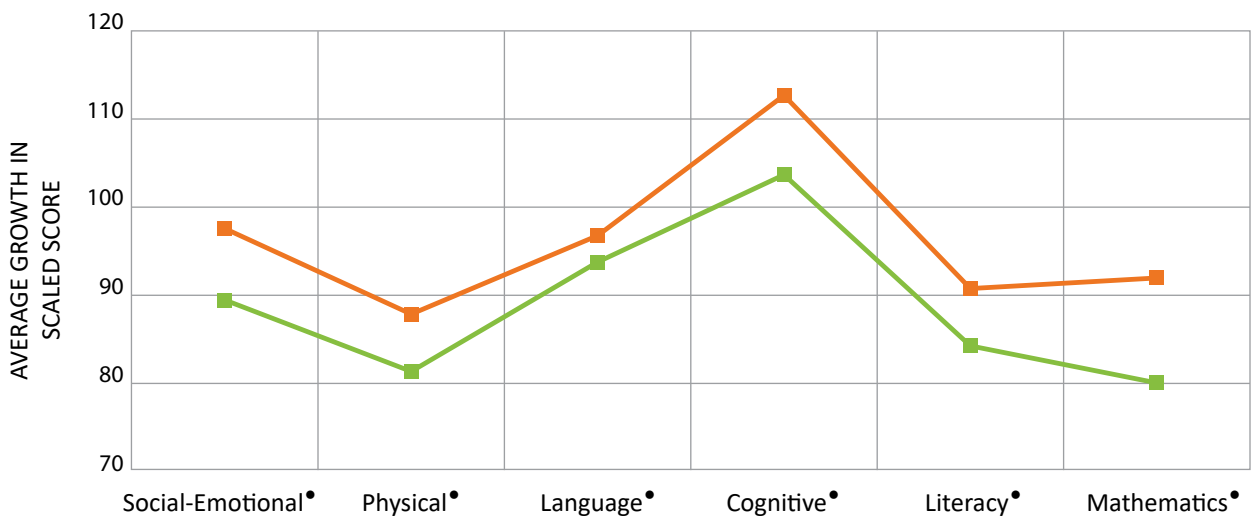
As illustrated by Figure 9, the majority of children for whom English was identified as their primary language met age expectations in most readiness indicators in each area by the spring of 2017. The majority of children for whom English was not identified as their primary language also met age expectations in most readiness indicators in each area by spring, except for mathematics. As demonstrated below, just under half of these children met age expectations in mathematics by the spring of 2017. Statistically significant differences exist only for language, literacy, and mathematics.

Figure 9: Percentage of CPP Four-Year-Olds Meeting Age Expectations in Most Readiness Indicators in Each Area by Primary Language (Spring 2017)



In terms of growth, Figure 10 illustrates that children whose primary language is not English demonstrated, on average, greater growth across all domains between fall and spring. All of these differences are statistically significant.

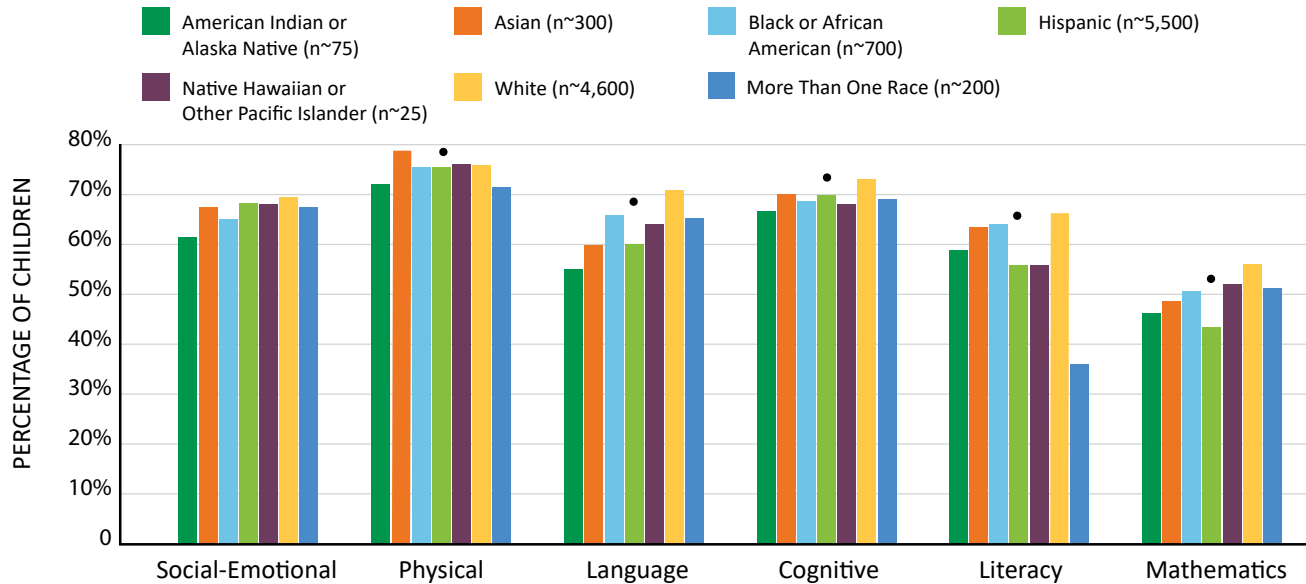
Figure 10: Average Growth in Scaled Scores between Fall 2016 and Spring 2017 by Primary Language



• = Statistically Significant, $p < .05$

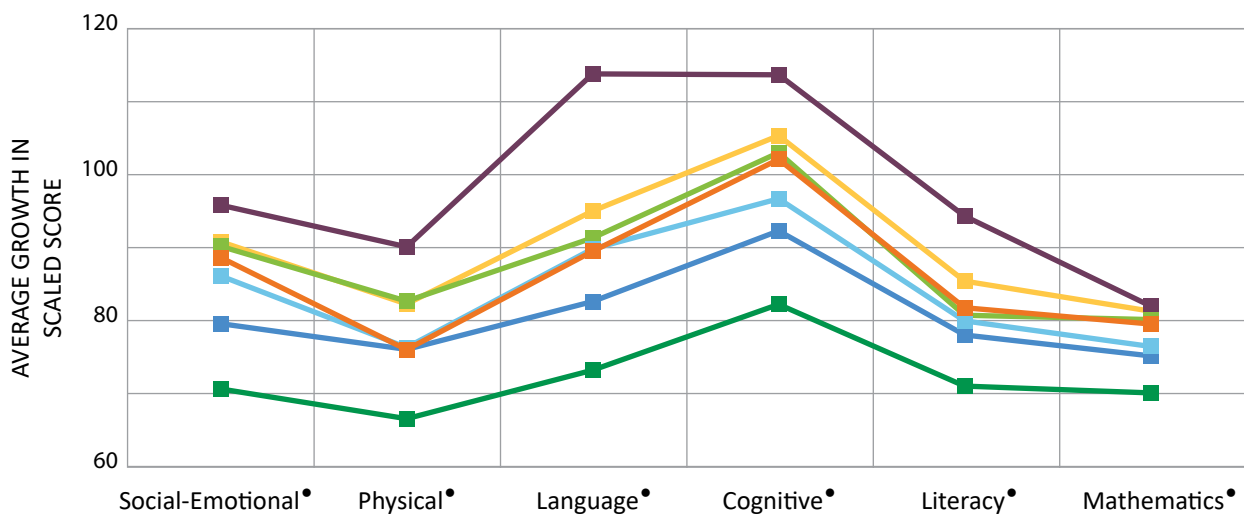
Across all races/ethnicity, the majority of children met or exceeded age expectations in almost all domains. The one exception is mathematics, where only the majority of Black or African American, Native Hawaiian or Pacific Islander, and White children, as well as children who are more than one race, met or exceeded age expectations in mathematics. The differences shown below are all statistically significant, except for social-emotional development.

Figure 11: Percentage of CPP Four-Year-Olds Meeting Age Expectations in Most Readiness Indicators in Each Area by Race/Ethnicity (Spring 2017)



Children across all races/ethnicity saw varied rates of growth across domains. In particular Native Hawaiian or Other Pacific Islander children demonstrated higher rates of growth across domains. Turning the focus toward domains, cognitive development saw the highest rates of growth between fall and spring on average, and physical development saw lower rates of growth between fall and spring on average.

Figure 12: Average Growth in Scaled Scores between Fall 2016 and Spring 2017 by Race/Ethnicity



* = Statistically Significant, $p < .05$

Highlights:

ASSESSMENTS OF PRESCHOOL OUTCOMES FOR CHILDREN FUNDED BY CPP

Key Findings From Measuring Preschool Outcomes in the 2016-2017 School Year:

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.

2

On average, female children funded by CPP score 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 on average during the year in language, whereas male children funded by CPP show greater growth on average in mathematics.

3

On average at the end of the school year, CPP four-year olds whose primary language is not English score lower* than those whose primary language is English in three areas: language, literacy, and mathematics. It should be noted that literacy and language are assessed in English, which is not necessarily the child's native language. However, children whose primary language is not English show greater average growth in every domain, suggesting the language gap may be narrowing.

4

In terms of growth, significant racial and ethnic disparities exist across all domains. On average, black children funded by CPP tended to show significantly less growth than white children in most domains. In addition, black children on average showed significantly less growth than Hispanic children in most domains. The evidence from both achievement and growth scores suggests the gap between white and black students may be widening.

* = Statistically Significant, $p < .05$



USING DATA TO MAKE DECISIONS

Decision makers require information. Information comes from data. Data need to be analyzed in order to draw meaning and form the basis for decision-making.

Decision makers are everywhere: educators, principals, families, policymakers, just to name a few. Among these roles, educational data are used for many purposes, including:

- ✘ Planning individual and class-wide instruction
- ✘ Communicating with families
- ✘ Supplementing additional educational experiences at home
- ✘ Planning classroom and program-wide improvement strategies
- ✘ Allocating resources
- ✘ Accountability reporting and program evaluation

This section highlights several examples of how local and state leaders make decisions using various kinds of data.

HOW LOCAL SCHOOL DISTRICTS USE DATA TO ENHANCE RELATIONSHIPS

Garfield 16 School District has multi-aged grades, starting in preschool. In the past, our kindergarten/first (K/1) grade students were struggling with challenging behaviors. We collected data and began to notice a trend with our K/1 students: children were transitioning several times a day for math, literacy, and specials to different teachers with different rules and expectations. These transitions were especially challenging for our kindergarten students.

Last year our school focused on best practices and research in early childhood to support children and provide them with a high-quality early childhood experience. With this information, it was decided to incorporate music, art, and physical education into the classroom, taught by the classroom teacher. This change reduced class sizes from 29 to 17-19 and allowed children to stay with their same teacher throughout the entire day. Teachers developed strong relationships with their small groups and children were able to know and trust the expectations from one adult. Further, teachers have had professional development regarding executive functioning and are better at using challenging behaviors as a teaching opportunity. Social skills are now taught intentionally throughout the day, just like math or literacy. With these changes, we have seen a significant drop in challenging behaviors in all of our students.

Twice a month the focus of our professional development was on purposeful play and brain research. The teachers also participated in peer observations in each other's classrooms and worked together in professional learning communities.

We have utilized the K-3 Classroom Assessment Scoring System (CLASS) to focus on instructional supports in the classroom and increasing these adult/child interactions. We have incorporated learning centers and materials to support purposeful play in the classroom, which also supports the Colorado Academic Standards. Children are learning not only through positive teacher/child interactions, but through intentional and purposeful play. Teachers see outdoor time as an opportunity to extend children's learning and even set up lessons to support children before they go outside.

This is the current culture and practice of our school and we have seen many positive changes in behavior and relationships with our young students.

GARFIELD 16



“ During the 2016-2017 school year, we focused on relationships. We discussed and implemented specific strategies to increase positive relationships between students and staff, with families, and among staff members. We were surprised to see that when we focused on relationships with students, we saw dramatic improvements in cognitive skills like attending to task, curiosity and motivation, persistence, flexibility, and inventiveness in thinking. CPP funds gave us the opportunity to teach children essential life skills!

Leigh Pytlinski, MA CCC-SLP
Director/ Principal
ENGLEWOOD 1



HOW CDE USES DATA TO ALLOCATE RESOURCES

As evidenced by the assessment data throughout this report, CPP graduates tend to score higher in mathematics compared to similar peers who did not participate in CPP. However, the short-term and long-term data indicate that mathematics outcomes are still relatively poor compared to other areas of development and learning. Acting on these trends, CDE decided to use newly available resources to provide evidence-based mathematics training to preschool educators across the state.

University of Denver professors Doug Clements and Julie Sarama remind us of the importance of math in the early years.⁵ Studies show that mathematics knowledge predicts not only children’s later math ability, but also their reading achievement. This is especially important for children living in at-risk environments where rich math language may not be spoken. To appropriately teach math concepts in early childhood, educators must learn how to infuse these

concepts into the everyday routine of the classroom, since young children learn better through hands-on, experiential learning than by teacher-led activities.

Donations from generous Coloradans through the Tax Checkoff Program - Public Education Fund* allowed CDE to provide professional learning opportunities during the 2016-2017 school year to preschool and kindergarten teachers using CPP and ECARE funding. Through a competitive process, CDE selected the Enhancing Early Mathematics Project, a mathematics training developed by Kids Play Math, with the goal of increasing quality teaching practices in mathematics.

Trainings were offered throughout the state in the following locations: Centennial, Cortez, Grand Junction, La Junta, Loveland, and Sterling. CDE received overall positive feedback about the trainings. The Department continues to measure outcomes to assess whether our improvement strategies are making a difference.

“The Kids Play Math Training we attended has had a huge impact both in how we assess kids for math skills, and now how we teach it. The concept of “go slow, to go far” has really resonated with us, and we are now making sure that our students (ages 3-5) have a firm understanding of the numbers 1-5 and 1-10 before we move on. It was the best math training we have ever been to! We use the information as well as the activities every day in our classrooms.”

Kate Kearns, Early Childhood Educator
Mancos Early Learning Center



⁵ Clements, D.H., & Sarama, J. (2014). The importance of the early years. In R.E. Slavin (Ed.), Science, Technology, & Mathematics (STEM) (pp. 5-9). Thousand Oaks, CA: Corwin.

Colorado's Income Tax Checkoff Program - Public Education Fund*

Colorado's Income Tax Checkoff Program on the Colorado income tax form has been in place since 1977. This voluntary program is funded by taxpayer contributions to any one fund, each of which benefits a program or charitable organization. The General Assembly determines which organizations will be eligible for contributions. The Public Education fund supports the Colorado Preschool Program which provides high-quality preschool for children impacted by factors such as poverty, homelessness, abuse or neglect. Children are supported by qualified early childhood professionals in safe and nurturing learning environments, which help them overcome substantial gaps and make significant gains that persist throughout their schooling.



*Colorado Legislative Council. (2015). Income Tax Checkoffs (15-03). Denver, CO: State Capitol.

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). The provisions of the Act promote early identification of reading difficulties and effective intervention to quickly close reading gaps and ensure all Colorado students demonstrate a level of competency in reading skills necessary to achieve success in school. Effective early reading instruction and targeted intervention support have the greatest potential to change the trajectory of Colorado’s most at-risk readers – helping to ensure that they meet the goal of reading by third grade.

READ Act Outcomes for Colorado Preschool Program

Figure 13 illustrates SRD rates in the 2015-2016 school year among four consecutive cohorts of children in CPP from 2011 to 2014. SRD rates are also compared to grade-matched comparison groups of children who were at risk (eligible for free or reduced-price lunch (FRL) in first grade) but did not have any history of publicly funded preschool.

KEY FINDINGS INCLUDE

1

While CPP graduates demonstrate higher SRD rates than the state overall, SRD rates for CPP graduates in grades 1-3 are on average 5 percent lower compared to other at-risk children who had no history of publicly funded preschool.

2

Looking within the two groups, rates are relatively similar across grades 1-3.

3

These data show patterns similar to other longitudinal analyses in this report.

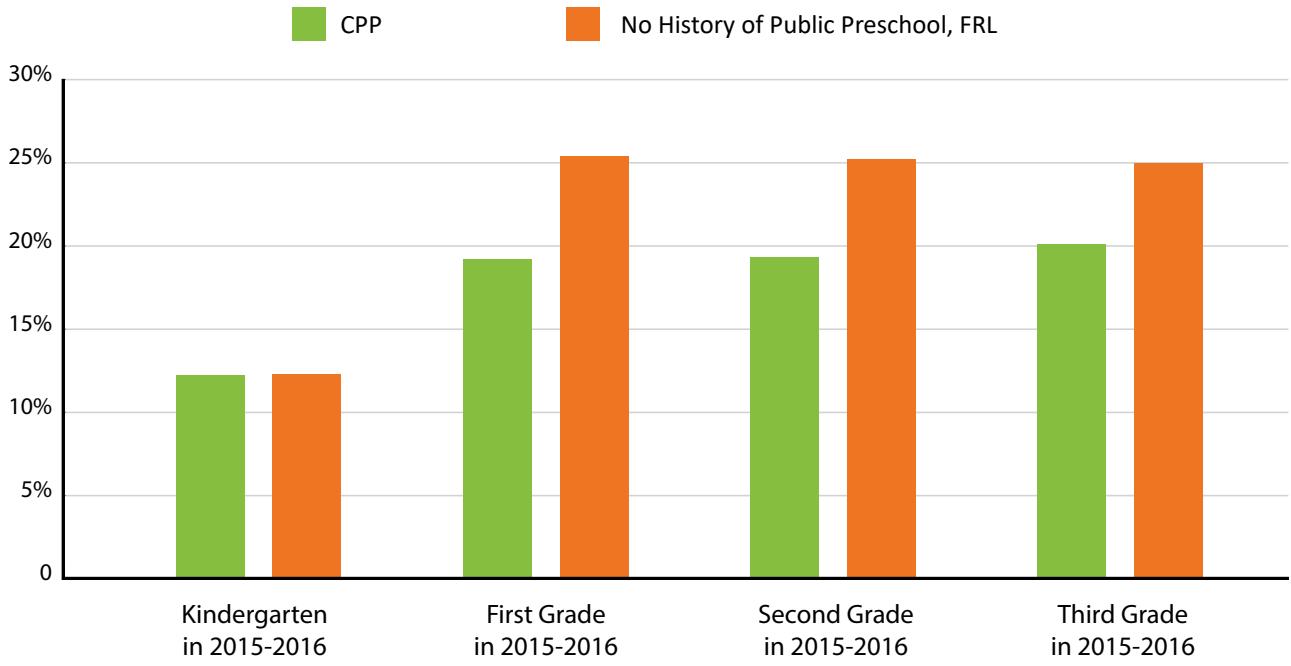
4

Cohorts vary across grades due to analysis of 2016 READ data only. Please see the data appendix for cohort descriptions.





Figure 13: Percentage of Students with a Significant Reading Deficiency in 2016



GRADE RETENTION RESULTS

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

Grade Retention Outcomes for CPP

Figure 14 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 15 breaks retention data down further, showing retention rates in each grade (K-3).

KEY FINDINGS INCLUDE

1

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, but lower for CPP graduates than a comparison group of at-risk children with no history of publicly funded preschool.

3

These trends have remained consistent over time.



* Please see data appendix for cohort descriptions.

Figure 14: Cumulative Retention Rates Kindergarten through Third Grade

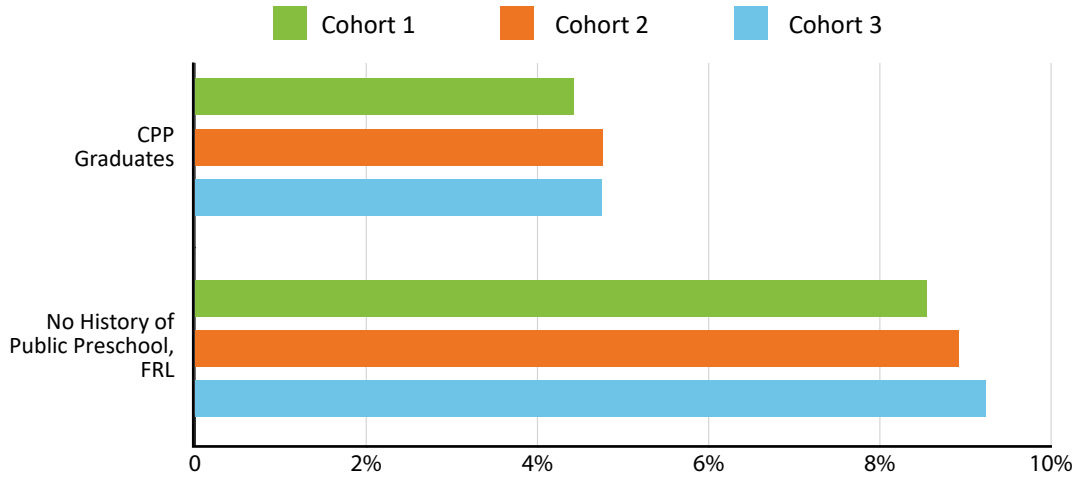
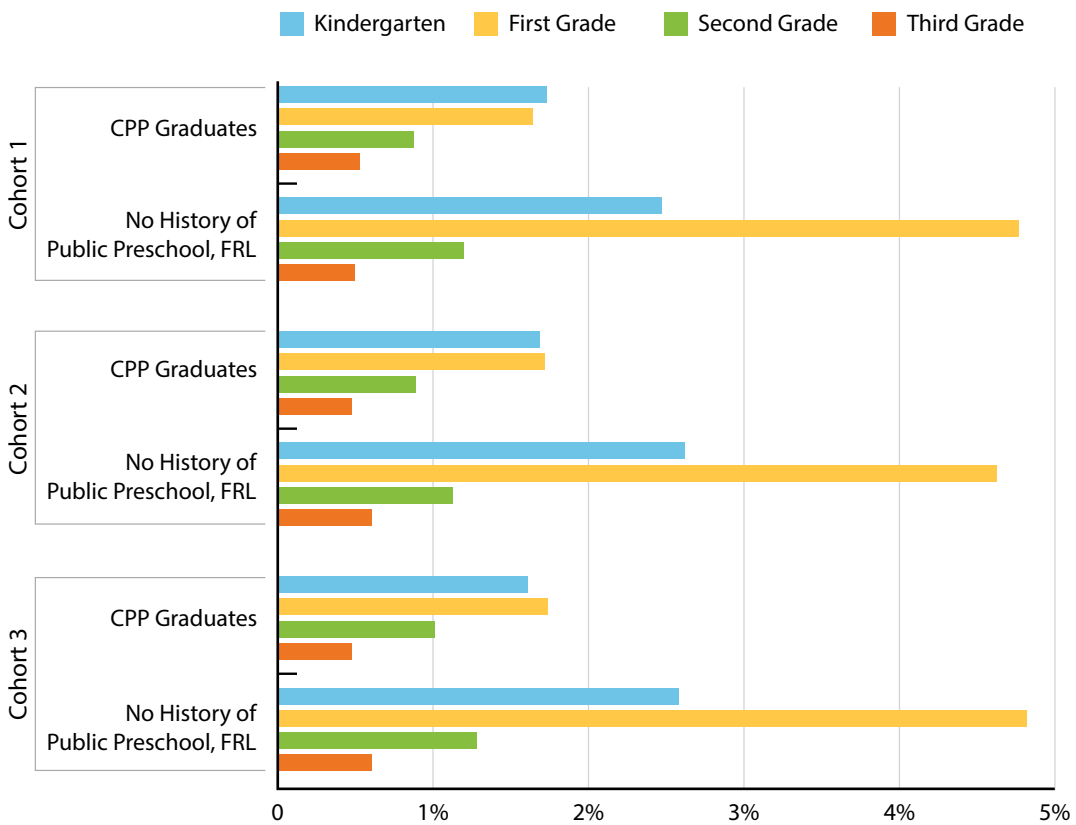


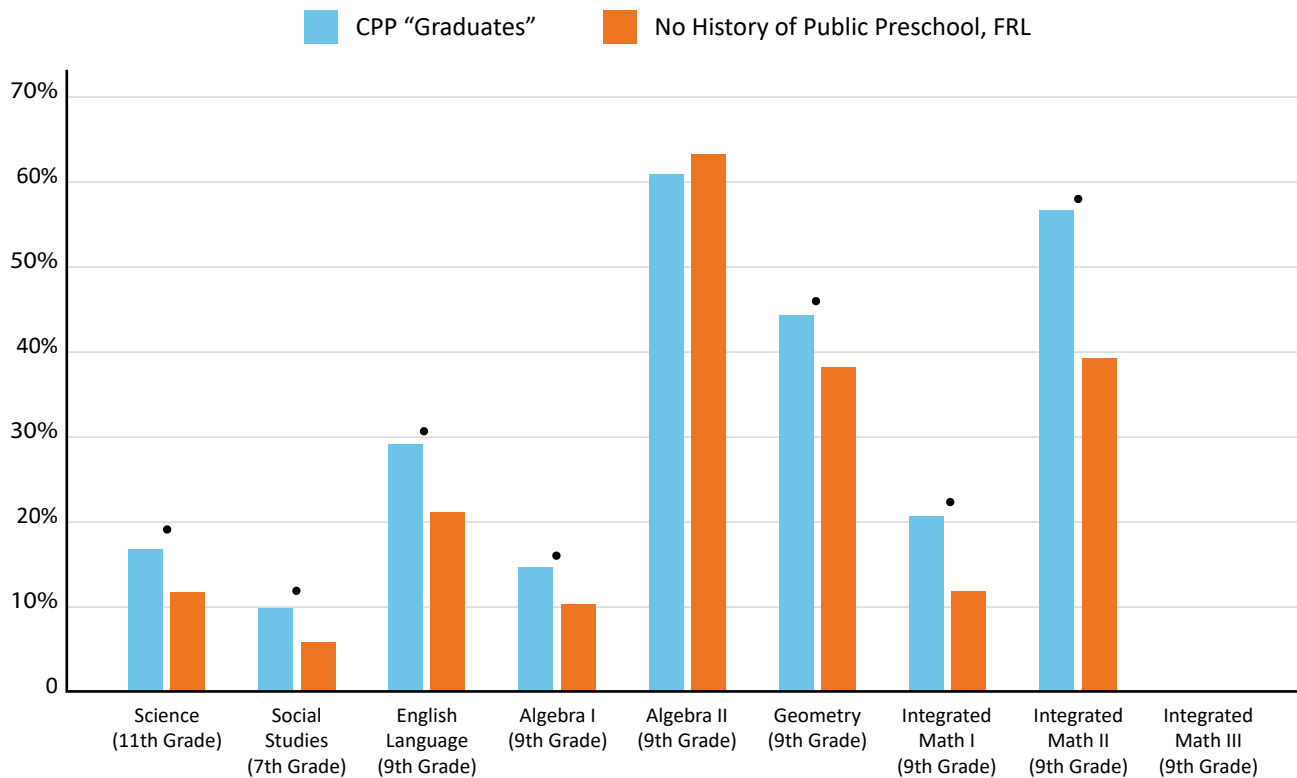
Figure 15: Percentage of Students Who Were Retained, by Grade



COLORADO MEASURES OF ACADEMIC SUCCESS (CMAS) RESULTS

Reviewing the Colorado Measures of Academic Success (CMAS) results, the percentage of CPP graduates who meet or exceed expectations in any one subject area is typically higher than the comparison group of at-risk peers with no history of publicly funded preschool. This is noteworthy as these trends are seen as far out as 11th grade in the case of science. A similar trend was seen in 2016, and the differences presented here are statistically significant for all subject areas, except for Algebra II.

Figure 16: 2017 CMAS Results



Methodological Notes and Limitations

CMAS data availability is limited. CMAS science and social studies have been administered for four years. CMAS ELA and math have only been administered for three years. In addition, science and social studies are not assessed in every grade. Therefore, different cohorts were used depending on the subject area. Integrated Math III is not displayed due to low participation. Please see the data appendix (p. 34) for more information.

• = Statistically Significant, $p < .05$



COLORADO SHINES AND COLORADO PRESCHOOL PROGRAM



**COLORADO
SHINES**

**START EARLY
START STRONG
QUALITY EARLY LEARNING**

High Quality Preschool and the Colorado Shines Quality Rating and Improvement System

To be eligible for CPP funding, programs are required to be licensed through Colorado Department of Human Services Child Care Licensing. In past years, the licensing process focused primarily on health and safety. The state has moved from this

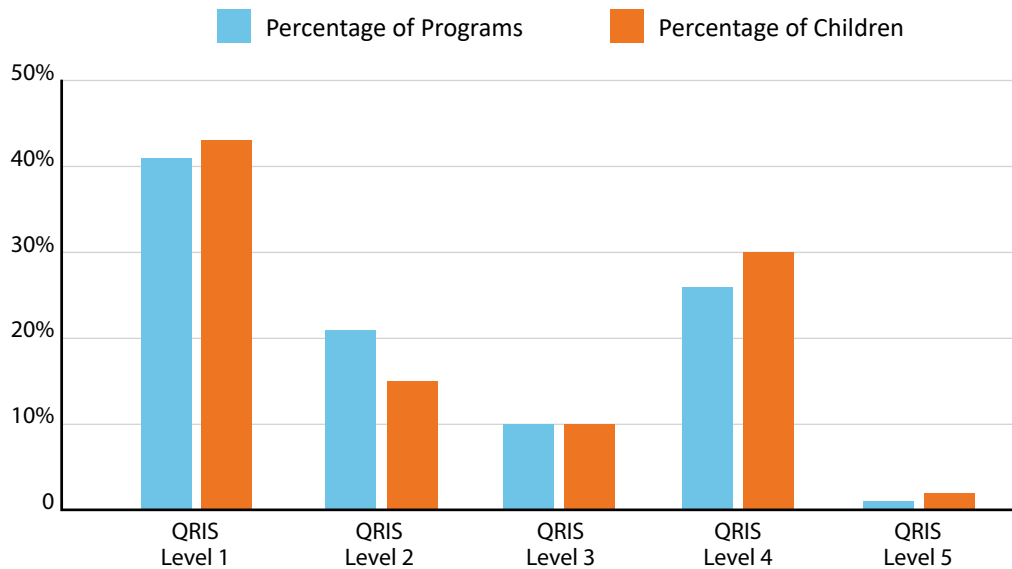
compliance model to Colorado Shines, the state's quality rating and improvement system (QRIS), which considers more than the basics of health and safety. QRIS ratings are from Level 1 to Level 5, with Level 5 being programs of the highest quality. To determine the level of quality of early care and education programs, Colorado Shines evaluates how each organization works to:

- 1 Support children's health and safety
- 2 Ensure their early childhood professionals are well-trained, effective, and appropriately compensated
- 3 Provide a supportive, play-based learning environment that increases children's skills in all areas of development, with a focus on social and emotional learning for future school and life success
- 4 Help parents become partners in their child's learning
- 5 Demonstrate strong leadership and business practices



In Figure 17, Colorado Shines data show that 37 percent of early childhood care and education programs funded by CPP have achieved a high quality rating (Level 3-5), while 41 percent of the programs received the lowest rating. Looking at the distribution of children funded by CPP shows that 42 percent of children were served in high-quality programs (Levels 3-5) in 2016, while 43 percent were served by programs with the lowest rating. A Colorado Shines rating Level 1 indicates that a program is currently licensed with the State of Colorado. Programs may choose to improve quality at a pace that works for each individual program. CDE encourages programs to pursue full participation in Colorado Shines QRIS and has worked with the Colorado Department of Human Services to create an alternative pathway to help facilitate and support district participation.

Figure 17: Distribution of Programs and Children Funded by CPP and Colorado Shines Rating Levels (Fall 2016)



We use early childhood tools, including the Early Childhood Environment Rating Scale, Third Edition (ECERS-3) and the CLASS, to monitor individual classrooms for quality, to select community sites for participation in CPP and to develop classroom training plans. All early childhood coordinators and facilitators are trained and reliable in the CLASS observation tool. We use this tool for community sites and Dual Language Learner teachers who have been with us for more than two years. We find it very helpful to ensure that more seasoned teachers and teams are given feedback that will help them grow and improve in their classrooms and to support their children’s development and learning.

COLORADO SPRINGS 11

ALTERNATIVE PATHWAYS FOR SCHOOL DISTRICT-BASED PRESCHOOL PROGRAMS



In Colorado, eligible school district programs may apply to be included in QRIS Levels 3 and 4 based on certain data in Colorado Shines. Colorado Shines requires school district programs to demonstrate verification of their governance structure, workforce

structure, and wage structure and show evidence that the program meets specific Colorado Shines standards. In order to achieve a QRIS Level 4 in Colorado Shines, districts are required to have the following elements:

1

Programs provide high quality, developmentally appropriate, play-based learning.

2

Educators are degreed, credentialed or licensed minimally as follows: Teacher License with Early Childhood Education (ECE) or Early Childhood Special Education (ECSE) endorsement or Bachelor's Degree in ECE, ECSE or related field.

3

Early childhood educators are paid on the same salary scale as K-12 educators.

4

The district offers full-time staff a compensation package with benefit options that include paid holidays, paid time off, health/dental insurance and at least three additional benefits such as: life insurance, employee child discount, retirement plan and/or disability insurance.

5

Children are assessed with developmentally appropriate methods (Results Matter participation meets this requirement).

6

The district provides vision, hearing, and dental screenings for all children.

Additional information on the alternative pathway is available at <http://coloradoshines.force.com/resource/1503946886000/SchoolDistrictAltPathApp>



COLORADO SHINES AND EARLY CHILDHOOD COUNCIL WORK



“

Liberty Preschool is located on the rural plains of northeastern Colorado, nestled within Yuma County, and proudly calling the Liberty J4 School District home. This one-of-kind location and school brings pros and cons, a notable challenge being the establishment and maintenance of an adequate Advisory Council.

Taking this particular challenge head-on, the Liberty School Board, Superintendent of Liberty School, and Director of the Liberty Preschool decided to collaborate with a neighboring community. A partnership was formed with Yuma County Early Childhood Council, bringing a wider group of people to the table. Liberty Preschool CPP Advisory Board and the Yuma Early Childhood Council now work cohesively to implement a high-quality program. Being a part of the Early Childhood Council has provided the Liberty Preschool with many opportunities, additional information about trainings, changes to laws, further understanding of rules and regulations, Qualistar, and Colorado Shines.

With a seasoned resume, Liberty Preschool has been through the Qualistar process several times and has received multiple 4-Star ratings. Through this experience and success, the program and council decided that it is in their best interest to move with the Colorado Shines rating system. Liberty Preschool proudly received a high 4 Level. Participating in this procedure was challenging, but rewarding. The program now clearly sees their strengths while paying close attention to areas of weakness.

It is through these adjustments that the Liberty Preschool continues to evolve. The program looks forward to providing even more years of quality care and making the natural shifts recommended by Colorado Shines. It is always Liberty Preschool's belief that all children deserve a safe, happy, and nurturing environment to grow, play, and learn.

”

LIBERTY J-4

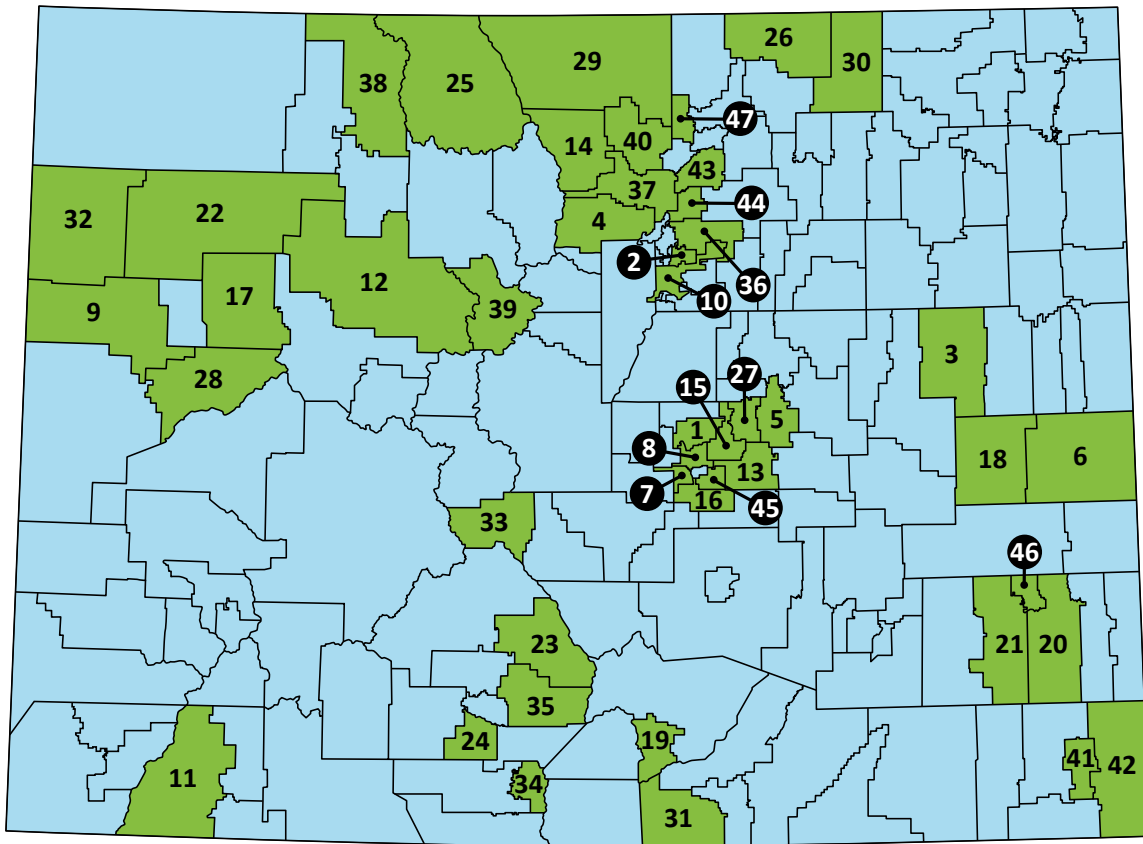
STAFF QUALIFICATIONS AND SALARY PARITY IN CLASSROOMS FUNDED BY CPP

Young children’s learning and development depend on the educational qualifications of their educators.⁶ Currently, most early childhood educators are not expected to have the same level of education as their counterparts in elementary school classrooms.⁷ Early childhood educators on average have fewer opportunities for professional development and formal education, and are paid less than their K-12 counterparts.⁸

Colorado Preschool Program educators are not currently required to hold a CDE educator license⁹;

however, staff members who serve children who are funded by CPP must meet the Colorado Department of Human Services requirements for an “Early Childhood Teacher” or minimum qualifications established by tribal government licensing for early childhood programs located on tribal lands.¹⁰

Currently, among Colorado school districts participating in CPP, 25 percent have local policies that require lead educators to hold a valid CDE educator license and pay their early childhood educators on the same salary scale as their K-12 educators. These districts are highlighted on the map below.



⁶ Schilder, D. (2016). Early childhood teacher education policies: Research review and state trends (Policy Report). New Brunswick, NJ: Center on Enhancing Early Learning Outcomes.

⁷ 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. <https://doi.org/10.17226/19401>.

⁸ Schilder, D. (2016). Early childhood teacher education policies: Research review and state trends (Policy Report). New Brunswick, NJ: Center on Enhancing Early Learning Outcomes.

⁹ C.R.S. 22-29-108 (3)

¹⁰ Colorado Preschool Program Handbook, found at <http://www.cde.state.co.us/cpp/cpphandbook>



All of Ellicott Preschool Teachers are certified/licensed teachers and attend district professional development days throughout the school year. Ellicott Preschool staff continue to improve and work on personal goals through the Professional Development Information System (PDIS). The preschool teachers also set personal goals in the Colorado State Model Performance Management System (RANDA) as required by our school district. RANDA is used to track goals, professional development, classroom instruction, and evaluations. All certified teachers are observed and evaluated by the district administration. The director helps to support the paras in the PDIS process and completes their observations and evaluations. As a staff, we are continuing to work on the Colorado Competencies for Early Childhood Educators and the Early Learning Guidelines.

ELLICOTT 22

- | | | |
|-------------------------|---------------------------|-----------------------------|
| 1. Academy 20 | 17. Garfield RE-2 | 33. Salida R-32 |
| 2. Adams County 14 | 18. Kit Carson R-1 | 34. Sanford 6J |
| 3. Arriba-Flagler C-20 | 19. La Veta RE-2J | 35. Sangre De Cristo RE-22J |
| 4. Boulder Valley RE-2 | 20. Lamar RE-2 | 36. School District 27J |
| 5. Calhan RJ-1 | 21. Mc Clave RE-2 | 37. St Vrain Valley Re 1J |
| 6. Cheyenne County RE-5 | 22. Meeker RE12 | 38. Steamboat Springs RE-2 |
| 7. Cheyenne Mountain 12 | 23. Moffat 2 | 39. Summit RE-1 |
| 8. Colorado Springs 11 | 24. Monte Vista C-8 | 40. Thompson R2-J |
| 9. De Beque 49JT | 25. North Park R-1 | 41. Vilas RE-5 |
| 10. Denver County 1 | 26. Pawnee RE-12 | 42. Walsh RE-1 |
| 11. Durango 9-R | 27. Peyton 23 JT1 | 43. Weld County RE-1 |
| 12. Eagle County RE 50 | 28. Plateau Valley 508 | 44. Weld County S/D RE-8 |
| 13. Ellicott 22 | 29. Poudre R-1 | 45. Widefield 3 |
| 14. Estes Park R-3 | 30. Prairie RE-11 | 46. Wiley Re-13 JT |
| 15. Falcon 49 | 31. Primero Reorganized 2 | 47. Windsor RE-4 |
| 16. Fountain 8 | 32. Rangely RE-4 | |

According to Colorado’s Early Childhood Workforce Plan 2020, the early childhood workforce must have worthy compensation, including comprehensive benefits, in order to recruit and retain qualified professionals. The plan recommends that livable compensation be provided for early childhood educators.¹¹

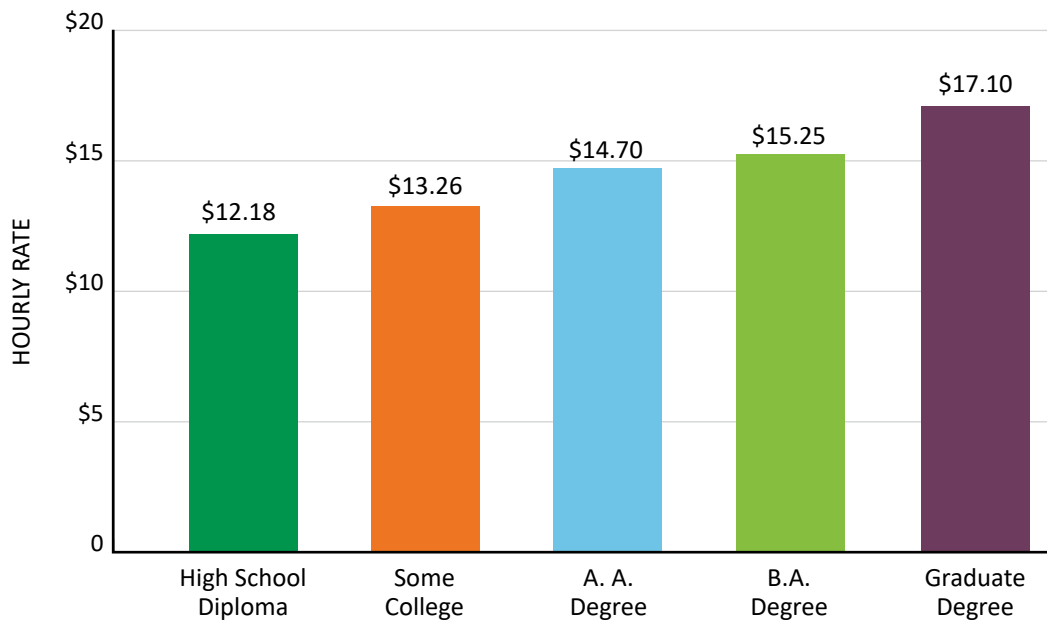
¹¹ Colorado’s Early Childhood Workforce 2020 Plan, found at <http://www.cde.state.co.us/early/copdplan>

FINDINGS FROM COLORADO'S EARLY CHILDHOOD WORKFORCE SURVEY

Several decades of research have established the importance of high-quality early care and education (ECE) for children’s short- and long-term social-emotional and academic outcomes and point to the critical role ECE can play in narrowing the achievement gap. In 2017, Colorado conducted the Early Childhood Workforce Survey 2017 to identify the strengths, gaps, and unmet needs in the workforce to help inform workforce recruitment, retention, and professional development efforts. This study surveyed 4,223 directors, assistant directors, lead educators, and assistant educators who worked in community-based ECE centers, Head Start centers, and public school-based ECE classrooms throughout Colorado. Findings from the Colorado Early Childhood Workforce Survey 2017 underscore the impact of low wages on early childhood educators:

- ✘ The average annual salary for an elementary educator is just over \$50,000. The average annual salary for an early childhood educator is under \$30,000.
- ✘ In Colorado, lead educators with a bachelor’s degree earn only \$3.07 more an hour, on average, than lead educators with a high school degree and only \$0.55 more an hour than early childhood educators with an associates degree.
- ✘ Almost a third of early childhood educators earn low enough wages that they are eligible for public assistance benefits restricted to very low-income families. An additional 45 percent of educators shared that they struggle to pay their bills and make ends meet.¹²

Figure 18: Wages by Degree for Colorado Early Childhood Educators



¹² Schaack, D. & Le, V. (2017). Colorado Early Childhood Workforce Survey 2017 Final Report. Denver, Colorado: University of Colorado Denver



Enhancing Educator Practices

The Thompson School District EC Program offers differentiated professional development trainings for its staff. These “Pathways” are based on staff surveys, student data, and program goals. They are threads that continue over multiple sessions to increase the depth of study and emphasize teaching using developmentally appropriate practices. Last year, our CPP Advisory Council reported observing an increase of integrated activities across learning domains while visiting classrooms. Staff reported that implementing new strategies in their classrooms resulted in improved behavior and social skills of children, increased involvement of students in activities, strengthened more carryover of new vocabulary words, and increased phonemic awareness skills. Staff also reported that bonds with students were stronger and communication with ELL students was improved. We are encouraged by these observations and will continue with this model.

THOMPSON R2-J

Preschool Funding in Colorado:

COMBINING RESOURCES TO CREATE POSITIVE OUTCOMES

Most preschool children in the state of Colorado are served in blended classrooms, that is, classrooms of children who may be considered at-risk or in need of special education alongside peers who may have families that pay tuition. Programs should consider the thoughtful combination of children in group settings to ensure a diverse mix of students who can learn better from one another. To provide adequate funding for these classrooms, programs need to be aware of the various funding opportunities in the state and in local communities. Accessing only one or two funding sources will rarely enable a program to meet the needs of all families. Early childhood funding in Colorado flows from different sources. While children may be served in the same programs and classrooms, there are critical differences between the funding sources. A chart with more information on the various funding sources used in programs can be found at: <http://www.cde.state.co.us/cpp/ecefundinginfo>



Funding for CPP/ECARE is meant to support high-quality, developmentally appropriate educational experiences for children at risk for later school challenges. Each district receives a capped allotment of slots for part of their population in need. The funding is not intended to stretch beyond the children enrolled in CPP to provide universal preschool. Other funding streams such as early childhood special education funding (including ECEA, IDEA 619 and Part B funding), Head Start, Colorado Child Care Assistance Program (CCCAP), Title I, general funds, tuition, and other sources are expected to be used to equitably serve the children represented in preschool classrooms administered by school districts.

By combining multiple funding sources in early childhood, programs are more able to:

- ☒ Increase parental choice by adding full-day and/or extended-day options
- ☒ Increase quality by requiring early childhood educators to be CDE licensed and paying on parity with K-12 educators
- ☒ Provide increased professional development and coursework opportunities for early childhood staff
- ☒ Improve quality of early childhood environments, both indoor and outdoor settings



DATA APPENDIX

This section includes supplemental notes, descriptive statistics, and cohort definitions for the READ Act, grade retention, and CMAS results.

READ Act: Methodological Notes

- Where noted, the phrase “At Risk, No History of Publicly Funded Preschool” references a grade-matched comparison group defined as children eligible for free or reduced price lunch in first grade the same expected year as the Colorado Preschool Program cohort and with no history of publicly-funded preschool, as denoted by the fall pupil counts. Please note that the Colorado Department of Education does not track whether children had other preschool experiences besides publicly-funded preschool (meaning, the Colorado Preschool Program and preschool special education).
- READ data lag by one year to allow for evaluation of significant reading deficiencies in kindergarten since that cohort’s comparison group was grade-matched to children in first grade in 2016-2017 school year.
- 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 2015-2016 READ data collection.
- A small fraction of students not identified with significant reading deficiencies were English Language Learners who initially showed a significant reading deficiency on one of the interim assessments but had that designation refuted (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.
- The 2015-2016 school year was the fourth year of the READ data collection. As with any data collection, data quality improves over time. Therefore, please use caution when interpreting changes between years. CDE continually takes steps to improve data quality and ensure that data are more reliable and valid.

READ Act: Cohort Definitions

Majority Kindergarten:

- CPP = CPP in 2014-2015
- At Risk, No History of Public Preschool = No history of publicly funded preschool and eligible for free or reduced price lunch in first grade in 2016-2017

Majority First Grade:

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

Majority Second Grade:

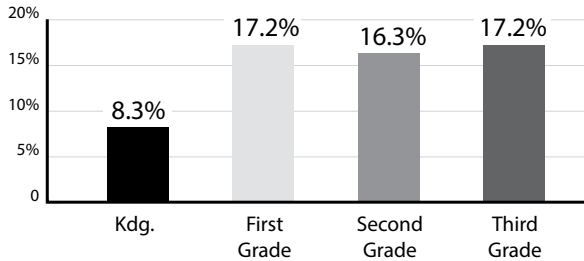
- CPP = CPP in 2012-2013
- At Risk, No History of Public Preschool = No history of publicly funded preschool and eligible for free or reduced price lunch in first grade in 2014-2015

Majority Third Grade:

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

Colorado Statewide Rates of Significant Reading Deficiency

2016 Statewide SRD Rates by Grade



N Size		
Cohort	CPP	Comparison
Majority Kindergarten	19,064	13,759
Majority First Grade	15,465	15,752
Majority Second Grade	13,443	16,054
Majority Third Grade	13,258	15,418

Grade Retention: Cohort Definitions

Cohort 1:

- CPP = CPP in 2008-2009, 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 2:

- CPP = CPP in 2009-2010, 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

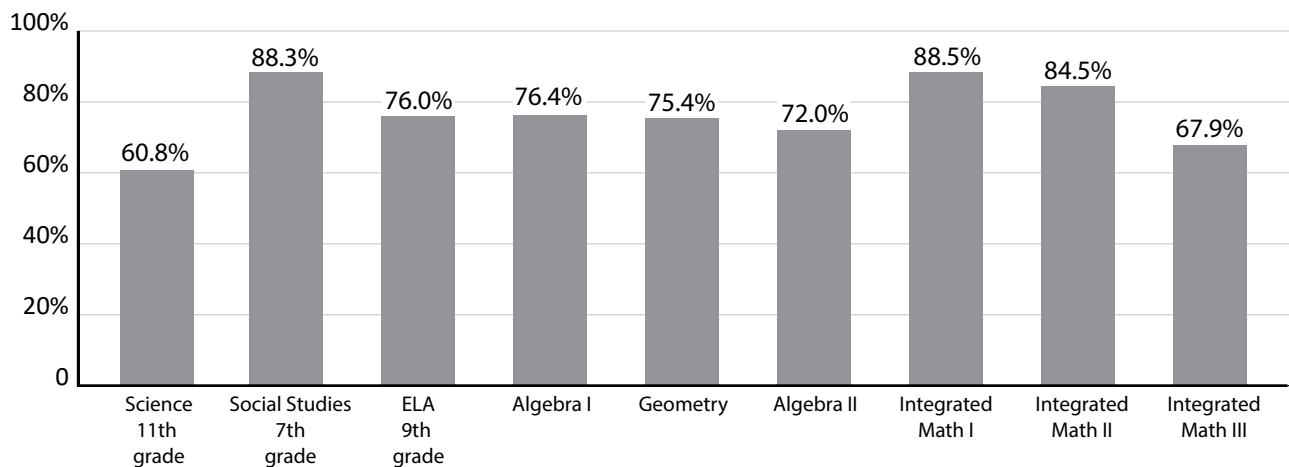
Cohort 3:

- CPP = CPP in 2010-2011, K 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 2012-2013

N Size		
Cohort	CPP	Comparison
Cohort 1	10,798	16,856
Cohort 2	11,553	16,920
Cohort 3	15,549	16,856

CMAS: Methodological Notes

- Where noted, the phrase “At Risk, No History of Publicly Funded Preschool” references a grade-matched comparison group defined as children eligible for free or reduced price lunch in first grade the same expected year as the Colorado Preschool Program cohort and with no history of publicly-funded preschool, as denoted by the fall pupil counts. Please note that the Colorado Department of Education does not track whether children had other preschool experiences besides publicly funded preschool (meaning, the Colorado Preschool Program and preschool special education).
- Each cohort includes a small percentage of children who did not follow a normal grade progression because they attended preschool for multiple years, were held back, or skipped a grade. The effect on the 2017 grade distribution varies depending on the CMAS subject.
 - ♦ English Language Arts is assessed in grades 3-9, where about 28 percent of the CPP cohort and 6 percent of the comparison cohort were assessed in a grade lower than 9th in 2017. In contrast, science is only administered in 5th, 8th, and 11th grades, and social studies is only administered in 4th and 7th grades on a sampling basis to one-third of schools each year. Of children reported in science and social studies, 99.8 percent and 99.25 percent were in 11th grade and 7th grade, respectively. However, some children from the original cohorts were in a grade higher or lower than 11th and 7th grade in 2017, meaning they may 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.
 - ♦ Algebra I-II, Geometry, and Integrated Math I-III are administered mostly in 9th grade with the exception of a few children in 7th and 8th grade who currently have the flexibility to take high school math exams.
- 2017 statewide participation rates varied widely by subject area and grade:



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

CMAS: Cohort Definitions

Science (Majority 11th Grade):

- CPP = CPP in 2004-2005
- No History of Public Preschool = No history of publicly funded preschool, eligible for free or reduced price lunch in first grade in 2006-2007

Social Studies (Majority 7th Grade):

- CPP = CPP in 2008-2009
- No History of Public Preschool = No history of publicly funded preschool, eligible for free or reduced price lunch in first grade in 2010-2011

English Language Arts (Majority 9th Grade):

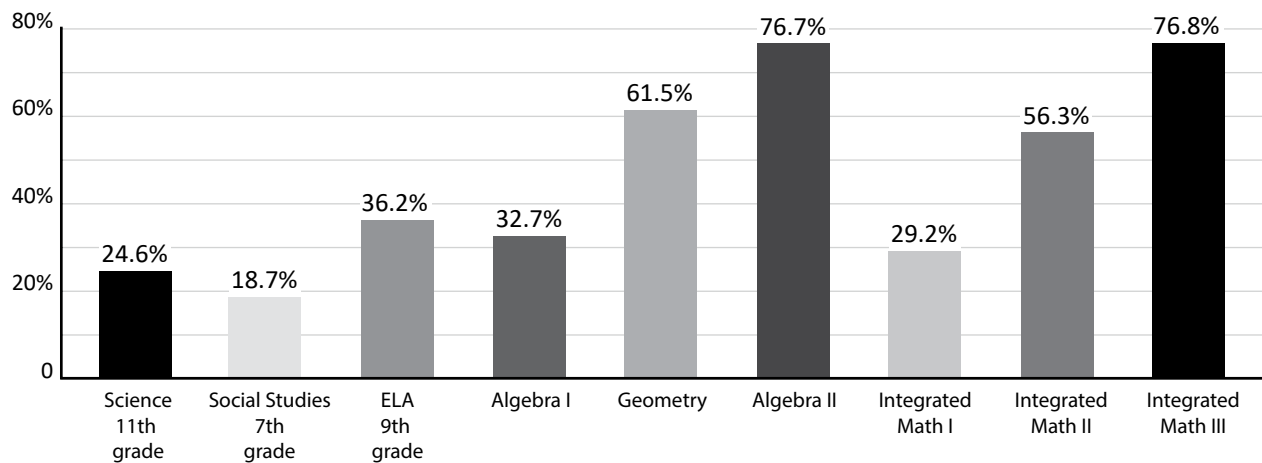
- CPP = CPP in 2006-2007
- No History of Public Preschool = No history of publicly funded preschool, eligible for free or reduced price lunch in first grade in 2008-2009

Mathematics (All Test Subjects- Majority 9th Grade):

- CPP = CPP in 2006-2007
- No History of Public Preschool = No history of publicly funded preschool, eligible for free or reduced price lunch in first grade in 2008-2009

Colorado Statewide CMAS Results

2017 Statewide Average - Percentage Met or Exceeded Expectations



N Size		
Subject	CPP	Comparison
Science (Majority 11th)	3,408	7,667
Social Studies (Majority 7th)	3,078	3,692
English Language Arts (Majority 9th)	8,001	10,554
Algebra I (Majority 9th)	3,874	6,294
Geometry (Majority 9th)	732	800
Algebra II (Majority 9th)	92	106
Int. Math I (Majority 9th)	1,107	2,395
Int. Math II (Majority 9th)	157	265
Int. Math III (Majority 9th)	N<16	N<16

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COLORADO
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