



Colorado Children's Campaign Early Education Recommendations to the Interim Committee on School Finance

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1. Prioritize early care and education as the foundation of a new school finance system.

- a. Recognize that cognitive and other developmental gaps between subgroups of children appear in the first year of life and, by and large, schools do not close those gaps. Rather than investing in remedial approaches to academic performance, prioritize early learning and development as a cost-effective, preventative approach.
- b. Retain the key values of early care and education programs that emphasize 1) parental choice, 2) a diverse system of providers delivering services (school district-based and community-based), and 3) focusing on proven early interventions that provide the greatest return on investment.

2. Invest in research- and evidence-based approaches to giving children in the earliest years of life the strong foundation they need to begin school ready to learn and to be reading on grade level in the early elementary years. These strategies include:

- a. Expanding access to quality preschool and full-day kindergarten, beginning with targeted investments in historically underserved groups and those who meet at least one of the eleven indicators that the Colorado Preschool Program uses to define being “at-risk of not being school ready.”

3. Measure outcomes, evaluate impact, and adapt to emerging learnings.

- a. Ensure we have robust and valid measures of children's school readiness and early literacy skills by implementing valid assessments that inform educators and policymakers on what is working and what is not. Funding these strategies ensures that we can measure return on investment and adapt strategies as we measure outcomes and evaluate impact.

Why prioritize early care and education as the foundation of a new vision for education?

1. Brain plasticity is highest at a young age and current gaps in performance are largely a function of different childhood experiences prior to school entry.

- Like the foundation of a house, early brain development is the base upon which a child's long-term academic success and health is built.ⁱ A large and growing base of academic and education research tells us that effective interventions like high quality early learning programs and parent-focused programs, such as home visiting services, can change the life trajectory of children. Despite the body of evidence

supporting the brain science of the early years and the demonstrated impact of various early learning interventions, many children enter the schoolhouse doors at 5 or 6 years old unprepared for success. And those who arrive behind tend to stay behind.ⁱⁱ

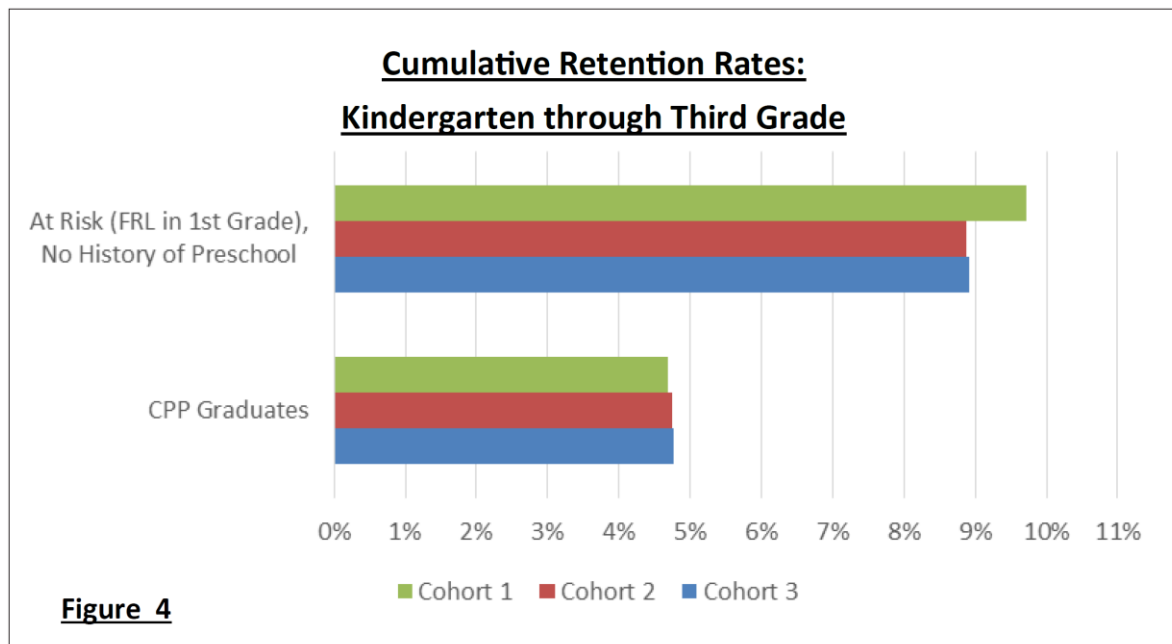
2. Gaps in children’s performance are well-established prior to school entry and schools are not closing these gaps quick enough.

- Fewer than half of low-income kindergarteners enter school ready to learn, and some are up to two years behind their peers (even though they have only been alive for five years).ⁱⁱⁱ Research shows that developmental gaps between higher- and lower-income children emerge long before children start school. Gaps have been observed among children as young as nine months old.^{iv} By 18 months, toddlers from low-income families are usually already several months behind their more advantaged peers in language development.^v One widely-cited study found that by age three, children with college-educated parents had vocabularies as much as three times larger than those of children whose parents did not complete high school — a gap so big, researchers concluded, that even the best intervention programs could, at most, keep the less-advantaged children from falling still further behind.^{vi}

3. The long-term impacts of quality early care and education programs represent one of the best strategies to reduce several of the core cost drivers in Colorado’s education system.

- A recently published analysis of the most comprehensive, high quality experimental and quasi-experimental studies of the impact of early childhood education conducted between 1960 and 2016 found that, on average, participation in ECE leads to statistically significant reductions in special education placement (-8.1 percentage points), grade retention (-8.3 percentage points), and increases in high school graduation rates (+11.4 percentage points).^{vii}

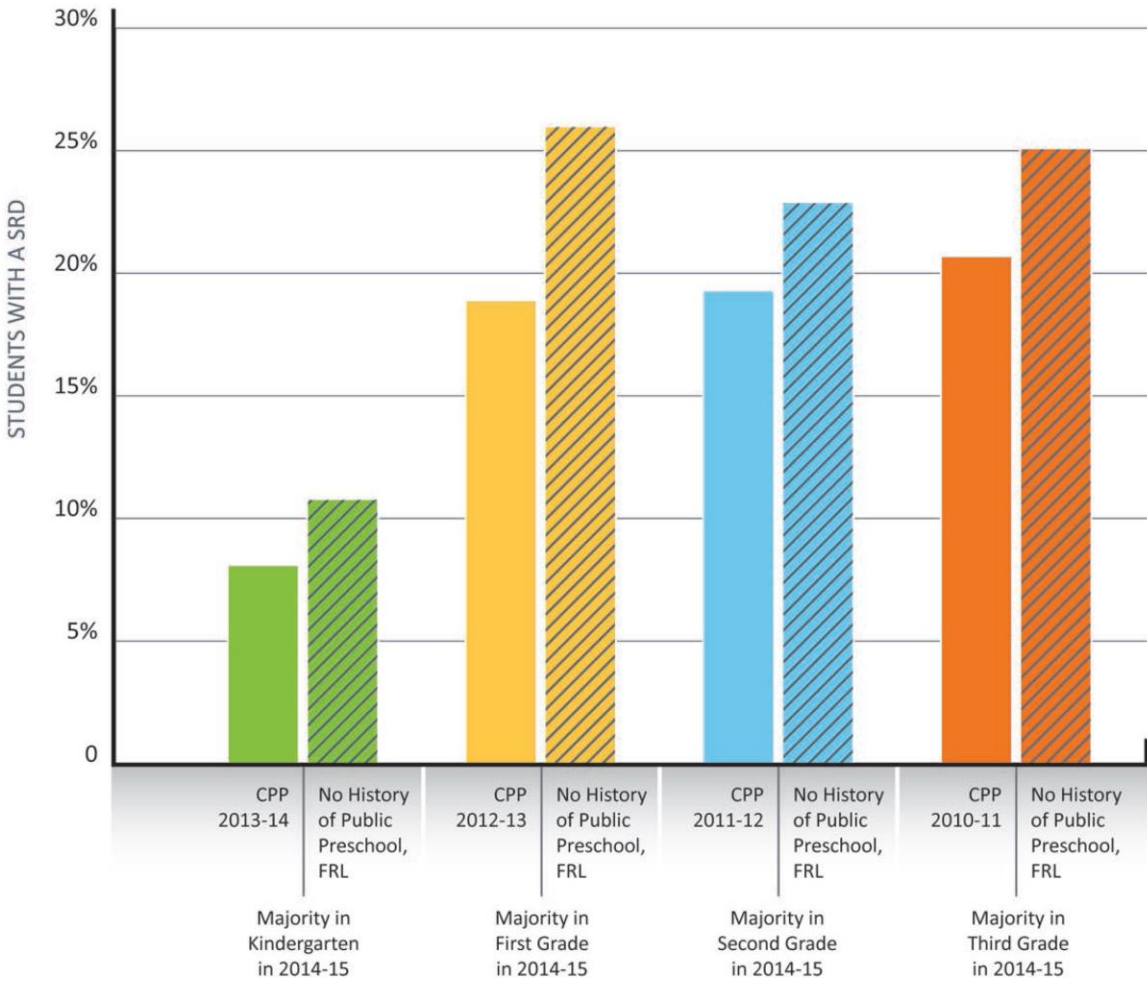
- These findings mirror year after year of annual analyses of Colorado’s own state-funded pre-K program (the Colorado Preschool Program) which improves student performance on standards-based assessments, reduces the probability of being identified with a Significant Reading Deficiency under the READ Act, and reduces early elementary grade retention.^{viii} Participants in quality early learning programs show substantial improvements on test scores early in life.^{ix} In adulthood, these same students are more likely to complete high school, attend college, and even have better health outcomes.^x They are less likely to have been charged with a crime or become a teenage parent.^{xi} The returns from quality early care and education have been estimated to be 7 percent to 13 percent per year.^{xii} Study after study highlights the long-term cost savings of investing in high quality early learning programs (see The Abecedarian Project,^{xiii} the High/Scope Perry Preschool study,^{xiv} Chicago Parent-Child Centers,^{xv, xvi} among others).



Source: Colorado Department of Education, Colorado Preschool Program, 2017 Legislative Report

- For example, a recent analysis of the Chicago Child-Parent Center study estimated \$48,000 in benefits to the public per child from a half-day public preschool for at-risk children. Participants at age 20 were estimated to be more likely to have finished high school—and were less likely to have been held back, need remedial help or have been arrested. The estimated return on investment was \$7 for every dollar invested (National Institute for Early Education Research).^{xvii} In addition, a recent research brief from Ready Nation summarizes the abundance of research illustrating both the short and long-term benefits investments in early childhood.^{xviii} In short, high quality early care and education is a key component to addressing the challenges our schools face in preparing tomorrow’s workforce for success.

Figure 7: Students with a Significant Reading Deficiency
 Cohorts vary across grades due to analysis of 2015 READ data only



Source: Colorado Department of Education, Colorado Preschool Program, 2017 Legislative Report

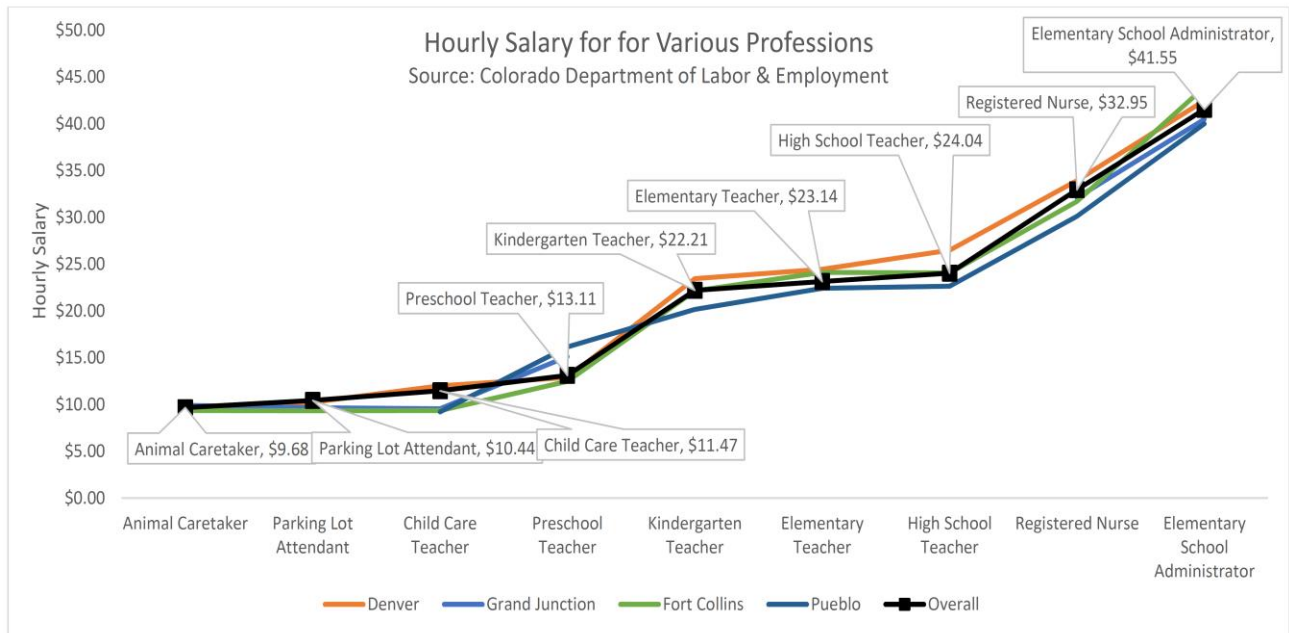
What are specific strategies that can be utilized in an updated approach to school finance?

1. Colorado should expand access to high quality early care and education.

Colorado should increase access to quality early learning, a strategy that has been shown to reduce downstream health and academic needs.

- As Katharine Stevens at the American Enterprise Institute recently observed, “For most of history, that essential foundation was laid largely in the home. But today, an unprecedented number of American parents are in the workforce, and millions of young children are in paid childcare for a substantial portion of their early years. And while childcare is a necessary support for working parents, it also has a critical impact on children during the most consequential phase of human development. We now know that starting at birth, young children are continuously and rapidly learning — wherever they are and from whomever they’re with. Indeed, the commonly made distinction between “care” and “education” in early childhood is a false one. Childcare is early education, regardless of the building it occurs in or what we call it. The question is only whether it’s advancing or impeding children’s learning.”^{xix}
- This observation resonates in Colorado where nearly two-thirds of all children under the age of 6 have all available parents in the workforce (see figure above). As such, child care – whether informal or licensed, high or low quality – is simply a reality for Colorado families. Ensuring that these early experiences promotes children’s learning and development requires strategies to support both the affordability as well as the quality of early learning arrangements.

- It is important to note, however, that early learning be of a high enough level of quality that it advances children’s healthy development. Low quality child care is detrimental to children’s academic growth. Notably, the key element of quality in any early care and education setting is the quality of interactions between teacher and child. To promote this quality, we need to ensure that we can recruit, retain, and compensate our workforce appropriately. Current wages for child care educators, however, are on par with doggy daycare and parking lot attendants (see figure below).



Source: Colorado Department of Labor and Employment

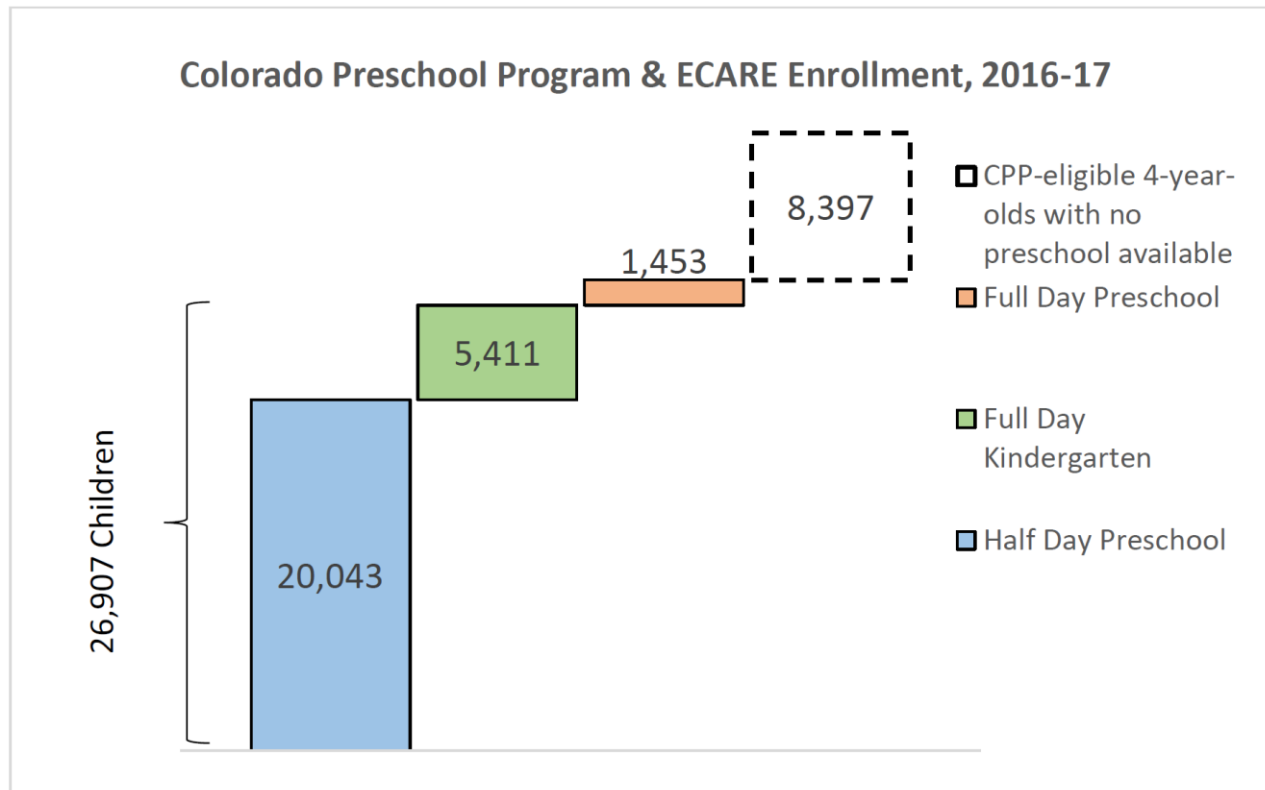
- Early care and education is a two-generation approach that supports children’s school readiness while also ensuring families with young children can work and provide for their own economic security. Ensuring that we have a workforce ready to promote children’s school readiness and that care is accessible and affordable is a necessary step toward a strong foundation for school readiness. Access to quality early learning can help mitigate some of the obstacles that families face in participating in the workforce while at the same time promoting the school readiness of children at a sensitive point in their lives.

2. Colorado should provide expanded access to quality preschool.

To promote early literacy, Colorado should expand access to more of the roughly 50 percent of 3- and 4-year-old children who have no access to preschool.

- Of the 2.5 million U.S. students who dropped out of high school in 2015, 1.6 million were firmly set on that trajectory when they were just 8 years old.^{xx} What did those 8-year-old students have in common? They received the lowest reading scores on their third-grade literacy exams. A student's ability to meet grade-level expectations in third grade plays a significant role in the likelihood of them graduating high school. A third-grade student who reads proficiently is four times more likely to graduate from high school than a third grader reading below grade level.
- As noted above, the Colorado Preschool Program (CPP) has a strong track record of reducing early literacy gaps and promoting young children's path to early success. The program provides limited funding to school districts to serve children who meet one of 11 risk factors for not being school-ready. The program is a voluntary preschool investment that promotes "mixed delivery" (the practice of delivering preschool in a diversity of settings –traditional school settings, charter schools, and community-based providers all participate). Started in 1988, the program has a strong track record of success in improving child outcomes and reducing taxpayer costs.
- More broadly, studies have also demonstrated that children in high-quality early childhood programs were 30 percent to 40 percent more likely to graduate from high school.^{xxi} As such, early childhood education can increase earnings in adulthood by 1.3 percent to 3.5 percent. These earnings gains alone are bigger than the costs of such programs.^{xxii} If all families were able to enroll their children in preschool at the same rate as high-income families, enrollment would increase nationwide by about 13 percentage points and yield net present value of \$4.8 billion to \$16.1 billion per cohort from earnings gains alone after accounting for the cost of the program.^{xxiii}

- Despite what we know about the value of early care and education just half of Colorado 3- and 4-year old children were enrolled in. In 2016-17, the Colorado Preschool 8 (CPP) only had capacity to serve 23 percent of 4-year-old children and eight percent of 3-year-old children in the state. The Colorado Department of Education estimates that in 2016-17, more than 8,000 4-year-old children qualified for CPP but had no program available to them.^{xxiv, xxv}



Source: Colorado Department of Education, 2017 Colorado Preschool Program Annual Report

- Nationwide, at age 4, enrollment in pre-K is about 65 percent for the lowest 40 percent of families by income and 90 percent for the highest income quintile. At age 3, when state pre-K is rarely provide, enrollment is only about 40 percent for low-income and moderate-income families while it is 80 percent for the top income quintile. Overall, the US ranks 32nd of 39 OECD countries for ECE enrollment (70 percent of Organization for Economic Cooperation (OECD) countries vs 30 percent in US).^{xxvi}
- At the local level, the Denver Preschool Program recently released independent research findings that show third-graders who had gone through DPP outperformed those who had not on Colorado’s assessment test of reading proficiency. Similar results were seen on reading assessments administered in kindergarten, first and second grades. Furthermore, English Language Learners and students living in poverty showed evidence of closing gaps to their peers.^{xxvii}

- As with other early care and education recommendations, ensuring that access is coupled both improvements in quality and preserving parental choices over settings are key to the success of the program. Currently, Colorado only meets 5 of the 10 National Institute for Early Education Research quality benchmarks.^{xxviii} We are leading in the areas of quality early learning and development standards, support for quality curriculum, some teacher training expectations, and ratios and group sizes in early learning classrooms. We have more work to do to elevate quality in the areas of teacher qualifications, screening policies, and ongoing classroom support and quality improvement. As we work to center early care and learning at the heart of an updated vision for education in our state, the goals of access and quality must move together if we are to get the returns we know we can when investing in young children.
- In sum, expanding access to preschool in Colorado would go a long way to closing gaps in performance and ensuring that children have access to the quality experiences that put them on a path to early literacy success.

Conclusion

Many children enter school unprepared to succeed, and those initial gaps are difficult for schools to close. Fewer than half of low-income 5-year-old children enter school ready to learn, and some are up to two years behind their peers.^{xxix} When schools fail to close gaps in performance as they progress through school, the results are poor academic performance, grade repetition, expensive remedial services, and high rates of school dropout.^{xxx} It is much cheaper, and much more effective, to prevent those gaps from developing the first place. A vision for Colorado's school finance system should place quality early care and education at the center of strategies that prepare children for future success.

ⁱ <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2807801/>

ⁱⁱ <https://www.forbes.com/sites/nickmorrison/2016/11/30/by-the-time-they-start-school-for-some-children-its-already-too-late/#55a70864a21e>

ⁱⁱⁱ https://www.brookings.edu/wp-content/uploads/2016/06/0319_school_disadvantage_isaacs.pdf

^{iv} <http://www.childtrends.org/wp-content/uploads/2013/05/2009-52DisparitiesELExecSumm.pdf>

^v <http://news.stanford.edu/news/2013/september/toddler-language-gap-091213.html>

^{vi} <https://www.aft.org/sites/default/files/periodicals/TheEarlyCatastrophe.pdf>

^{vii} <http://journals.sagepub.com/stoken/default+domain/ycdsVk2Xu4vSV8gxECVS/full>

^{viii} <https://www.cde.state.co.us/cpp/legreports>

^{ix} <http://www.econ.ucla.edu/people/papers/Currie/Currie14.pdf>

^x <http://www.jstor.org/discover/10.2307/3083291?uid=3739568&uid=2&uid=4&uid=3739256&sid=21102655618787>

^{xi} <http://qje.oxfordjournals.org/content/122/1/159.abstract>

^{xii} <https://heckmanequation.org/resource/invest-in-early-childhood-development-reduce-deficits-strengthen-the-economy/>

^{xiii} <http://abc.fpg.unc.edu/>

^{xiv} <http://highscope.org/Content.asp?ContentId=219>

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- xv <http://www.promisingpractices.net/program.asp?programid=98>
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- xix <https://www.aei.org/publication/what-does-early-childhood-have-to-do-with-americas-workforce-problem-a-lot-actually/>
- xx “Population 16 to 24 years old and number of 16- to 24-year-old high school dropouts (status dropouts), by sex and race/ethnicity: 1970 through 2014,” National Center for Education Statistics, 2014. https://nces.ed.gov/programs/digest/d15/tables/dt15_219.71.asp?current=yes (accessed August 30, 2016).
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- xxi Robert Wood Johnson Foundation. *A Healthy Bottom Line. High-quality early childhood care and education is critical to a healthy, productive workforce.* <http://readynation.s3.amazonaws.com/wp-content/uploads/ReadyNation-Health-Brief-Endnote-Version-092815.pdf>.
- xxii *The Economics of Early Childhood Investments.* (2014). https://www.whitehouse.gov/sites/default/files/docs/early_childhood_report1.pdf.
- xxiii *Ibid.*
- xxiv Barnett, W.S., Carolan, M.E., Squires, J.H., & Clarke Brown, K. (2015). *The State of Preschool 2014: State Preschool Yearbook.* New Brunswick, NJ: National Institute of Early Education Research.
- xxv http://nieer.org/wp-content/uploads/2017/05/Colorado_YB16.pdf
- xxvi Robert Putnam, *Our Kids: The American Dream in Crisis*, 2016, p. 129.
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- xxx http://www.frbsf.org/community-development/files/CI_Summer2012_Reardon.pdf