FIGHT CRIME: INVEST IN KIDS
COUNCIL FOR A STRONG AMERICA
OREGON

REPORT



Pre-K Key to Cutting Oregon Prison Costs and Boosting School Success

Oregon can save $513 million by improving the quality of its pre-K programs and cutting crime

Acknowledgements

Council for a Strong America is a national, bipartisan nonprofit that unites five organizations comprised of law enforcement leaders, retired admirals and generals, business executives, pastors, and prominent coaches and athletes who promote solutions that ensure our next generation of Americans will be citizen-ready.

Fight Crime: Invest in Kids
Thousands of police chiefs, sheriffs, prosecutors and violence survivors protecting public safety by promoting solutions that steer kids away from crime.

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The more than 5,000 law enforcement leaders around the nation who are members of Fight Crime: Invest in Kids—including the 140 here in Oregon—have a direct message for everyone who cares about the impact and cost of crime: *Pay now or pay much more later*.

Oregon's jails are full of people serving time for serious and costly crimes. High school dropouts are more likely to end up in jail, which is particularly relevant for Oregon, as the state has the 4th highest dropout rate in the nation. But it doesn't have to be that way: Providing at-risk kids with high-quality early learning programing through adequately supporting teachers can reduce crime and the resulting costs and impact in the future.

Law enforcement leaders know that one of the best ways to keep young people from dropping out of school and becoming criminals is to make sure they have a foundation for success in their earliest years. By standing up in support of high-quality early

> "Providing our children with high quality preschool and their teachers with professional development opportunities will ultimately decrease crime in years to come.



Sheriff Mike Reese
Multnomah County, Oregon

Oregon spends $1.6 billion on corrections each year

We already know where our current path is leading us:

Although crime rates have fallen over the past 20 years, including in Oregon, there are still 1.2 million violent crimes and 8 million property crimes committed against people in our communities across America every year.[1] **Oregon has approximately 10,500 violent crimes annually, which is a rate of 260 per 100,000 people.**

Oregon has approximately 14,700 adults incarcerated in state prisons annually.[2]

Nationally, we spend nearly $75 billion a year to incarcerate adults in federal and state prisons or local jails.[3] **Oregon spends almost $1.6 billion a year**.[4]

7-out-of-10 state prisoners nationwide do not have a high school diploma, and finding stable employment once they leave prison is very challenging.[5] **Oregon has the fourth highest high school dropout rate in the nation, at 26 percent**, and its high school graduates earn an approximate $7,100 more annually compared to the state's dropouts.[6]

childhood education, we can in turn reduce crime and incarceration rates in years to come. In particular, educators' professional development, which has been proven to enhance children's early learning experience, is key.

Law enforcement leaders base these views on both personal experiences and research. A study that followed children who participated in a high-quality pre-K and "parent-coaching" program through Chicago's Child-Parent Centers found that children not served by the program were 70 percent more likely to be arrested for a violent crime by age 18 than those who participated. In recent years, studies of state pre-K programs have found significant increases in participants' later academic performance—including high school graduation—and also important decreases in their need for special education and in being held back in school. Pre-K has impressive results when it's of high quality.

Reducing crime by improving the quality of pre-K is one of the key reasons why Governors and state legislators across the political spectrum have made bold commitments to high-quality early education and care. Policymakers in our state have an opportunity to improve the quality of pre-K for thousands of Oregon children by providing teachers with the necessary professional development to enhance their skill set.

We currently spend $75 billion every year on corrections nationwide to incarcerate more than two million criminals. **Oregon spends over 1.6 billion dollars a year on state and local corrections.**

A sophisticated analysis of nearly 20 pre-K programs for disadvantaged children demonstrated that quality pre-K returned an average "profit" (economic benefits minus costs) to society of more than $34,000

for every child served. The analysis measured the economic benefits of both cutting crime and the cost of incarceration, as well as reducing other costs such as special education and grade retention. Applying that estimate to the approximate 15,100 low-income Oregon children who are currently served public pre-K via Oregon's Head Start, Oregon Prekindergarten, and Preschool Promise programs could save the state approximately $513 million over their lifetimes.

The choice for Oregon is simple: Pay for high-quality early education programs and professional development opportunities for educators now, or pay far more later for the costs of crime.

The Cost of Crime in Oregon

As law enforcement leaders, our number-one priority is protecting the safety of our communities in Oregon. We do this by arresting, prosecuting and, when necessary, incarcerating people who commit crimes. But ultimately our best opportunity to improve public safety is to keep people from becoming involved in crime in the first place. To do so, we urge our elected leaders to invest in strategies and practices that have proven, positive and long-term impacts on crime reduction.

While these facts are daunting, they do not even begin to reflect crime's other economic costs, or the suffering of crime victims in Oregon. The path we are on is both fiscally unsustainable and devastating in its impact on human lives.

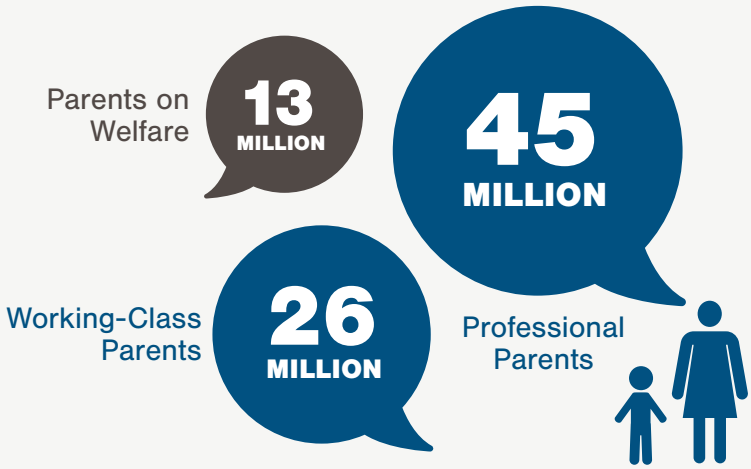
Too Many Children Are Falling Behind Before They Start School

Fortunately, we can steer thousands of children across Oregon toward more successful lives through high-quality early education that research has shown can lead to less child abuse and neglect, better school performance, fewer high school dropouts and, ultimately, fewer crimes committed as well as a reduction in the number of prisoners.

The research behind these outcomes shows that the early childhood period (birth to age 5) is a time of rapid brain development, and that hundreds of new brain connections form every second.[7] Early experiences play a large role in determining how brain connections are formed and in the "wiring" that becomes the foundation on which all later learning is built.

For example, by six months, babies start to understand the link between words and their meanings. This sets the stage for language development and later reading, which are key to later school success. Yet children from different backgrounds have very different early childhood experiences. Researchers observed children in their own homes monthly for over two years, until the age of 3, and recorded how many words their parents spoke to them.

Words Spoken by Parents to their Young Children



Source: Hart & Risley, 2004

A Fork in the Road

The Path to Crime

The risk factors for crime can show up very early in life. Many parents and child care providers don't know the value of talking and reading to young children, and fostering creative play to develop cognitive, physical and behavioral skills. Too many young parents don't have good parenting mentors; some become overwhelmed and neglect or lash out at their children.

The Path to Success

When children attend high-quality pre-K, they reap the benefits of a good teacher and interactions with peers, which can lead to better academic and social outcomes when they enter kindergarten. Voluntary home visiting programs start even earlier, working with at-risk parents during pregnancy and infancy to foster their child's development and prevent child abuse and neglect.

- More Dropouts
- Worse school outcomes
- More behavior problems
- More abuse and neglect



- Fewer Dropouts
- Better school outcomes
- Fewer behavior problems
- Less abuse and neglect



There were large differences in the average number of words spoken to the children by professional parents, working class parents, and parents receiving welfare:

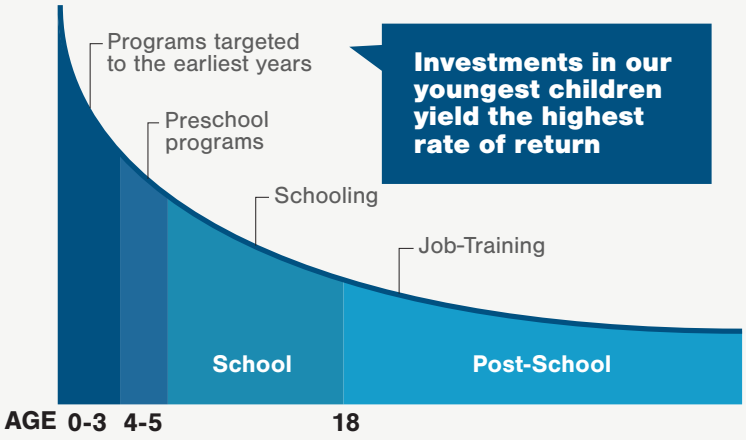
- **professional parents:** 45 million words
- **working-class parents**: 26 million
- **parents receiving welfare:** 13 million.[8]

These differences affected the children's vocabulary development: by age 3, children with professional parents had average vocabularies of 1,116 words, compared with 749 words for working-class and 525 for children of parents receiving welfare. By the time children reach kindergarten, too many are not only far behind in vocabulary development, but also on pre-literacy and pre-math skills, such as knowing the alphabet or being able to count to 10.

Many also face challenges in learning to control impulses and behavior so they can get along with other students and teachers. High-quality early education and care can help these children get on track, both academically and behaviorally, so they will be ready for kindergarten, despite these early deficits. High-quality early childhood programs also work with parents, to support them in their role as their children's first teachers.

James Heckman, the Nobel Prize-winning economist from the University of Chicago, has conducted groundbreaking work with economists, statisticians and neuroscientists and has demonstrated that the quality of early childhood development strongly influences health, social and economic outcomes. He argues that we should invest sufficiently in younger children--including pre-K--and in providing "coaching" for their parents because those early investments will pay off later on by establishing them on a path to be successful adults.[9]

Rate of Return to Human Capital Investment at Different Ages



Source: Nobel Laureate Dr. James Heckman, 2013

The Pathway to Less Crime

The path we set children upon in their earliest years can make a huge difference as they proceed through school and beyond. Research has shown that high-quality early education and care from birth through pre-K will result in more successful outcomes:

Less child abuse and neglect

The Chicago Child-Parent Centers (CPC) is a pre-K program that has served over 100,000 children and followed them up to age 28. This program also coaches parents to help them understand their children's health needs, create safer home environments and develop parenting skills. CPC cut child abuse and neglect in half for the children served, compared with similar children from families not being helped.[10]

Fewer behavior problems

Pennsylvania's Pre-K Counts Public Private Partnership program cut—from 22 percent to 4 percent—the portion of children at risk for problematic social and self-control behavior.[11]

Better school outcomes

Ready for school: Boston's pre-K program

improved mathematics, literacy and language skills among participating children equivalent to seven months of additional learning, compared with children who did not attend.[12] State pre-K programs are also reporting similar important improvements in academic skills among their children that matriculate from their programs.[13]

Not held back in school: participants in Michigan's state pre-K, the Great Start Readiness Program, were held back in school 51 percent less often than non-participants.[14] New Jersey's pre-K program found its children were held back 40 percent less often.[15]

Less special education: New Jersey's preschool program, which followed its children through the 4th and 5th grades, found that the children served were 31 percent less likely to be placed in special education than those in the control group.[6]

Increases in reading and math scores that persist: North Carolina's Smart Start and More at Four initiatives to improve early education found that the children in counties that spent more per student were two months ahead in reading at fifth grade and 1.5 months ahead in math by fifth grade when compared with children in counties that spent less per student.[17] New Jersey's pre-K program reported that participating children were three-fourths of a year ahead in math and two-thirds of a year ahead in literacy in fourth and fifth grades.[18] These findings show that academic gains from high-quality pre-K continue to have a positive impact for students, and that investing in early education will lead to greater academic achievements later on. The New Jersey researchers report that their findings are on par with the earlier results achieved by Chicago's CPC program, which later went on to achieve very strong graduation and crime reduction outcomes.

Fewer dropouts

- The Chicago CPC pre-K program reported a **29 percent increase in high school graduation rates** by age 20 among its participants;[19]
- Michigan's Great Start Readiness program reported a **35 percent increase in graduates,**[20] and
- Michigan's Perry Pre-K Program saw a **44 percent increase in graduation rates** by age 40.[21]

The increase in graduation rates among preschool attendees is particularly salient for Oregon, as the state experienced the fourth highest dropout rate in the nation in 2015, of 26 percent.[22]

Less crime

- Children not served by the Chicago CPC program were **70 percent more likely to be arrested for a violent crime by age 18**.[23]
- By age 27, children not served by the Perry Pre-K Program were **five times**

Increasing graduation rates decreases serious crime

Economists Enrico Moretti and Lance Lochner studied the relationship over time between changes in graduation rates and crime. They concluded that a 10 percentage-point increase in graduation rates—going from 50 percent to 60 percent, for example—reduces murder and assault rates by about 20 percent.

Source: Lochner & Moretti (2004) *The American Economic Review*



Stronger parents

The most successful early childhood programs with long-term results—such as the Perry Pre-K, CPC and New Jersey's state pre-K—work with parents to teach them how to reinforce positive behaviors and encourage them to routinely read and speak to their children, so they are better prepared for success in the years to come.

Parents are their children's first and most important teachers. However, some parents do not have the knowledge or experience necessary to fully support their children's development. High-quality early childhood programs partner with parents to help them improve their children's academic and behavioral outcomes. Oregon's Early Head Start promotes family engagement by involving parents in the program's educational activities and providing opportunities for parents/family members to volunteer in the program.[27]

more likely to be chronic offenders, with five or more arrests.[24]

Fewer prisoners

- By age 24, the people served by the Chicago CPC were **20 percent less likely to have served time in a jail or prison.**[25]
- By age 40, the children served by the Perry Pre-K program were **46 percent less likely to have been sentenced to prison or jail.**[26]

It All Adds Up

No baby is destined, at birth, to become a criminal. The road to criminal behavior is paved with such challenges as poverty, childhood abuse and neglect, inadequate preparation for school, unaddressed behavior problems, poor academic performance and dropping out of high school. The path to success in life is driven by school readiness, the ability to get along with others and manage emotions, academic achievement and high school graduation. We need to take action, right now, to ensure children have the opportunity for quality early education and care so they can start on the right path for life.

Quality and Accountability are Key

Results from New Jersey, North Carolina and Michigan should effectively end the debate on whether high-quality state pre-K efforts can be brought to scale and deliver strong and lasting results. Oregon's early learning programs and teachers' access to professional development must both be supported to continue improving the quality of the state's preschool. If any state pre-K or Head Start sites aren't achieving meaningful and lasting results, such as improved math and literacy skills, the program administrators need to find out what successful programs are doing differently.

To attain lasting results, programs must be high quality. The Bill and Melinda Gates Foundation describes 15 research-based "essential elements of high-quality pre-K" that move beyond program inputs to examine what actually happens in the classroom, particularly the quality of teacher-child interactions and teacher instruction.[28] The heart of any program is the interaction between the teacher and the child, which can be enhanced through professional development activities.

Oregon requires that early childhood teachers have an associate's degree with specialized training in early childhood education. Assistant teachers must possess a Child Development Associate (CDA) credential.[29] However, like many other professions, high-quality teaching requires ongoing, in-service professional development. Early childhood teachers can benefit immensely from professional development opportunities, which include workshops, coaching by more experienced teachers, and college-level work for credit or towards a degree.

To this end, several studies have found professional development training positively impacts both teacher quality and, as a result, early childhood learning. One study found preschool teachers who participated in an online professional development course and also received classroom mentoring graduated children with better language comprehension, more advanced phonological awareness, a larger vocabulary, and more letter knowledge than children in classrooms with teachers who received either none or less professional development support.[30] Another study of Head Start teachers who were provided with professional development activities, which included instruction on children's vocabulary development and phonological sensitivity, found that children in classrooms with these teachers also had higher vocabulary and phonological sensitivity compared to their peers in classrooms where teachers did not receive such training.[31] Last, another study found that preschool teachers who received observation and feedback "related to their interactions with their students showed greater gains in their aspects of these interactions" than teachers who did not receive this support.[32]

In order for teachers to be able to do their job effectively and succeed at helping children get on the right path, they need to be provided with professional development opportunities that support their growth as educators. These include learning about family engagement strategies, trauma informed practice, and culturally responsive practices, which will enable them to better serve Oregon's youth. Providing teachers with access to this training will improve the quality of preschool throughout Oregon, and, in turn, produce more stable and academically capable youth.

Further, pre-K must have an evidence-based curriculum that supports all aspects of children's development: cognitive, physical, social and emotional. For example, Boston's pre-K program uses the evidence-based Building Blocks math curriculum. Pre-Kers' math knowledge predicts later school success, predicting later reading achievement even better than early reading skills.[33]

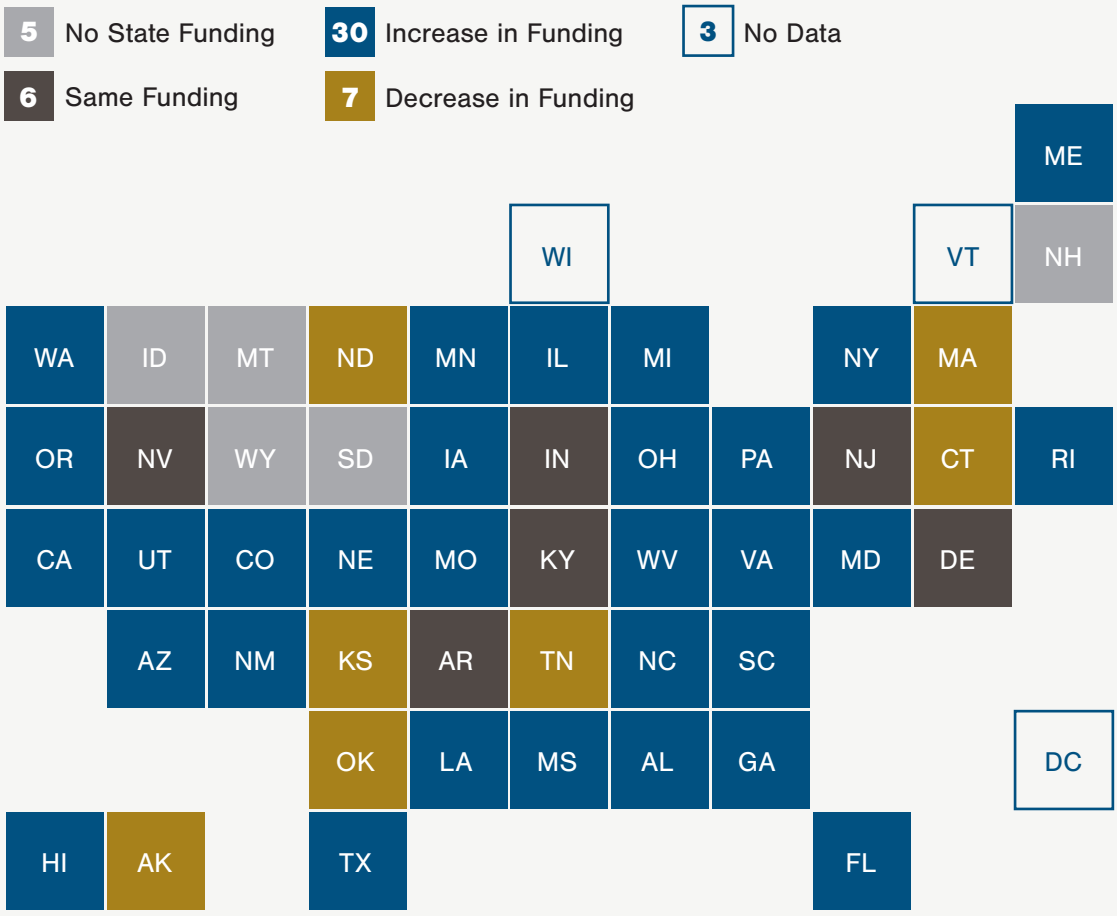
Time spent in pre-K is an essential element of quality programs. Research shows that full-day and full-week pre-K programs have been shown to be more effective at improving children's academic outcomes than part-time programs.[34] Oregon's Early Head Start meets for three and a half hours a day, five days per week, falling short of the full-school-day quality benchmark.[35]

Finally, the essential quality elements also include a strong focus on data and accountability: High-quality pre-K programs collect data to see how they are performing, at every level—district, program, teacher and student. This data is then used to improve program performance to ensure that children are well-prepared for school.

The director of the National Institute for Early Education Research, Dr. Steve Barnett, argues that "an accountability and continuous improvement system is a prerequisite for quality, as is adequate funding for those being held accountable."[36] Administrators of our most successful state pre-K programs take nothing for granted and are constantly working to learn from each other and make improvements.

Oregon must rigorously measure results, as well, so it can continually strive to attain excellent outcomes going forward.[37] That is how our state will reap the full rewards possible from effective pre-K programs.

State Preschool Funding (2016-2017)



Notes: 1. Allocations for the District of Columbia, Maine, Vermont and Wisconsin were not available at the time of publication. The authors assumed level funding from the 2015-2016 fiscal year to the 2016-2017 fiscal year. 2. During the 2015-2016 fiscal year, North Dakota allocated state funds for preschool for the first time. However, the state did not renew this funding for the 2016-2017 fiscal year. Source: Education Commission of the States. **Source:** Education Commission of the States.

The state's publicly funded Oregon Prekindergarten, Preschool Promise, and Head Start programs provided preschool for approximately 15,100 children in 2016.[38] While these programs have "greatly expanded Oregon's ability to provide high-quality preschool opportunities in this state, there remain more than 21,000 three- and four-year olds from low-income families" who do not have access to either programs.[39]

States Know Early Learning Works

Across the nation, pre-K has received support from both sides of the political aisle. In the 2016-2017 budget year, 30 states—17 with Republican leadership and 13 with Democratic leadership—increased funding for pre-K.[40]

Demonstrated Economic Benefits

A well-respected, independent cost-benefit analysis of nearly 20 different studies of pre-K programs showed that pre-K can return, on average, a "profit" (economic benefits minus costs) to society of more than $34,000 for every child served.[41] Applying these benefits to the approximate 15,100 children currently served by pre-K in Oregon, our state will reap a return of more than $513 million over the lifetime of these children, if we ensure that the pre-K is high-quality. These economic benefits accrue due largely to reductions in the cost of future crime and increases in participants' future wages, as well as decreases in other costs to society, such as children being held back in school or receiving special education. Other estimates of benefits are much higher. Clearly, pre-K works and more than pays for itself.

> "Ensuring that our youth have access to high-quality preschool will set them on a path to later success.



Honorable Beth Heckert
District Attorney
Jackson County, Oregon

Conclusion

Oregon's law enforcement officers urge policymakers to invest further in improving the quality of our state's pre-K program by enhancing educators' professional development. As law enforcement leaders, our job is to put those who commit serious crimes behind bars in Oregon. **But we *all* agree that a better and less expensive way to stop crime going forward is to prevent as many young children as possible from growing up to become involved in crime in the first place.** If Oregon continues to invest wisely in quality pre-K opportunities for its disadvantaged children, thousands of children can become successful, productive adults, instead of individuals of wasted potential who too often cost taxpayers dearly. When we support what works for our disadvantaged children, we put them—and our state—on a different, safer path. We must continue to invest in what works.

Endnotes

1 Federal Bureau of Investigation. (September 2016). Crime in the United States 2015. Washington, DC: US Department of Justice. Retrieved from https://ucr.fbi.gov/crime-in-the-u.s/2015/crime-in-the-u.s.-2015/tables/table-5

2 Oregon Department of Correction. (December 2016). Inmate Profile. Retrieved from: http://www.oregon.gov/doc/RESRCH/docs/inmate_profile_201612.pdf

3 Kyckelhahn, T. (February 2015). Justice expenditure and employment extracts, 2015- preliminary. NCJ 248628. Table 4. U. S. Department of Justice, Bureau of Justice Statistics. Retrieved from: http://www.bjs.gov/index.cfm?ty=pbdetail&iid=5239

4 Oregon Department of Corrections. (February 2017). Oregon Department of Corrections Quick Facts. Retrieved from: https://docs.google.com/document/d/1Y0KqpoMjOELbRv8sYmCj_9Q53rgfEfQdJBXvtgjlc2E/edit?ts=598cb3d4

5 Harlow, C. W. (January 2003). Education and correctional populations. NCJ 195670. Washington, DC: U. S. Department of Justice, Bureau of Justice Statistics. Retrieved from: http://www.bjs.gov/content/pub/pdf/ecp.pdf

6 Department of Education. (2016). Regulatory Adjusted Cohort Graduation Rate, All Students: 2014-2015. Retrieved from: https://eddataexpress.ed.gov/data-element-explorer.cfm/tab/data/deid/6100/sort/iup/; Alliance for Excellent Education. (March 2011). Education and the Economy: Boosting the Nation's Economy by Improving High School Graduation Rates. Retrieved from: http://all4ed.org/wp-content/uploads/2013/09/July18Econ.pdf .

7 Center on the Developing Child, Harvard University (n. d.). InBrief: The science of early childhood development. Retrieved from: http://developingchild.harvard.edu/resources/inbrief-science-of-ecd/

8 Hart, B., & Risley, T. R. (2004). The early catastrophe. Education Review, 17 (1), 110-118. Retrieved from: http://www.aft.org/pdfs/americaneducator/spring2003/TheEarlyCatastrophe.pdf

9 Heckman, J. (2013). Heckman: The economics of human potential. Retrieved from http://www.heckmanequation.org

10 Reynolds, A. J., Temple, J. A., Ou, S., Robertson, D. L., Mersky, J. P., Topitzes, J. W. & Niles, M. D. (2007). Effects of a school-based, early childhood intervention on adult health and well-being: A 19-year follow-up of low-income families. Archives of Pediatrics & Adolescent Medicine, 161(8), 730-739.

11 Bagnato, S., Salaway, J., & Suen, H. (2009). Pre-K Counts in Pennsylvania for Youngsters' Early School Success: Authentic Outcomes for an Innovative Prevention and Promotion Initiative. Retrieved from: http://www.heinz.org/UserFiles/Library/SPECS%20for%20PKC%202009%20Final%20Research%20Report%20113009.pdf

12 Weiland, C., & Yoshikawa, H. (2013). Impacts of a prekindergarten program on children's mathematics, language, literacy, executive function and emotional skills. Child Development. DOI: 10.1111/cdev.12099

13 The results are 23% more questions answered correctly on a literacy test for Arkansas and West Virginia, and 24% more for New Mexico. Hustedt, J.T., Barnett, W.S., Jung, K., & Thomas, J. (January 2007). The effects of the Arkansas Better Chance Program on young children's school readiness. National Institute for Early Education Research; Lamy, C., Barnett, W.S., & Jung, K. (December 2005). The effects of West Virginia's Early Education Program on young children's school readiness. National Institute for Early Education Research; Hustedt, J.T., Barnett, W.S., Jung, K., & Goetze, L. (November 2009). The New Mexico PreK Evaluation: Results from the initial four years of a new state pre-K initiative. National Institute for Early Education Research.

14 Michigan Great Start Readiness Program evaluation 2012: High school graduation and grade retention findings. Retrieved from http://bridgemi.com/wp-content/uploads/2012/06/GSRP-evaluation-may-21-12.pdf

15 Barnett, W. S., Jung, K., Youn, M., & Frede, E. C. (2013, March 20). Abbott Pre-K Program longitudinal effects study: Fifth grade follow-up. New Brunswick, NJ: National Institute for Early Education Research, Rutgers-The State University of New Jersey. Retrieved from: http://nieer.org/sites/nieer/files/APPLES%205th%20Grade.pdf

16 Ibid.

17 Dodge, K. A., Bai, Y., Ladd, H. F. and Muschkin, C. G. (2016). Impact of North Carolina's Early Childhood Programs and Policies on Educational Outcomes in Elementary School. Child Dev. doi:10.1111/cdev.12645

18 Barnett, W. S., Jung, K., Youn, M., & Frede, E. C. (2013, March 20). Abbott Pre-K Program longitudinal effects study: Fifth grade follow-up. New Brunswick, NJ: National Institute for Early Education Research, Rutgers-The State University of New Jersey. Retrieved from: http://nieer.org/sites/nieer/files/APPLES%205th%20Grade.pdf

19 Reynolds, A. J., Temple, J. A., Robertson, D. L., & Mann, E. A. (2001, May 9). Long-term effects of an early childhood intervention on educational achievement and juvenile arrest A 15-year follow-up of low-income children in public schools. Journal of the American Medical Association, 285, 2339-2346.

20 Michigan Great Start Readiness Program evaluation 2012: High school graduation and grade retention findings. Retrieved from http://bridgemi.com/wp-content/uploads/2012/06/GSRP-evaluation-may-21-12.pdf

21 Schweinhart, L.J., Montie, J., Xiang, Z., Barnett, W.S., Belfield, C.R., & Nores, M. (2005). Lifetime effects: The High/Scope Perry Pre-K study through age 40. Ypsilanti, MI: High/Scope Press

22 U.S Department of Education. (2016). Retrieved from: https://eddataexpress.ed.gov/data-element-explorer.cfm/tab/data/deid/6100/sort/iup/

23 Reynolds, A. J., Temple, J., Robertson, D. L., & Mann, E. A. (2001). Long-term effects of an early childhood intervention on educational achievement and juvenile arrest. Journal of the American Medical Association, 285, 2339-2380.

24 Schweinhart, L. J., Barnes, H. V., & Weikart, D. P. (1993). Significant benefits: The High/Scope Perry Pre-K study through age 27. Ypsilanti, MI: High/Scope Press.

25 Reynolds, A. (2007). Paths of influence from pre-K intervention to adult well-being: Age 24 findings from the Chicago Longitudinal Study. Society for Research in Child Development, March 31, 2007, Boston, MA.

26 Schweinhart, L.J., Montie, J., Xiang, Z., Barnett, W.S., Belfield, C.R., & Nores, M. (2005). Lifetime effects: The High/Scope Perry Pre-K study through age 40. Ypsilanti, MI: High/Scope Press.

27 US Department of Health and Human Services. (2017). National Center on Parent, Family, and Community Engagement (NCPFE). Retrieved from: https://eclkc.ohs.acf.hhs.gov/about-us/article/national-center-parent-family-community-engagement-ncpfce

28 Minervino, J. (September 2014). Lessons from research and the classroom: Implementing high-quality pre-K that makes a difference for young children. Seattle, WA: Bill & Melinda Gates Foundation. Retrieved from: https://docs.gatesfoundation.org/documents/Lessons%20from%20Research%20and%20the%20Classroom_September%202014.pdf

29 Barnett, W. S., Friedman-Krauss, A. H., Weisenfeld, G. G., Horowitz, M., Kasmin, R., & Squires, J. H. (2017). The state of preschool 2016. New Brunswick, NJ: Rutgers Graduate School of Education, National Institute for Early Education Research.

30 Landry, S., Anthony, J. L., Swank, P. R., & Monseque-Bailey, P. (2009). Effectiveness of comprehensive professional development for teachers of at-risk preschoolers. Journal of Educational Psychology, 101, 448-465.

31 Wasik, B. (2011). Improving vocabulary and pre-literacy skills of at-risk preschoolers through teacher professional development. Journal of Educational Psychology, 103, 455-469.

32 Pianta, R. et al. (2008). Effects of web-mediated professional development resources on teacher-child interactions in pre-kindergarten classrooms. Early Child Res Quarterly. 23, 431-451.

33 Clements, D. H. & Sarama, J. (August 2011). Early childhood mathematics intervention. Science, 333 (6045).

34 Robin, K. B., Frede, E. C., & Barnett, W. S. (2006). Is more better? The effects of full-day vs. half-day pre-K on early school achievement. New Brunswick, NJ: National Institute for Early Education Research. Retrieved from http://nieer.org/resources/research/IsMoreBetter.pdf

35 Barnett, W. S., Friedman-Krauss, A. H., Weisenfeld, G. G., Horowitz, M., Kasmin, R., & Squires, J. H. (2017). The state of preschool 2016. New Brunswick, NJ: Rutgers Graduate School of Education, National Institute for Early Education Research.

36 Steve Barnett made this comment in response to a study that showed that the academic benefits seen at the end of the pre-K year in Tennessee later faded out. However, children who participated in the pre-K program were half as likely to be held back in kindergarten. Barnett, W. S. (2013, August 2). An early look at early education in Tennessee. Retrieved from: http://pre-Kmatters.org/2013/08/02/an-early-look-at-early-education-in-tennessee/ Efforts are underway in Tennessee to improve the quality of the program, which has been found lacking. The entire sample of children is being followed through seventh grade and ongoing benefits will be examined.

37 Barnett, W. S., Friedman-Krauss, A. H., Weisenfeld, G. G., Horowitz, M., Kasmin, R., & Squires, J. H. (2017). The state of preschool 2016. New Brunswick, NJ: Rutgers Graduate School of Education, National Institute for Early Education Research.

38 Oregon Department of Education. (2017). Oregon Preschool Legislative Report. Retrieved from: https://oregonearlylearning.com/wp-content/uploads/2017/04/Oregon-Preschool-Legislative-Report_020917.pdf

39 Oregon Department of Education. (2017). Oregon Head Start Prekindergarten and Preschool Promise Percent Served 2016-2017.

40 Education Commission of the States. (January 2017). State Pre-K Funding for 2016-17 Fiscal Year: Trends and opportunities. Retrieved from: http://www.ecs.org/state-pre-k-funding-2016-17-fiscal-year-trends-and-opportunities/

41 Washington State Institute for Public Policy (May 2017). Benefit-cost summary State and district early education programs. Olympia, WA: Author. Retrieved from: http://www.wsipp.wa.gov/BenefitCost/Program/270

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