

# Business Case in Pennsylvania for Early Childhood Investments



*In business, we rarely have the luxury of making an investment decision with as much evidence as we have to support the economic value of investing in early childhood development and education... Put bluntly, in my terms, they are a financial no-brainer. The only question is ‘how strong is the ROI?’ The answer: Two or three or more to one.*



**John Pepper,**  
former CEO,  
Procter & Gamble

*“By age 5, it is possible to predict, with depressing accuracy, who will complete high school and college and who won’t.”*

**David Brooks**  
Columnist, *The New York Times*

**Businesses need employees who are job-ready, team-capable, and well-prepared – but we’re not getting them:**

- The majority of fourth and eighth graders in Pennsylvania and across the nation are not proficient in both math and reading.<sup>1</sup>
- In 2012, U.S. 15-year-olds ranked 27<sup>th</sup> among 34 developed countries in math, 17<sup>th</sup> in reading, and 20<sup>th</sup> in science.<sup>2</sup>
- 72% of young Pennsylvanians ages 17 to 24 would not qualify to serve in the U.S. military – ranking below 34 other states on this proportion. They could not meet the physical, behavioral, or educational standards for service – standards similar to those many employers use.<sup>3</sup>

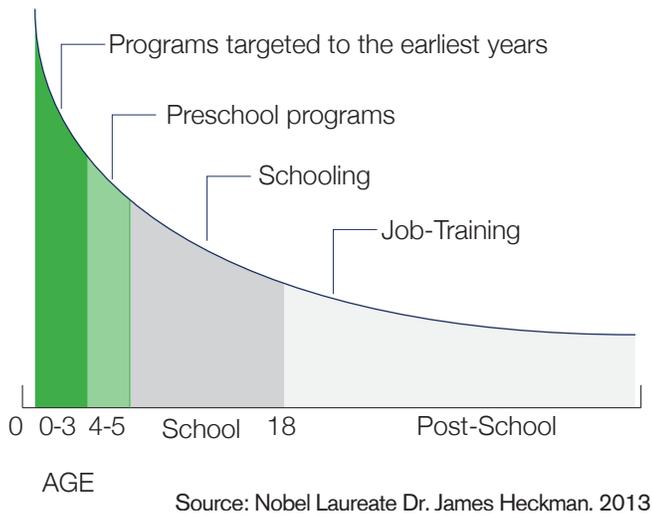
**This failing workforce pipeline can be repaired, but we have to start early.**

- The foundation of many skills needed for 21st -century jobs is established in the earliest years.
- Young children’s brains develop 700 synapses – neural connections that support learning and skills – every second.<sup>4</sup>
- The early childhood period (birth to age 5) is a time of rapid brain development; hundreds of new connections form every second. 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.<sup>5</sup>
- The learning gap between advantaged and at-risk children shows

## WHO WE ARE

ReadyNation is the preeminent business leader organization based in the U.S. working to strengthen business and the economy through effective investments in children and youth. Find us at [www.ReadyNation.org](http://www.ReadyNation.org)

## Rate of Return to Human Capital Investment at Different Ages



up as early as 9 months of age. At-risk children can start kindergarten as much as 18 months behind their peers. Many of these children never catch up, and are at an increased risk of dropping out of high school.<sup>6</sup>

## Evidence-based early childhood programs promote children's health and help them succeed:

These programs can address both children and their families to impact two generations. This is especially important given that 69% of Pennsylvania families with children under the age of six have all available parents in the workforce<sup>7</sup>:

- Research shows that Pennsylvania's Pre-K Counts program cut the portion of children at risk for problematic social and self-control behavior (such as taking things from others or not waiting your turn) from 22% to 4%.<sup>8</sup> This is a positive sign that fewer of those children will need special education.
- The Chicago Child-Parent Center (CPC) early childhood program and the Nurse-Family Partnership (NFP) home visiting program both cut abuse and neglect in half.<sup>9</sup>
- Children in the CPC were 29% more likely to graduate from high school, and the Perry Preschool Project children graduated 44% more often.<sup>10</sup>
- By age 30, individuals served by the Abecedarian early learning program were four times more likely to graduate college (and 42% more likely to be consistently employed).<sup>11</sup>

- Children not served by NFP had more than twice as many convictions by age 19. Those not served by CPC were 70% more likely to be arrested by age 18, while those not served by the Perry Preschool Project were five times more likely to be chronic offenders with five or more arrests by age 27.<sup>12</sup>
- A study from UCLA and Johnson & Johnson found that providing basic health care education and tools for at-risk families reduced emergency room visits by 42%, saving individual families around \$500 per year. These efforts also reduced the number of missed school days by 29%.<sup>13</sup>
- A randomized trial found that Early Head Start, when it included a strong home visiting component, improved the education and training of mothers and increased their earnings by \$300 a month.<sup>14</sup>
- Randomized trials found that NFP reduced families' reliance on food stamps and welfare. In Memphis, for example, NFP families relied on welfare for \$1,000 less per year on average than families not in the program.<sup>15</sup>

## Investments in early childhood programs yield short- and long-term returns:

- An independent analysis of NFP concluded that it produced a benefit-cost ratio of almost three to one and average net savings of \$17,000 per family by improving children's health, reducing child abuse and neglect, increasing their readiness for school and reducing their future crime. The same analysts reviewed over 20 studies of early education programs for at-risk children and found that the average benefit-cost ratio was over four to one, and average net savings were over \$26,000 per child served.<sup>16</sup>
- Child care and early learning professionals generally spend most of their earnings locally. In fact, an economic impact study found that for every \$1 invested in pre-K in Pennsylvania, a total of \$1.79 is generated in total spending within the state. This economic boost for local businesses is higher than investments in other major sectors such as retail trade (\$1.77), wholesale trade (\$1.75), farming, forest, fishing, hunting (\$1.72), manufacturing (\$1.68), mining, (\$1.66), and utilities (\$1.43). It also found that for every 20 jobs created in the Pennsylvania early education sector, five jobs are created outside the sector.<sup>17</sup>

## Making early childhood development work for Pennsylvania:

Here are just a few reasons why smart, proven investments in our state's youngest children are critical to protecting Pennsylvania's competitive edge in a global marketplace:

- **Benefits children and parents:** Twenty-three percent of children in Pennsylvania under six are from low-income, working families, yet only 5% of three-year-olds and 13% of four-year-olds are enrolled in state-funded pre-K programs.<sup>18</sup>
- **Prepared for the classroom:** Early deficits are reflected in school, where at-risk students who have missed out on early education opportunities often struggle to keep up with classmates, even from the first day of kindergarten. Many students fail to catch up: a full 44% of Pennsylvania fourth graders perform below grade level in math, and 40% perform below grade level in reading.<sup>19</sup>

- **Earning caps and gowns:** Fourteen percent of high school students in Pennsylvania still have not donned a cap and gown after four years.<sup>20</sup> And among high school graduates, only 38% meet the ACT College Readiness Benchmarks in the four core areas (English, reading, math, and science) and may not have the skills necessary for postsecondary education.<sup>21</sup>
- **Pursuing college and careers:** By 2020, 63% of jobs and 62% of job vacancies in Pennsylvania will require postsecondary education.<sup>22</sup> Longitudinal studies of the Abecedarian project have shown that high-quality early learning from six months to age 5 can improve students' rates of college completion.<sup>23</sup> Higher education often means higher earnings: one study estimated that the additional lifetime income if Pennsylvania's dropouts had graduated with their class in 2011 was over \$4 billion.<sup>24</sup>

As business leaders, we know that we get better employees in the long-term when we prioritize high-quality early childhood education. An investment in our youngest learners is an investment in our state's economy.

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Sixty-nine percent of Pennsylvania families with children under the age of six have all available parents in the workforce.<sup>7</sup>

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## Who We Are

ReadyNation is the nation's preeminent business leader organization working to strengthen business through better policies for children and youth. Our more than 1,100 members nationwide educate policymakers and the public about effective investments that will help business compete in today's global marketplace, build a foundation for lasting economic security, and help children get on the right track to succeed in school and life.

## How We Make a Difference

Our members educate local, state, and federal policymakers and the public by:

- Engaging elected officials through letters, calls, and meetings
- Speaking to the media through submitting opinion pieces or using radio/TV/social media outlets
- Participating in public presentations or press events

In addition, we offer webinars, business leader summits, new economic evidence, and profiles of business champions to help build the business network for early childhood. Our website is the nexus of business engagement across the country.

We are also leading a new project to explore *Pay for Success* (social impact bond) financing for early childhood ([www.ReadyNation.org/PFS](http://www.ReadyNation.org/PFS)).

In 2013, we supported our members to have 230 media appearances and 240 policymaker meetings or sign-on letters. We have contributed to policy victories in states as diverse as Indiana, Maine, Michigan, Montana, Ohio, Oregon, **Pennsylvania**, Washington, and Utah.

## How to Join

Go to [www.ReadyNation.org/join-us](http://www.ReadyNation.org/join-us). There are no membership fees, financial obligations, or formal meetings. Members are fully supported by our staff, minimizing your time commitment. Participation is always based on members' expressed consent,

## WHAT YOU CAN DO:

- ✓ Tell your elected officials and the media about the value of early childhood investments.
- ✓ Adopt family-friendly practices at your business.
- ✓ Provide time, volunteers, expertise, and funding to local early childhood programs.
- ✓ Host an event to share information with business and civic groups.
- ✓ Encourage your local business organizations to develop formal positions on the benefits of effective early childhood programs.
- ✓ Give your employees information about the importance of childhood and what they can do.

## HOW WE CAN HELP:

Business people who become members of ReadyNation (at no cost) can receive a variety of supports to speak out. You can:

- ✓ Distribute our free materials.
- ✓ Receive our monthly e-newsletter to learn about new evidence, business networking events, and champions.
- ✓ Contact us to find speakers as well as sample speeches, op-eds, talking points, and other communications materials.
- ✓ Get support for policymaker communications.
- ✓ Attend our conferences or connect with the national network of business leader advocates and learn more about championing early childhood programs.

availability, and desire to speak out on a specific issue. Members' names will not be used without their consent, except to be listed as members of ReadyNation.

For funders, see our website.

ReadyNation is a membership organization of business leaders that operates under the umbrella of the non-profit Council For A Strong America.

## Endnotes

- 1 The National Assessment of Educational Progress. 2011. "The Nation's Report Card." Retrieved from: <http://nces.ed.gov/nationsreportcard/pdf/main2011/2012457.pdf> and <http://nces.ed.gov/nationsreportcard/pdf/main2011/2012458.pdf>
- 2 OECD. 2012. "Programme for International Student Assessment (PISA) Results from PISA 2012: Key findings from the United States." Retrieved June 27, 2014 from <http://www.oecd.org/pisa/keyfindings/PISA-2012-results-US.pdf>
- 3 Mission: Readiness (2014) citation of the 2013 Qualified Military Available (QMA), based on personal communication between Mission: Readiness and the Accession Policy and Joint Advertising, Market Research and Studies teams at the Department of Defense in July 2014.
- 4 Shonkoff, Jack. 2009. "In Brief: The Science of Early Childhood Development." Center on the Developing Child at Harvard University. Retrieved from: [http://developingchild.harvard.edu/index.php/resources/multimedia/videos/inbrief\\_series/](http://developingchild.harvard.edu/index.php/resources/multimedia/videos/inbrief_series/).
- 5 Shonkoff, Jack. 2009. "In Brief: The Science of Early Childhood Development." Center on the Developing Child at Harvard University. Retrieved from: [http://developingchild.harvard.edu/index.php/resources/multimedia/videos/inbrief\\_series/](http://developingchild.harvard.edu/index.php/resources/multimedia/videos/inbrief_series/).
- 6 Barnett, W.S., Tarr, J.E., Lamy, C., & Frede, E.C. 2001. "Fragile Lives, Shattered Dreams: A Report on Implementation of Preschool Education in New Jersey's Abbott Districts." New Brunswick, NJ: National Institute for Early Education Research.
- 7 Annie E. Casey Foundation. (2014). KIDS COUNT data center. Baltimore, MD: Author. Retrieved on July 21, 2014, Retrieved from: <http://datacenter.kidscount.org>
- 8 Campbell, S.B., Shaw, D.S. & Gilliom, M. (2000). Early externalizing behavior problems: Toddlers and preschoolers at-risk for later maladjustment. *Development and Psychopathology*, 12, 467-488.
- 9 Olds, D.L. (1998). Long-term effects of nurse home visitation on children's criminal and anti-social behavior: 15-year follow-up of a randomized controlled trial. *Journal of the American Medical Association*, 280(14), 1238-1244; 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), pp. 730-739.
- 10 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; Schweinhart, L.J., Montie, J., Xiang, Z., Barnett, W.S., Belfield, C.R., & Nores, M. (2005). Lifetime effects: The High/Scope Perry Preschool study through age 40. Ypsilanti, MI: High/Scope Press.
- 11 Barnett, W.S., & Masse, L.N. (2007). Comparative benefit-cost analysis of the Abecedarian program and its policy implications. *Economics of Education Review*, 26, 113 - 125.
- 12 Eckenrode, J., Campa, M., Luckey, D. W., Henderson, C. R., Cole, R., et al. (2010). Long-term effects of prenatal and infancy nurse home visitation on the life course of youths: 19-year follow-up of a randomized trial. *Archives of Pediatric and Adolescent Medicine*, 164 (1), 9-15; Reynolds, A. J., Temple, J. A., 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; Schweinhart, L. J., Barnes, H. V., & Weikart, D. P. (1993). Significant benefits: The High/Scope Perry Preschool study through age 27. Ypsilanti, MI: High/Scope Press.
- 13 Peterson, Jeff. (2007). "NACOG Head Start and the UCLA/Johnson & Johnson Health Care Institute: A study of Health Care Savings." Arizona Rural Policy Institute. Retrieved from [http://www.franke.nau.edu/RPI/projects/NACOG\\_HCI\\_summary\\_finalrev051407.pdf](http://www.franke.nau.edu/RPI/projects/NACOG_HCI_summary_finalrev051407.pdf).
- 14 Jones Harden, B., Chazan-Cohen, R., Raikes, H., & Vogel, C. (2012). Early head start home visitation: The role of implementation in bolstering program benefits. *Journal of Community Psychology*, 40(4), 4380455.
- 15 Coalition for Evidence-Based Policy (2011, August). HHS's Maternal, Infant, and Early Childhood Home Visiting Program: Which Program Models Identified by HHS As "Evidence-Based" Are Most Likely To Produce Important Improvements in the Lives of Children and Parents? Retrieved from: <http://coalition4evidence.org/wp-content/uploads/2011/08/Review-of-8-hv-modelsAug-2011-FINAL.pdf>
- 16 Washington State Institute for Public Policy (2014, June 12). Benefit-Cost Results. Olympia, WA: Author. Retrieved from <http://www.wsipp.wa.gov/BenefitCost>
- 17 ReadyNation (2014, April). "Strengthening Pennsylvania Business through Investments in Pre-Kindergarten." Washington, DC. Retrieved from <http://readynation.s3.amazonaws.com/wp-content/uploads/ReadyNation-PA-Multiplier-Report.pdf> ReadyNation commissioned an analysis of the linkage effects of early care and education. Analyses were conducted using fully disaggregated models and using models aggregated into nine very broad sectors. This analysis calculated the Type SAM (Social Accounting Matrix) Output multipliers for all nine major aggregated economic sectors in the state using IMPLAN models.
- 18 Annie E. Casey Foundation. (2014). KIDS COUNT data center. Baltimore, MD: Author. Retrieved on July 21, 2014, Retrieved from: <http://datacenter.kidscount.org>; National Institute for Early Education Research (NIEER) (2014). "2013 State Preschool Yearbook." Retrieved from <http://nieer.org/yearbook>
- 19 National Center on Education Statistics (2013). The Nation's Report Card. National Center for Education Statistics, Institute of Education Sciences, U.S. Department of Education, Washington, D.C. Retrieved from: [http://www.nationsreportcard.gov/math\\_2013/](http://www.nationsreportcard.gov/math_2013/) and [http://www.nationsreportcard.gov/reading\\_2013/](http://www.nationsreportcard.gov/reading_2013/)
- 20 U.S. Department of Education (2015, January). Public high school 4-year adjusted cohort graduation rate (ACGR) for the United States, the 50 states and the District of Columbia: School years 2010-11 to 2012-13. National Center for Education Statistics. Retrieved from: [http://nces.ed.gov/ccd/tables/ACGR\\_2010-11\\_to\\_2012-13.asp](http://nces.ed.gov/ccd/tables/ACGR_2010-11_to_2012-13.asp)
- 21 ACT Inc. (2014). 2014 Condition of College and Career Readiness. Iowa City, IA: Author. Retrieved from <http://www.act.org/newsroom/data/2014/readinessreports.html>
- 22 Carnevale, A.P., Smith, N. & Strohl, J. (2013, June). RECOVERY Job growth and education requirements through 2020. Washington, DC: Georgetown University Center on Education and the Workforce.
- 23 Barnett, W.S., & Masse, L.N. (2007). Comparative benefit-cost analysis of the Abecedarian program and its policy implications. *Economics of Education Review*, 26, 113 - 125.
- 24 "The High Cost of High School Dropouts: What the nation pays for inadequate high schools." Alliance for Excellent Education. November 2011. Retrieved February 20, 2013 from <http://www.all4ed.org/files/HighCost.pdf>

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## Add your voice.

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