

CHAMPIONS

For America's Future

Athletes and coaches helping kids succeed in life



Olympians and Paralympians:

High-Quality Early
Education Can Help
Kids Win the Academic
“Medal Race”



60%

or more of the “achievement gap”
between low-income and
higher-income children in high
school already exists on the first
day of kindergarten.

Acknowledgements

Champions for America's Future is a national, bipartisan network of athletes, coaches and sports leaders who have come together to make sure every child has the best chance to compete in life. Our members rely on the best research and their own experiences to focus on what will give kids an edge in the future. We educate the public and policymakers at the local, state and national levels about the need to invest in proven, cost-effective programs that help children overcome the obstacles that prevent them from competing successfully in the 21st century. We operate under the umbrella of the non-profit Council for a Strong America.

Champions For America's Future is supported by tax-deductible contributions from foundations, individuals, and corporations.

Major funding for Champions For America's Future is provided by: Alliance for Early Success • The Boone Family Foundation • Annie E. Casey Foundation • Bill and Melinda Gates Foundation • Robert Wood Johnson Foundation • The W.K. Kellogg Foundation • The Kresge Foundation • Meadows Foundation • The David and Lucile Packard Foundation • Texas Education Grantmakers Advocacy Consortium Fund.

Report authors: William Christeson, Sandra Bishop-Josef, Ph.D., Cristin Kumar, Tom Garrett and Andrea Cernich

Contributor: David Kass

Design by Marina Flessas

June 2016

©2016: Champions for America's Future. All Rights Reserved.

Summary:

As accomplished athletes and coaches – and as Americans – we are proud of our nation’s finish atop the medal table at the 2012 Olympics. But, in our roles as parents and advocates, we are concerned that our nation’s children rank just 35th in math internationally. As members of Champions for America’s Future, we want to see all children achieve their full potential on and off the field and become champions in life. Unfortunately for many youth, the training they need to reach the starting line isn’t available, and too many kids start kindergarten already far behind in critical skills. Like our own access to trained coaches and effective sports programs, high-quality preschool bridges the gap to help all kids get the right start. High-quality preschool can provide the pre-math, pre-reading and important social-emotional skills needed for more children to reach their full potential in life.

Making high-quality early education available to children who are disadvantaged is paramount for America’s future generations to win and prosper.

Starting the race already far behind:

It takes a lot of support along the way for someone to become a champion athlete or coach. In fact, those of us who competed in the Olympics and Paralympics had the whole country behind us. But too many children who are disadvantaged across the U.S. lack such support for becoming competitive students, often starting kindergarten only knowing about one-fourth as many words as their peers who have professional parents.¹ Moreover, 60 percent of the “achievement gap” in reading and 70 percent of the achievement gap in math between low-income and higher-income children in high school is already present at the start of kindergarten.² That gap is part of the reason American children are far back in the pack when it comes to the international “medal count” on academic achievement. In fact, America’s 15-year-old children finished 27th in science and 35th in math out of the 64 countries taking the Organization for Economic Cooperation and Development [OECD] exam in 2012.³

Winning the Olympic Medal Count, but Losing the Academic Medal Count

2012 Olympic Medals

1	USA	103	🥇
2	China	88	🥈
3	Russia	81	🥉
4	Great Britain	65	
5	Germany	44	

2012 Math Scores

1	Singapore	573	🥇
2	Hong Kong	561	🥈
3	Taiwan	560	🥉
4	South Korea	554	
35	USA	481	

2012 Science Scores

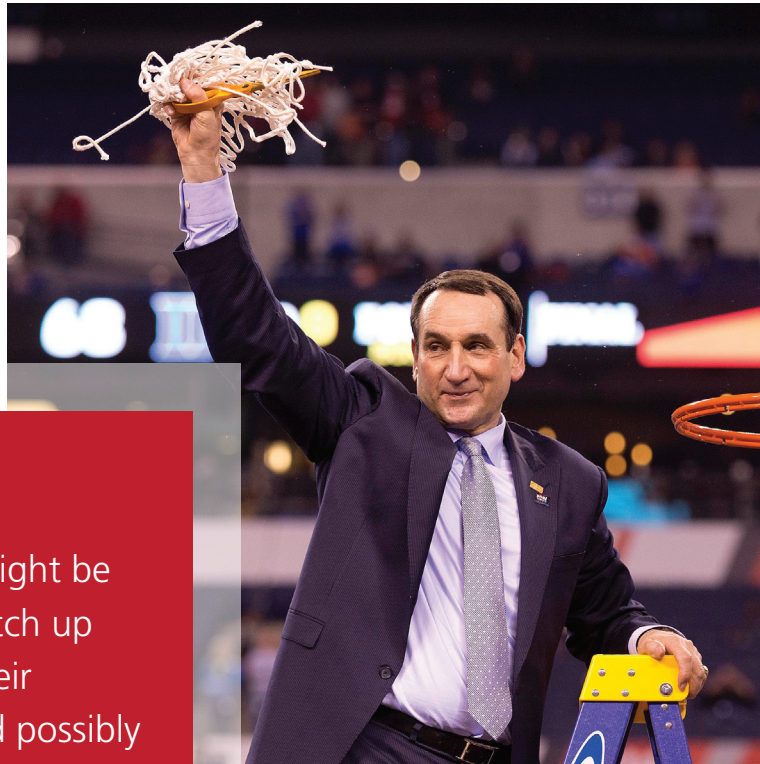
1	Hong Kong	555	🥇
2	Singapore	551	🥈
3	Japan	547	🥉
4	Finland	545	
27	USA	497	

One of the biggest cross-national tests is the Program for International Student Assessment (PISA), which every three years measures reading ability, math and science literacy and other key skills among 15-year-olds in dozens of developed and developing countries.

The most recent PISA results, from 2012, placed the U.S. an unimpressive 35th out of 64 countries in math and 27th in science.

— Pew Research Center

“These children might be scrambling to catch up for the rest of their education — and possibly for the rest of their lives.”



Coach Mike Krzyzewski, Head Coach,
USA Men's Basketball and Head Men's Basketball Coach,
Duke University

High-quality pre-K can change the odds:

We know high quality pre-kindergarten can dramatically change the chances of success for many children. For example:

- By the fourth and fifth grades, New Jersey children served by a preschool program in disadvantaged school districts around the state were three-fourths of a year ahead in math and two-thirds of a year ahead in literacy. They were also much less likely to be held back in school.⁴
- North Carolina's More at Four program increased third grade reading scores by an amount equivalent to five months of extra instruction and improved math scores by three to five months of extra instruction. More at Four also resulted in a 10 percent reduction in special education placement by grade three.⁵
- The Chicago Child-Parent Centers preschool improved graduation rates by age 20 by 29 percent among its participants, and the children not served by the program were 70 percent more likely to be arrested for a violent crime by age 18.⁶

Learning new words, numbers, and social emotional skills:

High-quality pre-K helps children develop in all areas – social, emotional, and behavioral skills, along with essential pre-math and pre-reading skills. As the Nobel-prize-winning economist James Heckman explains, “Non-cognitive skills are powerfully predictive of a number of socioeconomic measures (crime, teenage pregnancy, education and the like).”⁷

It may not be news to anyone who has watched a skilled preschool teacher wrangle a room full of three- and four-year olds, but research suggests that qualified preschool teachers are pretty adept at teaching young children such skills as taking turns, sharing, and resolving conflicts.⁸ These are the kinds of social-emotional and behavioral skills children will need throughout school and life to be successful. For example, a recent study showed that children with strong social-emotional skills in kindergarten were more likely to graduate from high school, attain a college degree and have a full-time job by age 25.⁹ Some researchers studying the substantial long-term outcomes of the Chicago Child-Parent-Centers, Perry Preschool, Head Start and Abecedarian preschool programs are convinced that social-emotional skills are as important or even more important than academic skills for explaining preschool gains that persist into adulthood.¹⁰

The best programs, such as New Jersey’s Abbott program, produce lasting academic gains.¹¹ To replicate such programs, though, early education teachers will have to be well-trained to be able to provide the level of instruction necessary to help children who are disadvantaged make up ground on pre-reading and pre-math skills. Research indicates that many pre-school teachers will need more support to do that.¹²

April Holmes, Paralympic Gold Medalist (Track & Field)

“How can little kids succeed if they start the race already ten steps behind?”





Gary Hall, Jr. Olympic Gold Medalist
(Swimming)

“As Olympians and Paralympians, our success comes from an early start and high quality programs. Imagine the possibilities when we give kids a solid start in life through high-quality early childhood education.”

High-quality early education can save millions:

An independent and well-respected cost-benefit analysis of more than 20 different studies showed that preschool can return nearly \$30,000 in average, net benefits to society for every child served.¹³ But children cannot benefit if they are not served. According to a report from the National Institute for Early Education Research titled *The State of Preschool 2015*, 59 percent of 4-year-olds are not in a publicly funded preschool program.¹⁴ Even for those children who are served, if data show a particular preschool program isn't delivering strong results, the administrators and state policy-makers should learn from the successful programs that are delivering stronger outcomes.¹⁵

“Preschool can return average net benefits to society of nearly **\$30,000** for every child served.”

Conclusion:

Through our successes and even failures as athletes and coaches, we are the first to acknowledge that we didn't get here on our own. That's why so many of us are involved in helping young students realize their potential on and off the field. We recognize having trained teachers and evidence-based programming is an even greater asset for these kids. We are stepping forward together to urge our nation to focus on the most important medal count—the success of our kids. Let's help to level the playing field for those who have not enjoyed the support we have by scaling up high-quality early learning support for the most disadvantaged children. These children are already at risk of being far behind by kindergarten; we need to give them the same opportunity to achieve their full potential as their more-advantaged peers. High-quality early education is central to accomplishing that goal.

Helping those who are less fortunate is important, but we want to be clear: Wise investments in high-quality early education aren't a matter of charity. They are necessary elements of the game plan that will allow American children to succeed and help our nation prosper.

1. Hart, B., & Risley, T. R. (2003, Spring). The early catastrophe: The 30 million word gap by age 3. *American Educator*. Retrieved from: <http://www.aft.org/sites/default/files/periodicals/TheEarlyCatastrophe.pdf>
2. Bradbury, B., Corak, M., Waldfogel, J., & Washbrook, E. (2015). Too many children left behind. Russell Sage Foundation.
3. Pew Research Center (2015, February 2). U.S. students improving slowly in math and science, but still lagging internationally. Retrieved from: <http://www.pewresearch.org/fact-tank/2015/02/02/u-s-students-improving-slowly-in-math-and-science-but-still-lagging-internationally/>
4. Barnett, W. S., Jung, K., Youn, M., & Frede, E. C. (2013, March 20). Abbott Preschool 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>
5. Dodge, K., Ladd, H., & Muschkin, C. (2011, March 16). From birth to school: Examining the effects of early childhood programs on educational outcomes in NC. Update with preliminary results. Retrieved from: http://www.wakesmartstart.org/wp-content/uploads/2015/10/Duke_2010_Study_PPT.pdf
6. 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.
7. Federal Reserve Bank of Minneapolis (2005, June). Interview with James Heckman. Retrieved from: <https://www.minneapolisfed.org/publications/the-region/interview-with-james-heckman>
8. Pianta, R., Howes, C., Burchinal, M., Bryant, D., Clifford, R., Early, D., & Barbarin, O. (2005). Features of pre-Kindergarten programs, classrooms, and teachers: Do they predict observed classroom quality and child-teacher interactions? *Applied Developmental Science*, 9, 144-159.
9. Jones, D. E., Greenberg, M., & Crowley, M. (2015). Early social-emotional functioning and public health: The relationship between Kindergarten social competence and future wellness. *American Journal of Public Health*, 105, 2283-2290. Retrieved from: <http://ajph.aphapublications.org/doi/abs/10.2105/AJPH.2015.302630>
10. Elango, S., Garcia, J. L., Heckman, J. J., & Jojman, A. (2015, December). Early childhood education. Retrieved from: https://econresearch.uchicago.edu/sites/econresearch.uchicago.edu/files/Elango_et_al_2015_early-childhood-education.pdf
11. Barnett, W. S., Jung, K., Youn, M., & Frede, E. C. (2013, March 20). Abbott Preschool 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>
12. E.g., Justice, L. M., Mashburn, A., Hamre, B., & Pianta, R. (2012). Quality of language and literacy instruction in preschool classrooms serving at-risk pupils. *Early Childhood Research Quarterly*, 23, 51-68; Pianta, R., Howes, C., Burchinal, M., Bryant, D., Clifford, R., Early, D., & Barbarin, O. (2005). Features of pre-Kindergarten programs, classrooms, and teachers: Do they predict observed classroom quality and child-teacher interactions? *Applied Developmental Science*, 9, 144-159.
13. Washington State Institute for Public Policy (2015, December). Benefit-cost results State and district early childhood education programs. Retrieved from <http://www.wsipp.wa.gov/BenefitCost/Program/270>
14. Barnett, W.S., Friedman-Krauss, A.H., Gómex, R., Horowitz, M., Weisenfeld, G.G., Brown, K.C., & Squires, J.H., (2016). The state of preschool 2016. National Institute for Early Education Research. Retrieved from Barnett <http://nieer.org/research/state-preschool-2015>
15. For a discussion of what makes up high-quality pre-kindergarten programs see: ReadyNation (2015). Quality matters most The business case for investing in high-quality early learning education in Washington. <http://readynation.s3.amazonaws.com/wp-content/uploads/ReadyNation-WA-Quality-Matters-Most.pdf>

www.ChampionsForAmericasFuture.org

 [@Champs4Future](https://twitter.com/Champs4Future)

 Facebook.com/ChampionsForAmericasFuture

CHAMPIONS
For America's Future

Athletes and coaches helping kids succeed in life