

The Vital Link: Early Childhood Investment is the First Step to High School Graduation

Efforts to improve the quality of the nation's workforce have focused on high school graduation as an important starting point for job readiness. We are more likely to achieve that goal if we help children start down the right path in the first five years of life.



Children can be **18 months behind** by the start of kindergarten.



Children not kindergarten-ready are **half as likely to read well** by third grade.



Children not reading proficiently by third grade are **four times more likely to drop out**.

Though children who fall behind can benefit from intensive help at every stage of development, the later the intervention, the harder it becomes for them to catch up and achieve their potential.

Early childhood to kindergarten readiness

The achievement gap opens in the earliest years, the period when children's brains grow fastest.¹ By age three, children of low-income families know only half the words of children in more advantaged families.² As a result, disadvantaged children can be 18 months behind their peers by the time they start kindergarten.³

Kindergarten readiness to third grade

Despite our best efforts to teach remedial skills and help children catch up, many of those who enter kindergarten not ready to learn will fall further behind their peers. Research clearly shows the connection between kindergarten readiness and third grade test scores:

- Children not scoring "fully ready" on the Maryland Kindergarten Readiness test were five times more likely to fail third grade reading and math standards.⁴
- Children in Cincinnati who weren't ready for kindergarten were only half as likely as their peers to read proficiently by third grade.⁵
- A San Francisco Bay Area study showed that nearly half of children who didn't meet kindergarten readiness standards did not meet math and reading standards in third grade, while this was true for only one in ten of their kindergarten ready peers.⁶

For these reasons, the Campaign for Grade-Level Reading has identified preparation in the pre-K years as one of three key factors affecting third grade reading.⁷

"Being ready for kindergarten affects everything that follows. The connections from preschool to third grade reading proficiency to high school completion—a bare-minimum requirement in today's economy—could not be clearer."

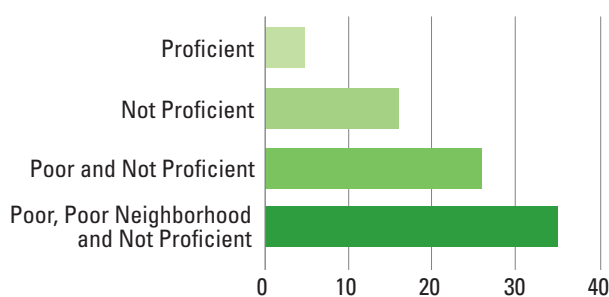
— John Pepper, former CEO, Procter & Gamble

Third grade to high school graduation

Third grade achievement reliably predicts the crucial benchmark of high school graduation. Why is third grade so important? It's when children make the leap from *learning to read* to *reading to learn*. At that point, children must read well in order to understand other subjects. Up to half of the printed fourth-grade curriculum, for example, is incomprehensible to students who read below that grade level.⁸

According to one study, about 16 percent of children who were not reading proficiently by the end of third grade did not graduate from high school on time, a rate four times greater than that for proficient readers. For children who were poor for at least a year and were not reading proficiently, the proportion failing to graduate rose to 26 percent. For children who were poor, lived in neighborhoods of concentrated poverty and not reading proficiently, the proportion jumped to 35 percent.⁹

Failing to Graduate High School On Time by Third Grade Reading Level and Risk Factors¹⁰



A growing body of research shows that the relationship between early learning and later achievement also exists for math. "Preschool children's knowledge of mathematics predicts their later school success into elementary and even high school," write the authors of a study in *Science* magazine. "Further, it predicts later reading achievement even better than early reading skills."¹²

Closing the graduation gap through early childhood programs

Fortunately, we know how to help close this achievement gap. Good early childhood programs prepare children for success in kindergarten, third grade and beyond. Three well-known studies from the 1960s and '70s found that high quality preschool dramatically improved high school graduation rates as well as college attendance.¹³

"Academic success, as defined by high school graduation, can be predicted with reasonable accuracy by knowing someone's reading skill at the end of third grade. A person who is not at least a modestly skilled reader by that time is unlikely to graduate from high school."

—The National Research Council¹¹

- Children whose mothers participated in a quality nurse home visiting (parent mentoring) program for infants and toddlers recorded higher math and reading scores through third grade.¹⁴ Another home visiting program showed participating children were 43 percent more likely to graduate from high school.¹⁵
- Participants in Utah's Granite School district pre-school program showed a 51 percent increase in math proficiency and a 27 percent increase in language arts proficiency in third grade over peers who had not attended preschool.¹⁶
- A 2013 study shows that children in New Jersey's most disadvantaged communities who participate in the Abbott pre-K program made significant gains in literacy, language, math and science; and these gains persisted through fourth and fifth grades.¹⁷
- Students enrolled in Michigan's Great Start School Readiness Program (GSRP) were much more likely than non-participants to pass a statewide assessment in fourth grade. They were also much more likely to graduate from high school (58 percent compared to 43 percent).¹⁸

The evidence is clear: business leaders fighting to raise graduation rates need to join the fight to help young children get the right start in life.

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Contact us at: ReadyNation
(202) 657-0600
info@readynation.org
www.readynation.org
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This report was written by William Carpluk, with research assistance from Kate Eaneman.



ReadyNation | America's Promise Alliance
1110 Vermont Avenue NW, Suite 900 | Washington, DC 20005