



Smart INVESTMENTSSM IN MINNESOTA'S STUDENTS

WHAT WE KNOW ABOUT ISSUES AND POLICY FOR CHILDREN FROM AGE 4 THROUGH 3RD GRADE

THE ISSUE

Minnesota must improve, expand and invest in early learning from preschool through 3rd grade to ensure that all children – especially Minnesotans of color and kids from low-income households – gain the skills they need to succeed.

RECOMMENDED ACTIONS FOR MINNESOTA

- **Provide effective instruction for children from age 4 through grade 3** in early reading and math skills using expanded preschool programs, small class sizes, and evidence-based approaches from successful early education initiatives.
- **Increase family services and support programs** that involve parents in their children's development and education.
- **Expand access to affordable, high quality preschool for children by age 4** through a state-funded program that can meet the need for early education, especially among at-risk kids.

WHY IT MATTERS

- Investments in education for young children lay a necessary foundation of early skills and learning that allows for more advanced skills and higher education later.¹ Such investments in early preparation increase the effectiveness of overall spending on education.² Language and literacy skills in particular stand out as important for students launching into education beyond the early years.³
- Gaps in reading and math capabilities among ethnic and racial groups appear early and are difficult to overcome as students move through their school years,⁴ making educational success from pre-kindergarten through 3rd grade vitally important to these students.
- The benefits substantially outweigh the costs of quality education and support initiatives for children from preschool through grade 3, research shows. The payoffs include a reduced need for expensive remedial instruction later, increased earnings by students in their adult years, income-related increases

in tax revenues for government, and decreased government spending on income support programs.⁵ But investments must focus on what works – for example, research into the impacts of kindergarten indicates likely poor returns from dollars spent on full-day kindergarten versus half-day programs.⁶

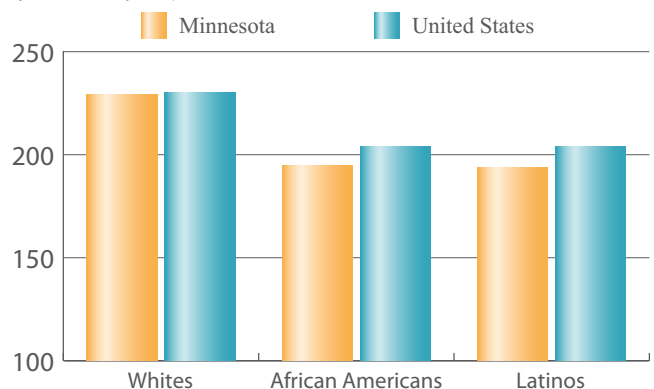
- Early childhood education has substantial and positive impacts on individual well-being and economic success. Federal Reserve Bank economists Arthur Rolnick and Rob Grunewald call such investment “the most efficient means to boost the productivity of the workforce 15 to 20 years down the road...”⁷

CHALLENGES FOR MINNESOTA

- Breakdowns show that by the end of the early education stage, Minnesota's children do no better and often worse than students nationwide when it comes to the critical gateway skill of reading. For the federal government's 2009 National Assessment of Educational Progress (NAEP), the average reading score for Minnesota's white 4th graders (230) only ties the national mark (229), while the scores for Minnesota's African American and Latino 4th graders trail the national levels – 195 compared to 204 for blacks, and 194 compared to 204 for Hispanics.⁸

MINNESOTA'S 4TH GRADERS DO NO BETTER THAN THE NATION'S IN READING

Average 2009 score for federal reading assessments in 4th grade (after the early education years)



Data from the National Assessment of Educational Progress.

- Because Minnesota’s low-income students of color on average scored worse than their national counterparts on the 2009 4th grade NAEP test and white students did not, it is unlikely the gaps in reading for Minnesotans of color trace back only to issues of poverty or low household income, as is sometimes argued.⁹
- Assessments carried out by the Minnesota Department of Education indicate that less than half of the state’s children were fully prepared for kindergarten as they entered it in fall 2008. Around 10 percent or more of our children did not yet have the needed capabilities in the areas of language and literacy, math thinking, and personal and social development. Students from low-income households were less likely to be proficient or in the process of becoming so, and boys trailed girls on many of the measures.¹⁰
- Minnesota lags well behind when it comes to twice-a-week preschool education funded by the state and federal governments. Only about 15 percent of Minnesota’s four year olds were enrolled in such programs for the 2007-08 school year compared to 38 percent for all 50 states. This tally counts a) state-funded programs, b) the federally funded Head Start program, and c) special education programs, but it misses some Minnesota 4 year olds who participate in preschool at least twice a week through school districts and other local entities using funds from the state government’s School Readiness initiative.¹¹

schools provide focused instruction, to the benefit of participating students.¹⁵

- **Parent involvement and family support initiatives** that encourage partnerships between schools and families to boost children’s academic development and social skills. Effective early education programs incorporate parental involvement¹⁶ – for example, Chicago’s Child-Parent Centers for children in pre-kindergarten through 3rd grade and the Success for All Program for elementary students.

SMART APPROACHES

For its initiative on *Smart InvestmentsSM in Minnesota’s Students*, Growth & Justice assembled a stellar steering committee of experts and practitioners to review research on cost-effective approaches and programs to improve education. Smart investments address real disparities and actual student needs. The steering committee called for a significant increase in public-sector investment and private-sector engagement in the following smart approaches for children from age 4 through grade 3.

- **High quality, half-day, affordable preschool for more Minnesota children by age 4** via programs that follow key effectiveness principles drawn from evidence on exemplary programs nationwide. Solid research shows impressive, long-lasting benefits from high quality preschool programs, especially for children at risk.¹²
- **Small class sizes for the early education years.** Researchers have found that reduced class size in kindergarten through 2nd grade proves more cost-effective than class-size reductions for grades 3 through 6,¹³ with small-size classes over a period of several years having effects through to high school graduation.¹⁴
- **Thorough instruction in language and math skills.** Reading in particular is an essential gateway skill for success, and reading by 3rd grade eliminates the need for high-cost special education instruction. Comprehensive programs like Success for All and the Child-Parent Centers in Chicago’s public

SMART INVESTMENTSSM IN MINNESOTA’S STUDENTS

The Growth & Justice proposal for *Smart InvestmentsSM in Minnesota’s Students*, available [here](#), highlights research-based, cost-effective policies, strategies and programs for improving education from the early childhood years through to post-secondary study, with the aim, by 2020, of increasing by 50 percent the share of Minnesota students who successfully complete post-secondary education.

Growth & Justice identified five key education stages across three critical developmental phases – Ready to Launch, Ready for Higher Learning, and Ready for Life. This issue brief focuses on the stage for age 4 through 3rd grade, but unless Minnesota pays careful attention to and invests in the entire continuum, we cannot reach our goal. For issue briefs on other key *Smart Investment* stages for Minnesota’s students, click [here](#).

A growing body of economic research suggests that the right investments in education can strengthen economic growth, raise the earnings power of more families and lower public costs. Educational research and economic analysis indicate that an added investment of \$1 billion a year in human capital by Minnesota would more than pay for itself.

ENDNOTES

- 1 Henry M. Levin and Clive R. Belfield, “Investments in K-12 Education for Minnesota,” Growth & Justice, November 12, 2007, p. 30, citing Isaacs, “Cost-Effective Investments in Children,” 2007. (Levin and Belfield report available [here](#).)
- 2 Minnesota Department of Education, “More about School Readiness,” website, April 2010. (Available [here](#).)
- 3 Arthur J. Reynolds, “Cost-Effective Early Childhood Development Programs from Preschool to Third Grade,” Growth & Justice, November 12, 2007, p. 26. (Available [here](#).)
- 4 Growth & Justice, *Smart InvestmentsSM in Minnesota’s Students: A Research-Based Investment Proposal*, October 2008, p. 7. (Available [here](#).)
- 5 Reynolds, pp. 1, 12-15
- 6 Reynolds, p. 17.
- 7 Arthur J. Rolnick and Rob Grunewald, “Achieving a High Return on Early Childhood Investment: Evidence, Proposal, and the Minnesota Pilot,” November 2007, p. 3. (Available [here](#).)
- 8 The 2009 data from the National Center for Educational Statistics for the National Assessment of Educational Progress is available [here](#). Minnesota’s reading score for white 4th graders, at 230, is not statistically different from the national score of 229. NAEP uses the categories “black” and “Hispanic.”
- 9 The 2009 NAEP data from the National Center for Educational Statistics shows the following average reading scores for fourth graders with household incomes low enough to qualify for the National School Lunch Program: whites at 215 in Minnesota and 215 nationwide, blacks at 189 in Minnesota and 200 nationwide, Hispanics at 185 in Minnesota and 200 nationwide, Asian/Pacific Islanders at 203 in Minnesota and 218 nationwide, and American Indians at 193 in Minnesota and 198 nationwide. Some of these variances in average scores for the state and nation likely fall within the range for statistical significance and therefore may be statistically equal rather than different.
- 10 Minnesota Department of Education, *Minnesota School Readiness Study: Developmental Assessment at Kindergarten Entrance, fall 2008*, p. 5, 10 and 11. (Available [here](#).) The results are based on assessments conducted with a random sample equal in size to 10 percent of the total number of children entering kindergarten.
- 11 W. Steven Barnett, et al, *The State of Preschool 2008*, National Institute for Early Education Research, April 2009, pp. 17 and 80. (Available [here](#).)
- 12 Reynolds, p. 28.
- 13 Reynolds, p. 18.
- 14 Levin and Belfield, p. 19.
- 15 Levin and Belfield, p. 19; and Reynolds, p. 24
- 16 Rolnick and Grunewald, p. 5.