

Invest Early Early Childhood Initiative Year 6 evaluation summary

Introduction

Wilder Research, in conjunction with the Invest Early leadership team and staff, is conducting a longitudinal and cost-benefit evaluation of the program. Annual reports document the implementation and assessment of Invest Early and outcomes for the service system, families, and children.

Invest Early expected outcomes and returns on investment

In the short term, Invest Early aims to improve children's school readiness by improving the system of early childhood screening, care, and education; strengthening and empowering families; and promoting healthy child development.

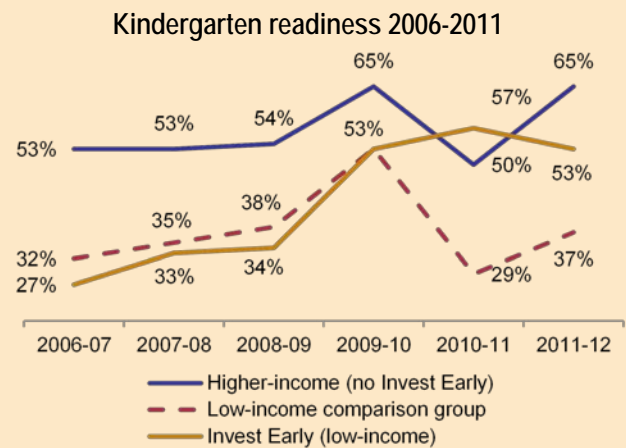
Invest Early believes these improvements will ultimately save taxpayers' money by reducing the number of children needing special education services, cutting the number of children repeating kindergarten or first grade, and reducing out-of-home placements for children.

The big returns on investment are expected to accrue as Invest Early children become teenagers and adults and achieve higher graduation rates and employment earnings, have better mental and chemical health outcomes, and lower rates of juvenile delinquency, crime, and imprisonment relative to their peers who did not participate in Invest Early programs.

HIGHLIGHTS

Invest Early is effective in preparing low-income students with multiple risk factors for school success when delivered in sufficient quantity.

- Home learning environments, which are associated with higher school readiness scores, improve significantly for Invest Early families during their participation.
- Kindergarten entry results show that Invest Early closed the proficiency gap this year relative to higher-income students and exceeded the low-income comparison group by nearly 1.5 to 1 (53% vs. 37% proficient, where proficiency is defined as achieving 75% of the total points).



- Based on third grade MCA-II reading and math tests in 2010-11, Invest Early children have better outcomes than a comparison group of children from low-income families without Invest Early, Head Start, or School Readiness program experience.

Educating and training early childhood caregivers and teachers

In 2010-11, 406 caregivers received some type of early childhood training, exceeding the goal of reaching at least 200 caregivers per year.

As of this year, Invest Early nearly reached its goal of having 20 to 30 early childhood educators in Itasca County achieve post-secondary degrees when 19 early childhood teachers received a 2- or 4-year degree. In addition, 21 educators are still enrolled in degree programs, and 91 have obtained Child Development Certificates.

Early childhood screenings

Overall, children are being screened significantly earlier than before Invest Early, but improvements have leveled off. In the past year, 37 percent of early childhood screenings were conducted before age 4, compared with about 42 percent last year and 26 percent prior to Invest Early.

Profile of Invest Early participants

In the sixth year, 377 children age 5 and younger and 303 families participated in Invest Early, compared with 371 children and 289 families last year. Of the children served this year, 20 percent were age 2 or younger, 23 percent age 3, and 57 percent ages 4 or 5.

Invest Early children live in households with a median income of \$21,362 per year, and a quarter (26%) live in single-parent households.

Most parents have at least a high school diploma, with mothers more likely than fathers to have post-secondary schooling (56% vs. 47%). Sixty-eight percent of parents work, slightly lower than the last two years when over 70 percent were working, with fathers more likely than mothers to be working full time (64% vs. 22%).

Risk factors

In addition to low-income, the most common risk factors are similar to past years: experiencing a family stressor in the past year, such as death, divorce, or unemployment (53%). Other common risk factors include: no opportunity for the child to socialize with peers (28%), and living in a single-parent household (29%). In addition, a fifth of the families have a chronic illness or disability in the family or child has a medical concern.

Risk factors by age of child

Participating families with children under age 3 had, on average, four risk factors, more than families with children age 3 (average of 2.7) or age 4 or 5 (average of 2.5).

The average number of risk factors and the proportion of families with each risk factor are both lower than last year.

Quality of Invest Early early care and education

Based on classroom observations using a standardized rating tool (Early Childhood Environmental Rating Scale), the average quality ratings of Invest Early classrooms have increased each year. The overall score this year is 6.3 on a scale where 5.0 through 6.9 are considered good quality.

Parent feedback

Parents were asked to rate their experience and satisfaction with the Invest Early program and staff. Similar to last year, parents responded positively.

In terms of the program, 96 percent say that they are satisfied with the education their child received; 95 percent say the services they received met their expectations; and 98 percent would recommend the program to others.

In terms of the staff, over 90 percent of parents say the staff know a lot about children and how to teach them; communicate with the parents in a way they

understand; respect the parent as an individual; give parents useful suggestions, recommendations, and advice; and are sensitive to their family and cultural issues.

Regarding their child's development, 97 percent of parents say their child has made progress in developing language skills and 94 percent say their child made progress in social skills needed for school.

In terms of their own parenting skills, as in prior years, parents were less positive overall. For example, 74 percent say staff helped them identify their strengths as a parent; 85 percent say they better understand their child's needs and development; 88 percent say they understand what their child needs to succeed in school more now; and 77 percent say involvement in the program helped them improve their parenting skills.

Outcomes for children

Growth and development during program participation

For the purpose of measuring developmental status and growth, Invest Early staff used the Teaching Strategies GOLD to assess participants, an observation-based assessment that measures children birth through age 6 on 64 dimensions of 36 objectives in nine developmental areas along a 10 level continuum ("not yet" to level nine). The expectations for each age overlap to acknowledge that children develop in stages at various rates. Unlike the Work Sampling System, "not yet" or a score of 0 is considered within the normal range of expectations for some age levels, especially younger ages. Invest Early staff assess preschool children on 30 dimensions, and infant and toddlers on 51 dimensions.

0- to 2-year-olds. Based on data for 47 children age 2 and younger, after participating in Invest Early, 94 percent were scoring within the normal expected age range in all domain areas, an increase from 51 percent at the start of the year.

3-year-olds. After participating in Invest Early, 73 percent of the 3-year-olds were in the normal range of development in all domain areas, up from 29 percent at the start of the program.

4- and 5-year olds. After participating in Invest Early, 81 percent of the 4- and 5-year-olds demonstrated normal age expectations in all domain areas, up from 35 percent at the start of the program.

Emergent literacy and math. Staff also assessed children ages 3 through 5 using the Individual Growth and Development Indicators (IGDI) and Preschool Numeracy Indicator (PNI).

At the end of Invest Early year 6, Invest Early preschoolers' emergent literacy skills varied by skill. On the high end, two-thirds (66%) were on target in letter naming, and over half (57%) were on target for picture naming. On the low end, 35 percent were on target for alliteration.

A quarter to a third showed improvement in colors, shapes and positional words (26-34 percent), with two-thirds being on target at the end of the year for colors, and less than half (43-36%) on target for shapes and positional words.

Finally, emergent math skills also varied, with about half on target in oral counting (55%) and one-to-one correspondence (49%), while less than two out of five were on target for quality comparison (37%) and number naming (35%).

Home learning environment improvements during program participation

Invest Early staff members visited the homes of participating children and talked with parents about the benefits of providing an educational learning environment at home. Based on their observations and discussions, staff rated participants' home learning environment in terms of the amount of access children have to learning materials and how frequently parents engage in learning activities with their children. Ratings were conducted at the beginning and end of the program year to determine if improvements occurred over time.

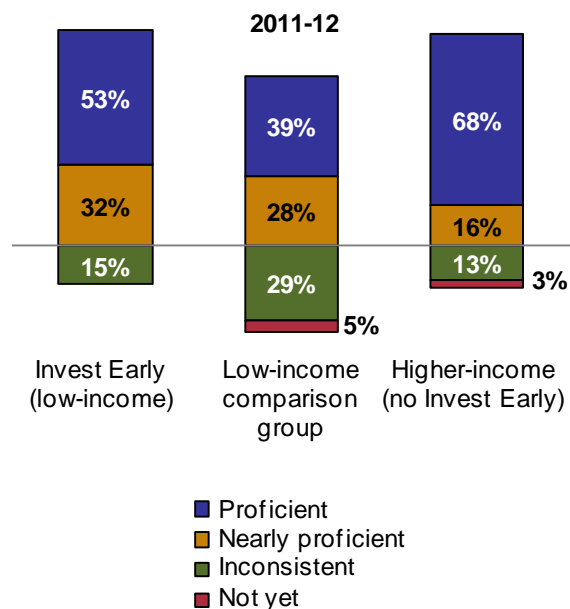
The home learning environments improved significantly on 10 of the 15 items rated, similar to last year. Notable improvements include: greater quantity of age or developmentally appropriate books and materials, more frequent encouragement of early literacy and numeracy, and greater emphasis on teaching verbal manners.

Kindergarten readiness assessment

Invest Early is using the Minnesota Work Sampling System Kindergarten Entry Developmental Checklist[®]2 developed by the Minnesota Department of Education to assess kindergarten readiness. The checklist is completed by kindergarten teachers during the first couple months after kindergarten entry on five domains: personal and social development, language and literacy, mathematical thinking, the arts, and physical development and health. Each domain is measured by a set of indicators. Students' performance on each indicator is rated: "not yet," "in process," or "proficient."

Invest Early kindergarten class of 2011-12

This year, 85 percent of the Invest Early low-income students demonstrated school readiness skills and knowledge fairly consistently (32%) or proficiently (53%), compared with 67 percent of the low-income comparison group (39% proficient) without Invest Early, School Readiness, or Head Start experience, and 84 percent of higher-income kindergarteners (68% proficient) who were not in Invest Early.



In all domains, Invest Early children demonstrated proficiency at higher rates than their low-income peers without Invest Early and equal to their higher-income peers.

Factors associated with kindergarten readiness

Wilder Research statistically analyzed Invest Early students' overall Work Sampling scores in relation to various factors thought to influence kindergarten readiness.

This year, students with better home learning environments had greater school readiness. In addition, low-income students whose mother's had at least an associate's degree were more likely to be proficient at kindergarten entry. This year, there was no statistically significant difference in attendance between students who were proficient at kindergarten entrance and those who were not.

Itasca County 2010-11 third grade class (2007-08 kindergarten class)

Based on third grade MCA-II reading and math tests in 2010-11, Invest Early children have better outcomes than a comparison group of children from low-income families with no Invest Early, Head Start, or School Readiness program experience.

Over three-quarters (79%) of Invest Early children met or exceeded standards for reading and 69 percent met or exceeded standards in math, compared with 67 percent of the comparison group in reading and 50 percent in math.

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For more information

This summary presents highlights of the *Invest Early, Early Childhood Initiative, year 6 evaluation*. For more information about this report, contact Richard Chase at Wilder Research, 651-280-2706.

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