

## Invest Early Early Childhood Initiative Year five evaluation summary

### Introduction

Wilder Research, in conjunction with the Invest Early leadership team and staff, is conducting a longitudinal and cost-benefit evaluation. Annual reports document and assess implementation 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.

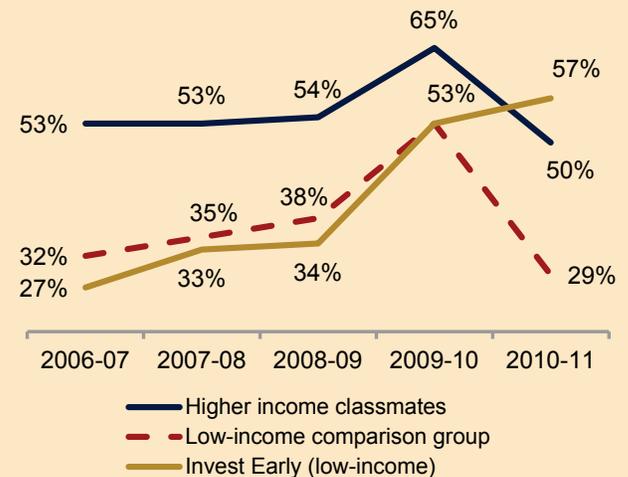
Invest Early believes these improvements will ultimately save taxpayers' money by reducing the number of children needing special education services, cutting the number of children repeating kindergarten or first grade, and reducing out-of-home placements for children.

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

### HIGHLIGHTS

Invest Early is an effective program 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 2 to 1 (57% vs. 29% proficient, using the new 75 percent cut-off for overall proficiency).



- Based on MCA-II reading and math tests in 2009-10 during their third grade year, 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.

## *Educating and training early childhood caregivers and teachers*

In 2009-10, 359 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 18 early childhood teachers received a 2- or 4-year degree. In addition, 24 are still enrolled in degree programs, and 85 have obtained Child Development Certificates.

## *Early childhood screenings*

Overall, children are being screened significantly earlier than before Invest Early, but the improvements have leveled off. In the past year, 42 percent of early childhood screenings were conducted before age 4, compared with about 43 percent last year and 26 percent prior to Invest Early.

## *Profile of Invest Early participants*

In the fifth year, 371 children age 5 and younger and 292 families participated in Invest Early, compared with 384 children and 292 families last year. Of the children served this year, 22 percent were age 2 or younger, 17 percent age 3, and 62 percent ages 4 or 5.

Invest Early children live in households with a median income of \$18,466 per year, and more than a third (37%) live in single-parent households, up from a quarter last year.

Most parents have at least a high school diploma, with mothers more likely than fathers to have post-secondary schooling (57% vs. 47%). Seventy-three percent of parents work, similar to last year and up from 59 percent the year before, with fathers more likely than mothers to be working full time (60% vs. 27%).

## **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 (62%). Other common risk factors: No opportunity for the child to socialize with peers (40%), and single-parent household (37%). In addition, 24 percent of the children have a history or have shown evidence of delays reaching developmental milestones.

## **Risk factors by age of child**

Families with children under age 3 had, on average, over five risk factors, more than families with children age 3 (average of 3.2) or age 4 or 5 (average of 3.3).

The average number of risk factors and the proportion of families with each risk factor are both higher this year than in previous years.

## *Quality of Invest Early early care and education*

Based on observations of classroom 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 6.4 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, 97 percent say that they are satisfied with the education their child received; 96 percent say the services they received met their expectations; and 97 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; are sensitive to their family and cultural issues; and are able to connect parents with other community services or resources.

Regarding their child's development, 98-99 percent of parents say their child has made progress in developing language skills and social skills needed for school.

In terms of their own parenting skills, as in prior years, parents were less positive overall. For example, 75 percent say staff helped them identify their strengths as a parent; 86 percent say they better understand their child's needs and development; 87 percent say they understand what their child needs to succeed in school more now; and 83 percent say involvement in the program helped them to 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 Ounce Scale to assess 0 to 2 year olds and the Work Sampling System to assess 3 to 5 year olds. The assessments cover five domains: personal and social development, language and literacy, mathematical thinking, the arts, and physical development and health. Each domain is measured with a set of indicators. Children's performance on each indicator is rated: "not yet," "in process," or "proficient."

**0 to 2 year olds.** Based on data for 72 children age 2 and younger, after participating in Invest Early, 51 percent remained proficient in their overall development (the domains combined), and 21 percent improved to proficient. A quarter percent remained below the level of proficiency; and 11 percent had more developmental needs identified.

**3 year olds.** Most of the 3 year olds started and ended the year "in process." After participating in Invest Early, 18 percent of the 3 year olds showed

proficiency in their overall development (the domains combined), with 12 percent improving to proficient, compared. Another 13 percent improved their overall development but had not yet achieved proficiency.

**4 and 5 year olds.** After participating in Invest Early, 73 percent of the 4 and 5 year olds showed proficiency in their overall development (the domains combined), with 32 percent improving to proficient, with a similar percent improving as last year. Another 13 percent improved their overall development but had not yet achieved proficiency.

### **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.

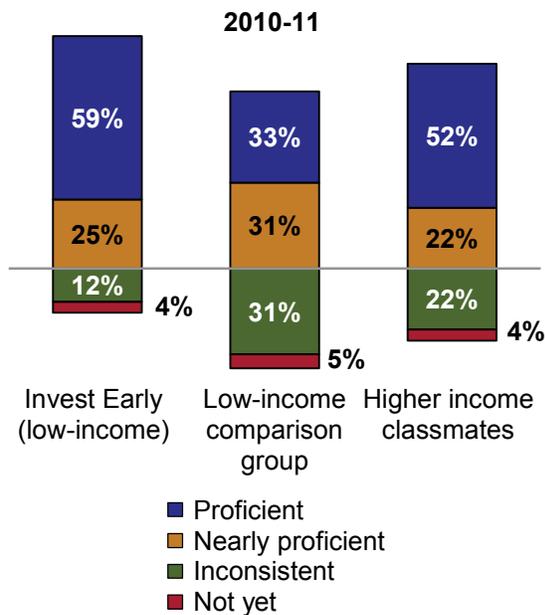
The home learning environments improved significantly on 11 of the 15 items rated, a steady improvement over the past three years. Notable improvements include: greater quantity of age or developmentally appropriate books and materials, more frequent encouragement of early literacy and numeracy, and greater emphasis on teaching of 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 with a set of indicators. Students' performance on each indicator is rated: "not yet," "in process," or "proficient."

### Invest Early kindergarten class of 2010-2011

This year, 84 percent of the Invest Early low-income students demonstrated school readiness skills and knowledge fairly consistently (25%) or proficiently (59%), compared with 64 percent of the low-income comparison group (33% proficient) without Invest Early, School Readiness, or Head Start experience, and 74 percent of their higher-income classmates (including 52% proficient).



In all domains, Invest Early kids 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, girls, and those whose parents have an associate's degree or higher tended to have greater school readiness. In addition, for low-income students, the dosage of Invest Early (number of days ever attended) influenced kindergarten readiness. Low-income Invest Early students that were proficient at kindergarten entry had about 60 days/12 weeks (median) more attendance in Invest Early across all previous years than those low-income students that were not proficient.

### Itasca County 2009-10 third grade class (2006-07 kindergarten class)

Based on MCA-II reading and math tests in 2009-10 during their third grade year, 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.

Three-quarters of the first cohort of Invest Early children meet or exceed standards for reading and math, compared with 65 percent of the comparison group in reading and 59 percent in math.

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#### For more information

This summary presents highlights of the *Invest Early Childhood Initiative, year 5 evaluation*. For more information about this report, contact Richard Chase at Wilder Research, 651-280-2706.

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