

## **Invest Early Early Childhood Initiative**

Year two evaluation

### ***Introduction***

Wilder Research, in conjunction with the Invest Early leadership team and staff, is conducting a longitudinal and cost-benefit evaluation, documenting and assessing 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; by strengthening and empowering families, and by promoting healthy child development.

Invest Early believes that these improvements will ultimately save taxpayers' money by reducing the number of children needing special education services, by cutting the number of children repeating kindergarten or first grade, and by 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***

In year two, Invest Early children with 2 years of the program narrowed the proficiency gap relative to their higher-income peers.

### ***Early childhood screenings***

Overall, children are beginning to be screened significantly earlier than before Invest Early, with improvements in all four school districts. In 2006-2007, about 38 percent of early childhood screenings were conducted before age 4, compared with about 26 percent prior to Invest Early.

### ***Profile of Invest Early participants***

In the second year, 333 children age 5 and younger in 262 families participated in Invest Early, up from 258 children in year one. Of the children served in year 2, 29 percent were age 2 or younger, 21 percent age 3, and 50 percent age 4 or 5.

Invest Early children live in households with a median income of \$16,601 per year, with a third living in single-parent households.

Most parents have at least a high school diploma, with mothers more likely than fathers to have post-secondary schooling (62% vs. 49%). Forty-three percent of parents are working, with fathers more likely than mothers to be working full time (38% vs. 16%).

### **Risk factors**

In addition to low income, similar to last year, the most common risk factor for participants is experiencing a family stressor in the past year, such as a death in the family, divorce, or unemployment (54%). Other common risk factors cited: No opportunity for a child to socialize with peers (41%) and single-parent household (33%). In addition, about 30 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, five risk factors, more than families with children age 3 (average of 3 risk factors) or age 4 or 5 (average of 4 risk factors).

In addition, the types of risks varied by the child's age. For example, families with children under age 3 are more likely to have family stress; a history of chemical, sexual, or psychological abuse or neglect; medical concerns and chronic illness; and a history of high risk pregnancies or births.

### ***Parent feedback***

Parents were asked to rate their experience and satisfaction with the Invest Early program and staff. Overall, parents responded positively but not as strongly positive as last year.

In terms of the program, similar to last year, 98 percent say that they are satisfied with the education their child received; 93 percent say the services they received met their expectations, and 95 percent would recommend the program to others.

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

In terms of their child's development, 92 to 93 percent of the parents say their child has made progress in developing language skills and social skills needed for schools.

In terms of their own parenting skills, parents were slightly less positive overall and more often neutral, but showed improvement compared with last year. For example, 77 percent say staff helped them identify their strengths as a parent; 86 percent say they better understand their child's needs and development (up from 71%); 86 percent say they understand what their child needs to succeed in school more now

(up from 74%); and 84 percent say involvement in the program helped them to improve their parenting skills (up from 73%).

### ***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 as: "not yet," "in process," or "proficient."

**0 to 2 year olds.** Based on data for 77 children age 2 and younger, after participating in Invest Early, 18 percent remained proficient in their overall development and 25 percent improved to proficient, compared with 5 percent last year. The percent scored as proficient in their overall development increased from 31 percent to 43 percent, much better results than last year when this percentage dropped from 45 percent to 35 percent. Thirty-nine percent were unchanged developmentally below the level of proficiency; and 18 percent had more developmental needs identified.

**3 year olds.** After participating in Invest Early, 61 percent of the 3 year olds showed proficiency in their overall development (the domains combined), with 33 percent improving to proficient, compared with 20 percent last year. Another 29 percent improved their overall development but had not yet achieved proficiency.

**4 and 5 year olds.** After participating in Invest Early, 78 percent of the 4 and 5 year olds showed proficiency in their overall development (the domains combined), with 34 percent improving to proficient, compared with 30 percent last year. Another 16 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 of Invest Early families improved significantly on almost all of the items rated. Notable improvements include greater encouragement of early literacy and numeracy and greater emphasis on positive behavior guidance, such as praising good behavior and teaching verbal manners.

### Kindergarten readiness assessment

Invest Early is using the developmental checklist, 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 as: "not yet," "in process," or "proficient."

### Invest Early kindergarten class of 2007-08

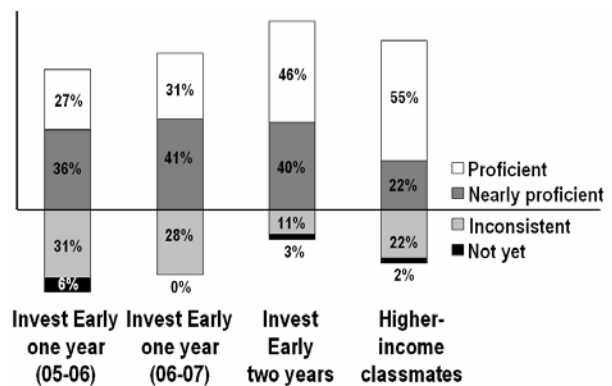
The language and literacy domain scores for Invest Early children improved this year to 6 percent "not yet," down from 15 percent last year. This year, the largest "not yet" percentage is 7 percent in the personal and social development domain, about the same domain score as last year.

The overall kindergarten readiness scores for Invest Early students are also better than last year with 79 percent of the Invest Early children demonstrating school readiness skills and knowledge fairly consistently (40%) or proficiently (39%), up from 63 percent last year fairly consistent (36%) or proficient (27%).

In addition, after two years of Invest Early, 86 percent demonstrate school readiness skills and knowledge fairly consistently (40%) or proficiently (46%), higher than students last year (63%) and this year (72%) with one year of Invest Early and higher than their higher-income peers (77%). However, the proficiency rate of the two-year Invest Early group is still somewhat lower than the proficiency rate for the higher-income group (46% compared with 55%).

### KINDERGARTEN READINESS\*

Two years of Invest Early narrows the proficiency gap at kindergarten entry



*\*Note: Demonstration of skills or knowledge represented by performance in all domains combined at kindergarten entry, 2007, Itasca County, using Work Sampling domain mean scores to calculate a single mean score and defining the lower half of the "in process" scores as "inconsistent" and the upper half as "nearly proficient." Includes: from cohort 1, 83 students with one year of Invest Early; from cohort 2, 32 students with one year and 35 with two years of Invest Early; and 206 students from families with higher-incomes, defined as not eligible for free or reduced lunch (pegged at 130% to 185% of poverty).*

### **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, including age, gender, race, parental education level, single-parent status, number of risk factors, home learning environment, and family stress. Two factors, age and father education, are moderately associated with greater school readiness, and the other factors were not statistically associated. These results indicate that Invest Early is equally effective helping low-income children regardless of other risk factors.

In sum, Year 2 evaluation results show that Invest Early is effective in helping children with various risk factors achieve school readiness and that, when children start Invest Early at age 3, Invest Early narrows the proficiency gap relative to their higher-income peers.

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#### **For more information**

This summary presents highlight of the *Invest Early, Early Childhood Initiative: Year Two implementation and outcomes evaluation*. For more information about this report, contact Richard Chase at Wilder Research, 651-280-2706.

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