

## **Invest Early Early Childhood Initiative**

### **Year one 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.

#### ***Year one highlight***

At kindergarten entry, Invest Early children fare better than a low-income comparison group but are not as proficient as their higher-income classmates.

#### ***Profile of participants***

In the first year, 258 children age 5 and younger and their families participated in Invest Early. Of the children served, 36 percent were age 2 or younger, 18 percent age 3, and 46 percent age 4 or 5.

#### **Risk factors**

In addition to low income, 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 (59%). Other common risk factors cited: No opportunity for a child to socialize with peers (42%) and single-parent household (31%). In addition, about one-fourth 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 a history of chemical, sexual, or psychological abuse or neglect (40%) and to have a history of high risk pregnancies or births (40%), compared to families with children age 4 or 5 (13% and 14%) and children age 3 (7% and 10%). In contrast, families with children age 4 or 5 are more likely to have a child experiencing social isolation (54%) than families with 3 year olds (31%) or children under age 3 (35%).

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## ***Parent feedback***

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

In terms of the program, 96 percent say that they are satisfied with the education their child received and that their involvement in the program has helped them make their home a more positive place for their child to grow. In addition, 94 percent say the services they received met their expectations and that they would recommend the program to others.

In terms of the staff, 95 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 advice; are sensitive to their family and cultural issues; and are able to connect parents with other community services or sources.

In terms of their child's development, 95 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, however, parents were less positive overall and more often neutral. For example, 74 percent say staff helped them identify their strengths as a parent; 71 percent say they better understand their child's needs and development; 74 percent say they better understand what their child needs to succeed in school; and 73 percent say involvement in the program helped them improve their parenting skills.

## ***Preliminary 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 43 of the 49 children, after participating in Invest Early, 30 percent remained proficient in their overall development; 5 percent improved to proficient; 51 percent were unchanged developmentally below the level of proficiency; and 14 percent had more developmental needs identified. Physical and cognitive development are the strongest domains, followed by language and literacy. Personal and social development lags behind the other domains.

**3 year olds.** About half of 3 year olds in Invest Early scored as proficient in overall development (all of the domains combined) after a year in Invest Early, up from about a quarter when they began the program.

After participating in Invest Early, two-fifths of the 3 year olds showed growth in their overall development, with 20 percent improving to proficient. In specific domains, the largest growth occurred in language and literacy, with 40 percent improving to proficient.

**4 and 5 year olds.** More than half (56%) of the 4 and 5 year olds in Invest Early scored as proficient in all of the developmental domains combined after a year in Invest Early, up from 26 percent when they began the program.

After participating in Invest Early, 57 percent of the 4 and 5 year olds showed improvement in the domains combined, with 30 percent improving to proficient and 27 percent improving to in process. Physical development and health showed the greatest improvement, with 44 percent improving to proficient.

### Home learning environment improvements during program participation

Ratings of positive parent-child interaction and an enriching home environment significantly improved for Invest Early participants, based on home-visiting staff observation and discussion with parents when Invest Early participation began and repeated, on average, about 100 days later. Nevertheless, these ratings are still below optimal levels. For example, by the end of the first year:

- 69 percent of children have a lot of age/developmentally-appropriate books, and 72 percent have a lot of age/developmentally-appropriate play materials or toys, up from 54 percent.
- 74 percent of children get out of the house to play and explore all of time, up from 57 percent.
- 43 percent of parents read or tell stories to their children all of the time, up from 29 percent.
- 46 percent of parents set limits of behavior and encourage children to comply with the rules all of the time, up from 29 percent; and 31 percent always control the amount and content of children's television viewing, up from 13 percent.
- 57 percent of parents frequently encourage children to learn the alphabet and read a few words, up from 31 percent; and 71 percent frequently teach children to use simple verbal manners, such as saying "please" and "thank you," up from 46 percent.

### Kindergarten readiness assessment

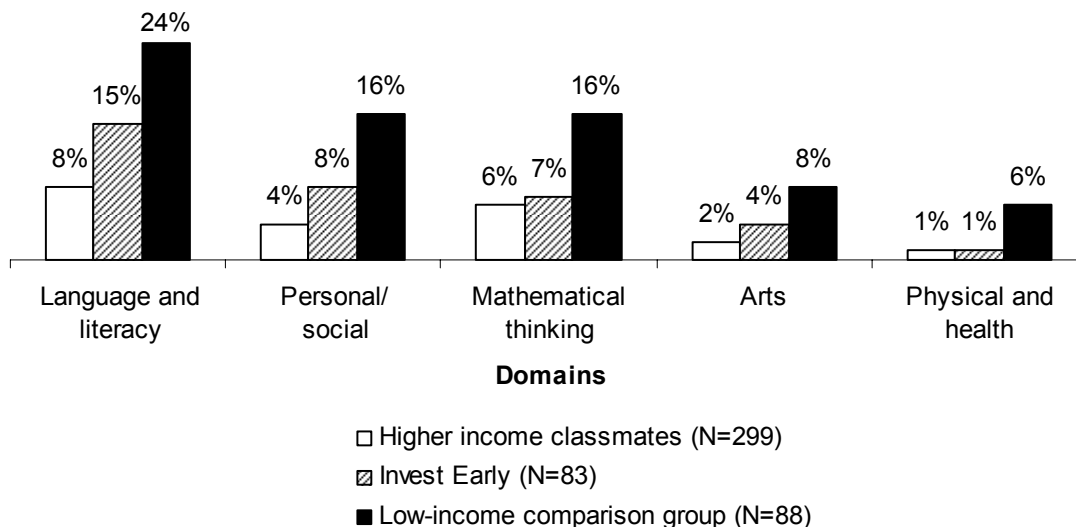
Invest Early is using the developmental checklist, Minnesota Work Sampling System Kindergarten Entry Developmental Checklist®2, developed by the Minnesota Department of Education to assess kindergarten readiness. The checklist is completed by kindergarten teachers during the first couple months after kindergarten entry.

#### Invest Early kindergarten class of 2006-07

Of the 470 children entering kindergarten in the four Invest Early school districts, 83 children participated in Invest Early. School readiness data are available for these 83 children; a comparison group of 88 children from low-income families with no Invest Early, Head Start or School Readiness program experience, and 299 other classmates from families with higher-incomes, defined as not eligible for free or reduced lunch (pegged at 130% to 185% of poverty).

The figure below shows the percentage of children starting kindergarten in 2006 not yet demonstrating school readiness skills and knowledge. For each of the domains, the Invest Early children fare better than the low-income comparison group but are not as proficient as the higher-income classmates.

**PERCENT "NOT YET" DEMONSTRATING SKILL OR KNOWLEDGE FOR SCHOOL READINESS\***



\*Performance indicators in each domain at kindergarten entry, 2006, Itasca County.

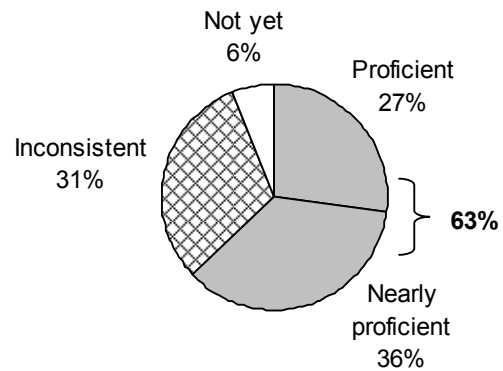
The language and literacy domain has the largest group of Invest Early children not yet demonstrating skills and knowledge, 15 percent, and the biggest gap between them and the higher-income classmates, 7 percentage points. Invest Early children demonstrate similar proficiency as the higher-income classmates in the mathematical thinking, arts, and physical development domains.

For this figure, we combined all the developmental domain numerical scores to calculate a single mean score and defined the lower half of the “in process” scores as “inconsistent” and the upper half as “fairly consistent” or “nearly proficient.” Sixty-three percent of the Invest Early children demonstrate school readiness skills and knowledge fairly consistently (36 percent) or proficiently (27 percent), compared with 50 percent of the low-income comparison group and 73 percent of their higher-income classmates.

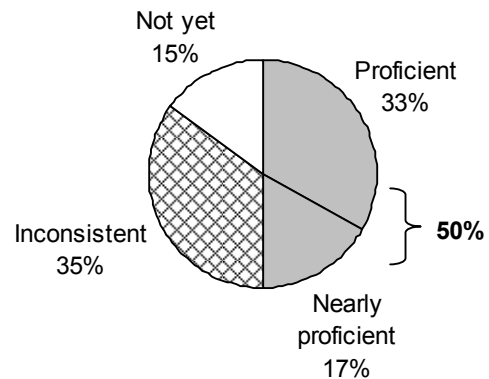
These results show that providing quality preschool experience for one year to a group of low-income, at-risk children reduces the number of children starting school far behind relative to a comparison group of low-income children without preschool experience but does not completely close the proficiency gap relative to their higher-income peers.

#### KINDERGARTEN READINESS\*

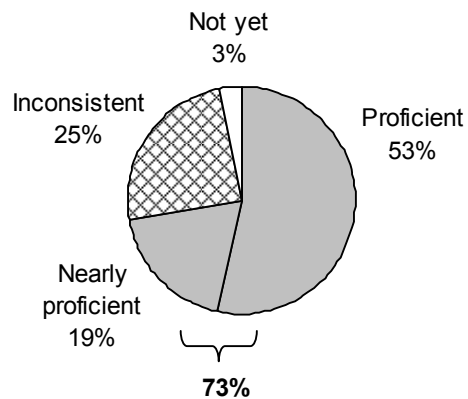
##### Invest Early (N=83)



##### Low-income comparison group (N=88)



##### Higher-income classmates (not eligible for free or reduced lunch) (N=299)



\*Note: Demonstration of skills or knowledge represented by performance indicators in all domains combined at kindergarten entry, 2006, Itasca County.

#### For more information

This summary presents highlights of the *Invest Early, Early Childhood Initiative: Year one implementation and outcomes evaluation*. For more information about this report, contact Richard Chase at Wilder Research, 651-647-4617

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