

Invest Early Early Childhood Initiative

Year four 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; by strengthening and empowering families; and by promoting healthy child development.

Invest Early believes 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.

Early childhood screenings

Overall, children are beginning to be screened significantly earlier than before Invest Early, with improvements in all four school districts. In 2008-2009, about 43 percent of early childhood screenings

HIGHLIGHTS

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

- Over the past four years, the percentage of children demonstrating overall proficiency or progress towards proficiency at the end of each program year is trending up.
- Home learning environments, which are associated with higher school readiness scores, improve significantly for Invest Early families during their participation.
- Invest Early narrows the proficiency gap for low-income students with other risk factors relative to their higher-income peers.

were conducted before age 4, compared with about 40 percent last year and 26 percent prior to Invest Early.

Profile of Invest Early participants

In the fourth year, 384 children age 5 and younger and 292 families participated in Invest Early, up from 346 children and 267 families last year. Of the children served in year 4, 21 percent were age 2 or younger, 22 percent age 3, and 57 percent age 4 or 5.

Invest Early children live in households with a median income of \$21,000 per year, and a quarter (29%) 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 (58% vs. 48%). Seventy-one percent of parents work, up from 59 percent last year and 43 percent the year before, with fathers more likely than mothers to be working full time (64% vs. 23%).

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 (51%). Other common risk factors: No opportunity for the child to socialize with peers (34%), and single-parent household (29%). In addition, 25 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, about five risk factors, more than families with children age 3 (average of 2.6) or age 4 or 5 (average of 2.5).

In addition, the types of risks varied by the child's age. 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; a history of high risk pregnancies or births; and lack of access to social assistance.

Parent feedback

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

In terms of the program, 98 percent say that they are satisfied with the education their child received; 99 percent say the services they received met their expectations, and 99 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.

In terms of their child's development, 98 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 less positive overall. For example, 83 percent say staff helped them identify their strengths as a parent; 85 percent say they better understand their child's needs and development; 86 percent say they understand what their child needs to succeed in school more now; and 79 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."

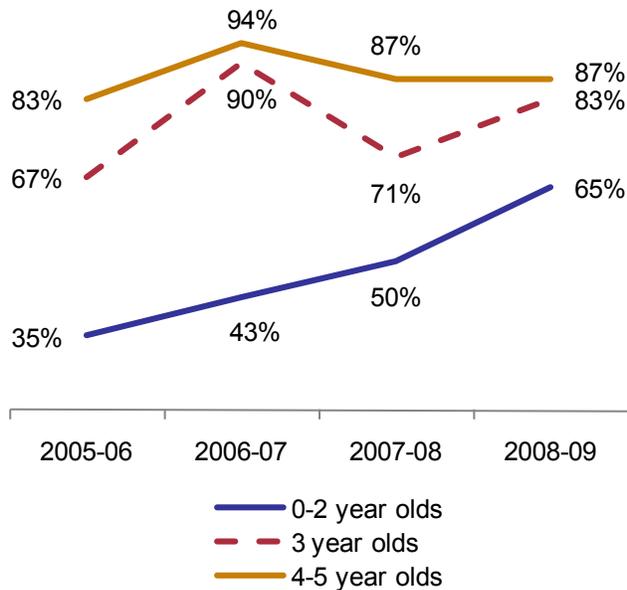
0 to 2 year olds. Based on data for 79 children age 2 and younger, after participating in Invest Early, 39 percent remained proficient in their overall development (the domains combined), and 25 percent improved to proficient. Twenty percent remained below the level of proficiency; and 14 percent had more developmental needs identified.

3 year olds. Most of the 3 year olds started the year "in process." After participating in Invest Early, 42 percent of the 3 year olds showed proficiency in their overall development (the domains combined), with 27 percent improving to proficient, compared with 20 percent last year. Another 41 percent improved their overall development but had not yet achieved proficiency.

4 and 5 year olds. After participating in Invest Early, 69 percent of the 4 and 5 year olds showed proficiency in their overall development (the domains combined), with 38 percent improving to proficient, with more improving than last year; but the overall total proficient was lower than last year. Another 18 percent improved their overall development but had not yet achieved proficiency.

The figure below shows the percentage of each age group demonstrating overall proficiency or progress towards proficiency over the last four program years. In general, the percentages are trending up, one indicator of program effectiveness. The 4 and 5 year olds have shown the highest rates of progress or proficiency over the past 4 years.

PROGRESS TOWARD PROFICIENCY OR PROFICIENT BY END OF YEAR – 2005-2009



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, more than last year, but fewer than previous 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, and giving praise.

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 2009-2010

The domain scores and the overall kindergarten readiness scores are better than last year.

Last year, the largest percentage of Invest Early children "not yet" demonstrating skills and knowledge was 11 percent in the personal and social development domain, and the biggest gap between them and the higher-income classmates was 8 percentage points, in the personal and social development and arts domains. This year, the largest "not yet" percentage is 8 percent in the personal and social development and arts domains, and the biggest gap is 6 percentage points in both of those domains.

Last year, 63 percent of the Invest Early children demonstrating school readiness skills and knowledge fairly consistently (30%) or proficiently (33%), compared with 65 percent of the low-income comparison group without Invest Early or Head Start experience, and 76 percent of their higher-income classmates (including 54% proficient). This year, the results were better than last year and similar to the previous year, with 76 percent of the Invest Early children demonstrating school readiness skills and knowledge fairly consistently (22%) or proficiently (54%), compared with 82 percent of the low-income comparison group without Invest Early or Head Start experience, and 81 percent of their higher-income classmates (including 66% proficient).

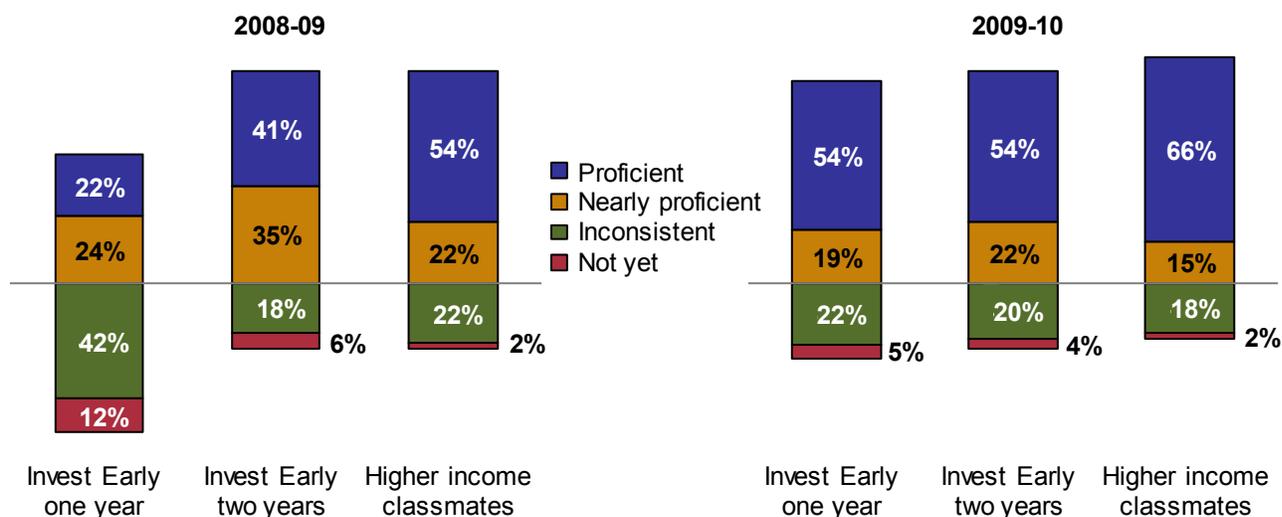
Kindergarten readiness*

In the previous two kindergarten classes, kindergarten readiness results were higher for Invest Early students with two years of Invest Early than they were for those with only one year of Invest Early. In the class of 2009-10, however, the results are similar regardless of the number of years in Invest Early. In fact, students entering kindergarten this year with one year of Invest Early have better results than Invest Early students with two years of Invest Early in the previous two kindergarten classes. This may be due to program enhancements, “grade inflation” by the kindergarten teachers conducting the assessments, or natural variations in kindergarten classes from year to year.

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, number of risk factors, home learning environment, family stress, and program attendance. This year, students with a fewer number of risk factors, girls, and those with better home learning environments tended to have greater school readiness.

INVEST EARLY NARROWS THE PROFICIENCY GAP AT KINDERGARTEN ENTRY



* Demonstration of skills or knowledge represented by performance in all domains combined at kindergarten entry, 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 3, 41 students with one year and 51 with two years of Invest Early; and 170 students from families with higher-incomes, defined as not eligible for free or reduced lunch (pegged at 130% to 185% of poverty; from cohort 4, 37 students with one year and 48 with two years of Invest Early; and 206 students from families with higher-income.