Invest Early, Early Childhood Initiative

Year 9 Evaluation Summary

Introduction

Invest Early is a comprehensive early childhood collaborative of four school districts in Itasca County, Minnesota, that serves young children and their families with risk factors that may impede school success. Wilder Research, in conjunction with the Invest Early leadership team and staff, is conducting a longitudinal evaluation of the program. Annual reports document the implementation and assessment of Invest Early and outcomes for the service system, families, and children.

Highlights

Invest Early is having county-wide impacts. The proportion of children receiving early childhood screens before age 4 has increased from 26 percent prior to Invest Early to 41 percent this year. Moreover, the early childhood workforce is more educated. For example, in 2013-14, 1,305 adult caregivers of young children received some type of continuing education and training. Forty early childhood caregivers have obtained degrees in early childhood education, and 120 have obtained Child Development Certificates since Invest Early started in 2005, exceeding the goals of Invest Early.

Invest Early serves higher-risk and underserved populations. Seventeen percent of the children served this year are American Indian, up from four percent in 2006-07. American Indian children make up 8 percent of the child population in Itasca County, indicating Invest Early is reaching this typically harder-to-reach population. In addition to being low-income, children served by Invest Early have three other risk factors, on average, which put them at risk for delayed child development.

Invest Early prepares low-income students for school success. At the end of the year, 79 percent of all the Invest Early participants were in the normal range of development in all domains assessed on the GOLD assessment. In addition, kindergarten entry results are the highest they’ve been in five years, with Invest Early students outperforming the low-income comparison group in the language and literacy domain (62% vs. 48%), a key indicator of future educational achievement.
Invest Early is having county-wide system impacts for children and families

**Early childhood screenings**

Invest Early children are screened within 45 days of enrollment in the program. County-wide, children are being screened significantly earlier than before Invest Early, but improvements have leveled off. In the past year, 41 percent of early childhood screenings were conducted before age 4, compared with about 38 percent last year and 26 percent prior to Invest Early.

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

In 2013-14, 1,305 caregivers received some type of early childhood training, far exceeding the goal of reaching at least 200 caregivers per year. Due to partnerships with other agencies, the number of trainings offered this year is over three times previous years.

As of this year, 40 early childhood educators have earned a two-year early childhood degree, two have earned a bachelor’s, and three have earned a master’s. In addition, 120 have obtained Child Development Certificates.

**Profile of Invest Early participants**

In year 9, 550 children age 5 and younger and 474 families participated in Invest Early, compared with 501 children and 424 families last year. Of the children served this year, 16 percent were age 2 or younger, 19 percent age 3, and 65 percent ages 4 or 5. Most (78%) are white.

Invest Early families have a median income of $20,632 per year. Over a third (38%) of children live in single-parent households.

**Risk factors**

In addition to being from low-income households, participating children and families have, on average, three other life circumstances at the time of enrollment that place them at risk. The most common risk factors are similar to past years: experiencing a family stressor in the past year, such as death, divorce, or unemployment (41%); the family being a single-parent household (32%); history or evidence of delays reaching developmental milestones (24%); and the child having no opportunity for socializing with peers (23%). This year, as in previous years, the youngest children (under age 3) have one to two more risk factors, on average, than those age three to five.
Based on staff observations, a third of parents sometimes or frequently seem overwhelmed or stressed and have difficulties coping with personal or family matters, with no change in level of frequency during the year. Three-quarters of the parents report feeling challenged by life’s demands.

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

Based on classroom observations this year, Invest Early classrooms were rated of higher quality on the Classroom Assessment Scoring System (CLASS), on average, than national Head Start ratings and 4-star Parent Aware rated classrooms.

**Invest Early children and families show progress during their participation**

**Children’s growth and development**

As measured by the GOLD assessment tool, children in the Invest Early program experienced growth and development in all domain areas. At the end of the year, 79 percent of all the Invest Early participants were in the normal range of development on all seven of the GOLD domains: fine and gross motor, social-emotional, literacy, language, cognitive, and math.

**Home learning environment improvements**

Participating families’ home learning environments improved significantly in 14 of 15 items rated. Notable improvements include parents’ increased encouragement of children to learn the alphabet and numbers, and an increase in age- or developmentally-appropriate toys, books, music, and art materials in the home.

**Family involvement in Invest Early**

Over half (60%) of parents reached or exceeded the goal of committing 30 volunteer hours to Invest Early, up from last year (47%). Similar to previous years, parents volunteered most for special events, field trips, and reading to children.
Parents rate their experience and satisfaction with Invest Early positively

Parents gave high ratings to the Invest Early program and staff. In terms of program satisfaction, 98 percent are satisfied with the education their child received, say the services they received met their expectations, and would recommend the program to others.

In terms of the staff, 99 percent of parents say the staff know a lot about children and how to teach them and respect the parent as an individual; 97 percent say it is easy to contact staff when they need to; 95 percent say staff give parents useful suggestions, recommendations, and advice; and 93 percent say staff are sensitive to their family and cultural issues.

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

Parents also rated their own parenting skills high. For example, 86 percent say they better understand their child’s needs and development; 87 percent say they better understand what their child needs to succeed in school; 81 percent say involvement in the program helped them to improve their parenting skills; and 80 percent say staff helped them identify their strengths as a parent.

Invest Early is effective in preparing low-income students with multiple risk factors for school success

**2014-15 kindergarten class**

Overall, 63 percent of the Invest Early low-income students demonstrated school readiness skills and knowledge compared with 59 percent of the low-income comparison group without Invest Early, School Readiness, or Head Start experience, and 77 percent of their higher-income classmates who were not in Invest Early. Among the low-income comparison group students, those with one or no risk factor had overall proficiency levels similar to the Invest Early students (62%), compared with 50 percent for comparison group students with two or more risk factors.

Invest Early students outperformed the low-income comparison group in the language and literacy domain (62% vs. 48%), a key indicator of future educational achievement; and both Invest Early students and the low-income comparison group have the highest levels of kindergarten readiness for the last five years.
Elementary grade test scores

Based on third grade MCA test results in the spring of 2014, 51 percent of the Invest Early children met or exceeded standards for reading, compared to 43 percent of the low-income comparison group. In math, Invest Early third graders outperformed the low-income comparison group at a statistically significant level (80% vs. 61%). Invest Early students are also outperforming low-income students statewide (39% meeting or exceeding the reading standard and 55% meeting or exceeding the math standard).

Based on fifth grade MCA test results in the spring of 2014, 59 percent of the Invest Early children met or exceeded standards for reading, compared to 53 percent of the low-income comparison group. In math, the two groups were similar with just over half (52-55%) meeting or exceeding standards.

Invest Early participants across time

In this ninth year of the project, three cohorts of Invest Early students have completed the fifth grade, and matched achievement data are available for three time periods: kindergarten entry, end of third grade, and end of fifth grade.

Based on kindergarten assessments and MCA reading and math tests, a smaller percentage of Invest Early students in the first three cohorts were rated ready for kindergarten compared to the low-income comparison group students. Over time, however, the Invest Early students scored better than their low-income peers in third and fifth grade.

More than three-quarters of the first two cohorts of Invest Early children met or exceeded third-grade standards for reading and math, compared with 74 percent of the comparison group in reading and 69 percent in math. By fifth grade, 66 percent of Invest Early children met or exceeded standards for reading and 51 percent for math, compared with 48 percent of the comparison group in reading and 45 percent in math.

Invest Early cohorts 1 - 3: Met or exceeded achievement standards, Spring MCA tests

<table>
<thead>
<tr>
<th></th>
<th>Kindergarten entry (2006-08)</th>
<th>3rd grade reading (2010-12)</th>
<th>3rd grade math (2010-12)</th>
<th>5th grade reading (2012-14)</th>
<th>5th grade math (2012-14)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Invest Early (N=166-168)</td>
<td>33%</td>
<td>78%</td>
<td>66%</td>
<td>51%</td>
<td>66%</td>
</tr>
<tr>
<td>Low-income comparison group (N=246-254)</td>
<td>44%</td>
<td>74%</td>
<td>69%</td>
<td>48%</td>
<td>45%</td>
</tr>
<tr>
<td>Higher income (N=563-574)</td>
<td>57%</td>
<td>88%</td>
<td>85%</td>
<td>80%</td>
<td>66%</td>
</tr>
</tbody>
</table>
Methods and background

Kindergarten readiness assessment

Invest Early uses the Minnesota Work Sampling System Kindergarten Entry Developmental Checklist® 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.”

Home learning environments

Invest Early staff members visit participating children’s homes to talk with parents about the benefits of providing an educational learning environment at home. Based on their observations and discussions, staff rate 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.

Children’s growth and development during the program

To assess participants’ developmental status and growth, Invest Early staff used the Teaching Strategies GOLD, an observation-based assessment that measures 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.

Staff also assess preschool children (ages 3 through 5) on emergent math and literacy skills using the Individual Growth and Development Indicators (IGDI) and Preschool Numeracy Indicator (PNI).

Classroom environments

Invest Early assesses all classrooms on the quality of classroom learning environments using the Classroom Assessment Scoring System (CLASS).