Invest Early
Early Childhood Initiative

Year 7 evaluation summary

Introduction

Wilder Research, in conjunction with the Invest Early leadership team and staff, is conducting a longitudinal and cost-benefit evaluation of the program. Annual reports document the implementation and assessment of Invest Early and outcomes for the service system, families, and children.

Highlights

- 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 children perform better than their low-income comparison peers (58% vs. 52% proficient, where proficiency is defined as achieving 75% of the total points), and they continued to narrow the gap with the higher-income group this year.

- More Invest Early students were ready for kindergarten this year than in all previous years.

- Efforts within the Invest Early communities to improve conditions for school readiness systemically may be gaining momentum and benefiting all low-income students.

Kindergarten readiness, 2006-2012

<table>
<thead>
<tr>
<th>Year</th>
<th>Higher-income (no Invest Early)</th>
<th>Low-income comparison group</th>
<th>Invest Early (low-income)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2006-07</td>
<td>53%</td>
<td>65%</td>
<td>53%</td>
</tr>
<tr>
<td>2007-08</td>
<td>53%</td>
<td>54%</td>
<td>53%</td>
</tr>
<tr>
<td>2008-09</td>
<td>32%</td>
<td>38%</td>
<td>53%</td>
</tr>
<tr>
<td>2009-10</td>
<td>35%</td>
<td>57%</td>
<td>50%</td>
</tr>
<tr>
<td>2010-11</td>
<td>29%</td>
<td>53%</td>
<td>37%</td>
</tr>
<tr>
<td>2011-12</td>
<td>37%</td>
<td>65%</td>
<td>52%</td>
</tr>
<tr>
<td>2012-13</td>
<td>52%</td>
<td>69%</td>
<td>58%</td>
</tr>
</tbody>
</table>
Invest Early is having county-wide system impacts for children and families

**Early childhood screenings**

Overall, children are being screened significantly earlier than before Invest Early, but improvements have leveled off. In the past year, 39 percent of early childhood screenings were conducted before age 4, compared with about 37 percent last year and 26 percent prior to Invest Early.

<table>
<thead>
<tr>
<th>Year</th>
<th>Percentage screening before age 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>2006-07</td>
<td>26%</td>
</tr>
<tr>
<td>2007-08</td>
<td>38%</td>
</tr>
<tr>
<td>2008-09</td>
<td>40%</td>
</tr>
<tr>
<td>2009-10</td>
<td>43%</td>
</tr>
<tr>
<td>2010-11</td>
<td>42%</td>
</tr>
<tr>
<td>2011-12</td>
<td>37%</td>
</tr>
<tr>
<td>2011-12</td>
<td>39%</td>
</tr>
</tbody>
</table>

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

In 2011-12, 623 caregivers received some type of early childhood training, exceeding the goal of reaching at least 200 caregivers per year.

As of this year, 17 early childhood educators have earned an associate’s degree, two have earned a bachelor’s, and two have earned a master’s. In addition, 43 educators are still enrolled in degree programs, and 91 have obtained Child Development Certificates.

**Profile of Invest Early participants**

In year 7, 389 children age 5 and younger and 310 families participated in Invest Early, compared with 377 children and 303 families last year. Of the children served this year, 20 percent were age 2 or younger, 19 percent age 3, and 62 percent ages 4 or 5. Most (83%) are white and all but one speak English at home.

Invest Early children live in households with a median income of $22,134 per year. Over a quarter (29%) 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 (47%), living in a single-parent household (30%), and lack of opportunities for the child to socialize with peers (22%). In addition, a fifth of the children have a developmental or medical concern. This year, as in previous years, the youngest children (under age 3) have one more risk factor, on average, than those age three to five.

Based on staff observations, a third (29-31%) 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, the overall quality ratings of a sample of Invest Early classrooms this year is 5.8 on a scale where 5.0 through 6.9 are considered good quality.

Invest Early children and families show progress during their participation

Children’s growth and development

After participating in Invest Early, 94 percent of infants and toddlers were scoring within the normal expected age range in all domain areas, an increase from 51 percent at the start of the year.

After participating in Invest Early, over four out of five preschoolers demonstrated normal age expectations in all domain areas. This is an increase of 43 percent from the start of the year.

Home learning environment improvements

Participating families’ home learning environments improved significantly on 14 of the 15 items rated, more than in the last three years. Notable improvements include parents’ increased encouragement of children to learn the alphabet and numbers.

Family involvement in Invest Early

Over half (58%) of parents reached or exceeded the goal of committing 30 volunteer hours to Invest Early, similar to last year (56%), but up substantially from two years ago (46%) and three years ago (35%). 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 rated their experience with the Invest Early program and staff highly and higher than in prior years.

In terms of the program, 99 percent of parents say that they are satisfied with the education their child received; 97 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; and 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 skills and 93 percent say their child made progress in social skills needed for school.

Parents also rated their own parenting skills high. For example, 91 percent say involvement in the program helped them to improve their parenting skills; 90 percent say they better understand their child’s needs and development; 88 percent say they understand more now what their child needs to succeed in school; and 83 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

2012-13 kindergarten class

This year, 83 percent of the Invest Early low-income students demonstrated school readiness skills and knowledge fairly consistently (24%) or proficiently (59%), compared with 77 percent of the low-income comparison group (54% proficient) without Invest Early, School Readiness, or Head Start experience, and 90 percent of higher-income kindergarteners (68% proficient) who were not in Invest Early.

Kindergarten readiness, fall 2012

<table>
<thead>
<tr>
<th></th>
<th>Invest Early (low-income)</th>
<th>Low-income comparison group</th>
<th>Higher-income (no Invest Early)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proficient</td>
<td>59%</td>
<td>54%</td>
<td>68%</td>
</tr>
<tr>
<td>Nearly proficient</td>
<td>24%</td>
<td>23%</td>
<td>22%</td>
</tr>
<tr>
<td>Inconsistent</td>
<td>16%</td>
<td>17%</td>
<td>5%</td>
</tr>
<tr>
<td>Not yet</td>
<td>10%</td>
<td>10%</td>
<td>10%</td>
</tr>
</tbody>
</table>

In each domain, Invest Early children demonstrated proficiency at higher rates than their low-income peers without Invest Early and equal to their higher-income peers.

Factors associated with school readiness

This year, girls, students whose mothers had at least an associate’s degree, and those with better home learning environments were more likely to be proficient at kindergarten entry. Children whose families experienced a family stress during the year before they enrolled were less likely to be proficient in kindergarten.

The steady increase over the past three years in the percentage of low-income students achieving school readiness in Itasca County seems to indicate that efforts within the communities to improve conditions for school readiness systemically may be gaining momentum and benefiting all low-income students.

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 achieve higher graduation rates and employment earnings, have better mental and chemical health outcomes, and lower rates of juvenile delinquency, crime, and imprisonment relative to their peers who did not participate in Invest Early programs.
**Elementary grade test scores**

Based on third grade MCA-II reading and MCA III math tests in 2012, about three-quarters of the Invest Early children and the low-income comparison group are meeting or exceeding reading and math standards in the third grade, similar to third graders statewide.

Based on fifth grade MCA test results in 2012, 80 percent of the Invest Early children meet or exceed standards for reading, compared to 65 percent of the low-income comparison group. In math, 56 percent of the Invest Early children meet or exceed standards, compared with 29 percent of the low-income comparison group.

**Methods and background**

**Kindergarten readiness assessment**

Invest Early uses 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 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 the quality of classroom learning environments with the Early Childhood Environmental Rating Scale (ECERS), the Infant/Toddler Environmental Rating Scale (ITERS), and the Classroom Assessment Scoring System (CLASS).
This summary presents highlights of the Invest Early, Early Childhood Initiative, year 7 evaluation. For more information about this report, contact Richard Chase at Wilder Research, 651-280-2706.

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