
Presented at the Biennial Meeting of the Society for Research in Child Development, April 24, 2003
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Papers and Authors

- Overview of Cognitive and Social-Emotional Findings - Louisa Tarullo
- Relationship Between Curricula and Family, Program and Classroom Characteristics - Ruth Hubbell-McKey, Shefali Pai-Samant, Alberto Sorongon
- Understanding Quality in Head Start Classrooms: The Role of Teacher and Program Factors - Gary Resnick and Nicholas Zill
• Relationship of Program and Classroom Characteristics to Children’s Cognitive Gains and Social Development - Nicholas Zill
• Relationship of Family and Parental Characteristics to Children’s Cognitive and Social Development - Mary Ann D’Elio, Robert O’Brien, and Michael Vaden-Kiernan
Head Start FACES Study

- Two cohorts, Fall 1997 (3200 in 40 programs) and Fall 2000 (2800 in 43 programs)
- Provides longitudinal findings on Head Start quality and outcomes
- Stratified national probability samples of Head Start programs, families and children
- Direct assessments of children at start and end of Head Start and end of Kindergarten
- Direct observations of classroom quality
- Teacher and parent interviews
Head Start Program Performance Measures Conceptual Framework

1. Enhance children’s growth and development.
2. Strengthen families as the primary nurturers of their children.
3. Provide children with educational, health and nutritional services.
4. Link children and families to needed community services.
5. Ensure well-managed programs that involve parents in decision-making.
Cognitive Gains During the Head Start Year and Achievement in Kindergarten

• Research Questions:
  – What knowledge and skills do children have when they enter Head Start?
  – Do children make significant gains during the Head Start year? During Kindergarten?
  – How do these gains vary across skill levels and domains?
  – How do these gains compare across two cohorts?
Most Children Entering Head Start Have Academic Skills Below National Norms

Figure 1. Most children entering Head Start have academic skills below national norms

<table>
<thead>
<tr>
<th>Skill Area</th>
<th>Mean Standard Score (Norm = 100)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vocabulary</td>
<td>85.3 67.0</td>
</tr>
<tr>
<td>Early Writing</td>
<td>85.1 70.8</td>
</tr>
<tr>
<td>Letter Identification</td>
<td>92.4 82.9</td>
</tr>
<tr>
<td>Early Math</td>
<td>87.9 69.0</td>
</tr>
</tbody>
</table>

SOURCE: Head Start Family and Child Experiences Survey (FACES), fall 2000, children assessed in English in both fall and spring.
Head Start Children Show Gains in Vocabulary and Early Writing During Program Year

Figure 2. Head Start students show gains in vocabulary and early writing skills during program year

<table>
<thead>
<tr>
<th>Skill Area</th>
<th>Mean at Beginning</th>
<th>Mean at Year End</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vocabulary (PPVT-III)</td>
<td>85.3</td>
<td>89.1</td>
</tr>
<tr>
<td>Early Writing (WJR Dictation)</td>
<td>85.1</td>
<td>87.1</td>
</tr>
<tr>
<td>Letter Identification (WJR Letter-Word ID)</td>
<td>92.4</td>
<td>92.9</td>
</tr>
<tr>
<td>Early Math (WJR Applied Problems)</td>
<td>87.9</td>
<td>89.0</td>
</tr>
</tbody>
</table>

SOURCE: Head Start Family and Child Experiences Survey (FACES), fall 2000 and spring 2001, children assessed in English in both fall and spring.
Head Start Children Show Comparable Gains in Vocabulary in Both Cohorts

Figure 3. Vocabulary Standard Scores of Children in Fall and Spring of Head Start Year:
FACES 1997 versus FACES 2000

Head Start Children Show Greater Gains in Letter Knowledge in 2000-2001

Figure 5. Letter Identification Standard Scores of Children in Fall and Spring of Head Start Year: FACES 1997 versus FACES 2000

How Many Letters Do They Know?

FACES LWI Mean Scores and Number of Letter Equivalents

<table>
<thead>
<tr>
<th></th>
<th>WJ R Fall</th>
<th>WJ R Spring</th>
<th>Letters Fall</th>
<th>Letters Spring</th>
</tr>
</thead>
<tbody>
<tr>
<td>FACES 1997</td>
<td>5.0</td>
<td>6.6</td>
<td>3.2</td>
<td>5.0</td>
</tr>
<tr>
<td>FACES 2000</td>
<td>5.3</td>
<td>7.2</td>
<td>3.9</td>
<td>7.3</td>
</tr>
<tr>
<td>Congressional Mandate</td>
<td>7.8</td>
<td>10.2</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Children Who Enter with Lower Skills Show Greater Gains

Figure 7. Children who enter Head Start with lower skills show larger gains in comparison to national norms.

SOURCE: Head Start Family and Child Experiences Survey (FACES), fall 2000 and spring 2001, children receiving assessments in English both times.
Spanish Speaking Children Progress in English Vocabulary, Maintain Spanish Vocabulary

Figure 10. Vocabulary and Letter Identification Skills in English and in Spanish of Head Start Children From Spanish-Speaking Language Minority Families
Head Start Graduates Progress Toward National Norms in Kindergarten

Figure 11. Head Start graduates show further progress toward national norms in kindergarten

<table>
<thead>
<tr>
<th>Skill Area</th>
<th>Mean Standard Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vocabulary (PPVT-III)</td>
<td>88.0</td>
</tr>
<tr>
<td>Early Writing (WJR Dictation)</td>
<td>87.9</td>
</tr>
<tr>
<td>Early Math (WJR Applied Problems)</td>
<td>86.5</td>
</tr>
<tr>
<td>End of Head Start</td>
<td>92.7</td>
</tr>
<tr>
<td>End of Kindergarten</td>
<td>96.2</td>
</tr>
<tr>
<td>End of Kindergarten</td>
<td>92.3</td>
</tr>
</tbody>
</table>

Head Start Children’s Social Skills and Problem Behavior

• Research Questions:
  – Do children show gains in social skills and reductions in problem behaviors during Head Start?
  – Do children who enter with more problem behaviors show greater improvement?
Children Show Gains in Cooperative Behavior during Head Start Year

Figure 1. Head Start students show gains in cooperative classroom behavior during program year

<table>
<thead>
<tr>
<th>Group Rated and Program Year</th>
<th>Fall 2000-01</th>
<th>Spring 2000-01</th>
<th>Fall 1997-98</th>
<th>Spring 1997-98</th>
</tr>
</thead>
<tbody>
<tr>
<td>All Children 2000-01</td>
<td>14.6</td>
<td>16.6</td>
<td>14.7</td>
<td>16.1</td>
</tr>
<tr>
<td>All Children 1997-98</td>
<td>13.3</td>
<td>13.2</td>
<td>9.7</td>
<td>8.6</td>
</tr>
<tr>
<td>Bottom Quartile 2000-01</td>
<td>8.6</td>
<td>9.7</td>
<td>8.6</td>
<td>9.7</td>
</tr>
</tbody>
</table>

Source: Head Start Family and Child Experiences Survey (FACES), 2000-01 (n = 2,191), 1997-98 (n = 1,982).
Children Show Reductions in Hyperactive Behavior during Head Start Year

Figure 2. Head Start students show significant reductions in hyperactive behavior during program year

Children with High Levels of Problem Behavior Show Improvement during Head Start

Figure 4. Head Start students who enter with high levels of problem behavior show improvement during program year

Mean Problem Behavior Scale Score – Teacher Ratings

Highest Quartile in Fall  Same Children in Spring

Total Problem Behavior

Aggressive Behavior

Hyperactive Behavior

Withdrawn Behavior