Don’t Just Do the Assessment, Look at It.

New Jersey Early Childhood Academy
May 19, 2014
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Council of Chief State School Officers
Road Map

- Warm-Up: Examples/Challenges in Using Assessment Data
- Let’s Talk About It: What Can Data Tell Us About Teaching and Learning?
- Resources on Using Assessment Data
How Children Are Doing: B-3

Cumulative Vocabulary (Words)

Child’s Age (Months)

College Educated Parents

Working Class Parents

Welfare Parents

How Are Children Doing: At Kg. Entry

Maternal Education

- Less than HS
- HS
- Some College
- BA

Letter Recognition
Beginning Sounds
# & Shapes
Relative Size

(NCES, 2000)
How Big Are These Disparities Anyway?

- Low-income 4-5-yr-old children are 12-14 months below national norms in language development. (Layzer)

- 40% of low-income children did not know all the letters of the alphabet at the end of kindergarten (Head Start Impact Study).
Mathematics Achievement Scores of Kindergartners Followed Through Grade 8, by Kindergarten Score Quartile

Math Achievement Trajectories

How Are Children Doing: 4\textsuperscript{th} Grade

\textbf{\% 4\textsuperscript{th} Grade 'Proficient' Readers}

- White: 43
- Black: 14
- Hispanic: 17
- Asian: 46
- Native Am.: 18
- Poor: 17
- Non Poor: 44
Why We Care About Early Reading Proficiency

Are We Improving Over Time? 3rd Grade Reading Proficiency In MA 2001-2012 MCAS by Income

Source: Massachusetts Comprehensive Assessment System (MCAS), Massachusetts Department of Elementary and Secondary Education.
What Do You Think?

- Are educators sufficiently informed, alarmed and focused on early achievement gaps/shortfalls?

- Are parents receiving accurate honest feedback on how well their children are progressing?

- How do we highlight data on disparities without blaming parents, children, or ourselves?
How Are Teachers/Schools Doing

**CLASS**: Global view of domains of quality that include emotional climate, classroom organization and instructional support

**Snapshot**: Minute by minute view of child experience of activity settings, curriculum content, and teaching approaches
CLASS Classroom Quality Ratings

- Positive climate
- Negative climate
- Teacher sensitivity
- Regard for student perspectives

- Effective behavior management
- Learning formats/engagement
- Productivity

- Concept development
- Evaluative feedback
- Language modeling

Emotional Support

Organization/Management

Instructional Support
What is the Quality of Classrooms/Teaching?

- **Positive emotional climate**
- **Productivity**
- **Quality of feedback**
Profiles of Classroom Quality: First Grade

- Emotional Quality:
  - 31% for 31%
  - 23% for 23%
  - 29% for 29%
  - 17% for 17%

- Instructional Quality:
  - 31% for 31%
  - 23% for 23%
  - 29% for 29%
  - 17% for 17%
Continuity in Classroom Quality?

- Rates of “stable” quality in 1st, 3rd, 5th grade

<table>
<thead>
<tr>
<th>Emotional</th>
<th>High</th>
<th>Low</th>
</tr>
</thead>
<tbody>
<tr>
<td>Instructional</td>
<td>17%</td>
<td>18%</td>
</tr>
<tr>
<td>14%</td>
<td>20%</td>
<td></td>
</tr>
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</table>

- Only 10% of poor children experience stable high instructional quality.
Snapshot Data: PreK-2nd Grade

- Data on how seamless the school experience is for young learners

- Pinpoints areas of instructional strength as well as those needing improvement
Activity Setting - Pre K
- Basics: 15%
- Meals/Snacks: 9%
- Whole Group: 24%
- Choice: 37%
- Station: 5%
- Individual: 8%

Activity Setting - K
- Basics: 19%
- Meals/Snacks: 5%
- Whole Group: 45%
- Choice: 6%
- Station: 2%
- Small Group: 0%

Activity Setting - 1st Grade
- Basics: 23%
- Meals/Snacks: 4%
- Whole Group: 45%
- Choice: 5%
- Station: 4%
- Individual: 18%

Activity Setting – 2nd Grade
- Basics: 26%
- Meals/Snacks: 4%
- Whole Group: 33%
- Individual: 29%
- Station: 0%
- Small Group: 0%
- Choice: 8%

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Monitoring Progress: Small Changes = Big Differences

As teachers increase children’s engagement in content and higher order thinking, **instructional time grows dramatically**:

- **3%** = 12 minutes/day, 60 minutes/week, 2700 minutes/year = 12 days = 2+ weeks more
- **5%** = 20 minutes/day, 100 minutes/week, 4500 minutes per year = 20 more days/year = 4 weeks more!
- **10%** = 40 minutes/day, 200 minutes/week, 9000 minutes per year = 40 more days/year = 8 more weeks of instructional time!!
## Progress in Math Instructional Time & Content

<table>
<thead>
<tr>
<th>Time 1</th>
<th>Time 2</th>
<th>%+/−</th>
<th>Category</th>
<th>Daily % X 4</th>
<th>Weekly Daily X 5</th>
<th>Yearly % X 180</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>13</td>
<td>16</td>
<td>+3</td>
<td>Numbers</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>4</td>
<td>3</td>
<td>-1</td>
<td>Geometry</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>4</td>
<td>7</td>
<td>+3</td>
<td>**Algebra</td>
<td>12</td>
<td>1 hours</td>
<td>36 hours</td>
<td>Greater attention to higher order thinking</td>
</tr>
<tr>
<td>2</td>
<td>2</td>
<td>+2</td>
<td>Time</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>+7</td>
<td>Total math time</td>
<td>28 min</td>
<td>140 min</td>
<td>83 hours</td>
<td>23 instructional days</td>
</tr>
</tbody>
</table>

*Greater attention to higher order thinking*
What Else? Summer Learning Loss

What Else? Chronic Absenteeism

- 10% of Kindergartners & 1st graders are chronically absent
- Poor children are 4X more likely to be chronically absent in K than high income peers (Romero & Lee 2007)
- Negative impact of absences on literacy is 75% larger for low income vs. middle class children (Ready 2010)
Resources on Using Assessment Data

- **Data Wise**: books and website
- Data Quality Campaign website
- Early Childhood Data Collaborative website
- First School Project website and book
- Grade Level Reading Campaign website
- Attendance Works website