Expanding Learning:
Making a Difference for Children and Youth

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1. Key Ingredients That Make a Difference

- Early studies looked simply at participation—scored as yes or no
- Now we are assessing & analyzing:
  - Program Quality—How good is the program
  - Intensity—How many hrs/wk & days/yr
  - Breadth—How many different types of activities
  - Cumulative Participation—% of participation over time

1. Meta-analyses show robust short-term effects of program quality

- Meta-analysis is a statistical technique that combines results of multiple studies.
- Each study provides a data point, and studies are weighted by their sample size.

Exciting Times

1. Key ingredients of powerful after-school programming have been identified
2. Meta-analyses indicate robust short-term effects
3. Emerging evidence of meaningful long-term outcomes
Meta-analyses...

- Enable us to look at the weight of the evidence across studies
- Offset the likelihood of a single study having undue influence
- Can help to provide more generalizable evidence
- Provide a common metric so that effects can be compared across studies

AN IMPORTANT META-ANALYSIS

  - 49 reports of 73 programs
  - Evaluated studies for evidence that programs offered Sequential and Active activities with Focused and Explicit content—SAFE

DOCUMENTED SHORT-TERM EFFECTS OF HIGH QUALITY PROGRAMS

Durlak, Weissberg and Pachan (2010). *American Journal of Community Psychology*

<table>
<thead>
<tr>
<th>Outcomes</th>
<th># of Studies</th>
<th>Significant Effects</th>
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<tr>
<td>School achievement</td>
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<tr>
<td>Grades</td>
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<td>.24</td>
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<tr>
<td>School attendance</td>
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<td>School bonding</td>
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<td>Self perceptions</td>
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<td>Problem behaviors</td>
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<td>Drug use</td>
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<td>.22</td>
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So, are these effects “meaningful”?

- Aspirin on heart disease, $d = .03$
- School-based substance abuse prevention programs on drug & alcohol use, $d = .09$
- Early child care & math achievement, $d = .09 - .12$
- Class size reductions on math achievement, $d = .23$
2. LONG-TERM & CUMULATIVE EFFECTS OF AFTERSCHOOL PROGRAMS

STUDY OF EARLY CHILD CARE AND YOUTH DEVELOPMENT

1360 children studied from birth through high school, included:
- Measures of afterschool activities
- Measures of school, early child care and families
- Multiple covariates
- A "value-added" analytic approach

FINDINGS: CUMULATIVE EFFECTS
CLOSING THE MATH ACHIEVEMENT GAP
GRADE 3

ENDURING EFFECTS

| Breadth of Activities Grade 6 | • Higher math achievement (age 15)  
| Intensity Hours/Week Grade 6 | • More task persistence (age 15)  
| Quality of Activities Grade 6 | • More confident and assertive (age 15)  
|                             | • Fewer behavior problems (externalizing)  

CUMULATIVE EFFECTS
CLOSING THE MATH ACHIEVEMENT GAP
GRADE 5
INCREASING OPPORTUNITY GAP
SPENDING ON ENRICHMENT (1972-2008)
Duncan and Murnane (2011): Whither Opportunity?

Final Reflections
- Unprecedented opportunities for afterschool programs to make a difference
- Move beyond participation: yes/no
- Incorporate measures of intensity, duration and quality in metrics
- Expanded student outcomes (academic as well as social, behavioral, and health outcomes)
- Critical to expand access for low-income youth who are less likely to have access to programs and who may most benefit from these programs