Getting Smart About Summer Learning

February 26, 2015
11:30am-12:30pm
Presenters:

- **Sarah Pitcock**, CEO, National Summer Learning Association
- **Catherine H. Augustine**, Senior Policy Researcher, RAND Corporation
- **Bolgen Vargas**, Superintendent, Rochester City School District
- **Antwan Wilson**, Superintendent, Oakland Unified School District
Ready for Fall?
Near-Term Effects of Voluntary Summer Learning Programs on Low-Income Students’ Learning Opportunities and Outcomes

Catherine Augustine
RAND Corporation

February 26 2015
Building our understanding of summer learning

- We know the research on summer learning loss:
  - Wealthier children have greater opportunities in the summer for learning and enrichment – and can gain ground
  - Low-income children, with an opportunity gap relative to their wealthier peers, tend to lose ground
- Some summer learning programs have shown positive impacts
- We know less about running programs across urban districts

“During summer, low-income students suffer disproportionate learning loss and those losses accumulate over time, contributing substantially to the achievement gap between low- and higher-income children.”

-- Getting to Work on Summer Learning, RAND, 2013
National Summer Learning Project

• Five urban districts selected from 35 candidates
• Voluntary summer programs
  – Full-day, 5-6 weeks
  – Academics & enrichment
• 5,000 children in RAND study measuring impact on:
  – Reading and math tests
  – Grades, attendance, behavior
  – Socio-emotional competence
... and offering guidance on running effective programs
Goals of the National Summer Learning Project

• Provide low-income children with summer programs that combine academics and enrichment

• Provide policymakers with evidence on whether and how district summer learning programs can produce lasting academic gains and other benefits for children
Distinctive features of The National Summer Learning Study

• Formative feedback provided in 2011 and 2012
• Randomized controlled trial (RCT) launched in 2013
• National in scope, allowing us to study “proof of concept”
• Follows students for 2 years in voluntary programs run by urban districts and community partners
  • Students were rising into fourth grade in summer 2013
Most students in the study are low-income and non-white

<table>
<thead>
<tr>
<th>Student Characteristics</th>
<th>Study Students</th>
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<tbody>
<tr>
<td>Total number of students in study</td>
<td>5,637</td>
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<tr>
<td>Treatment group</td>
<td>3,192</td>
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<tr>
<td>Control group</td>
<td>2,445</td>
</tr>
<tr>
<td>African American (%)</td>
<td>47</td>
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<tr>
<td>Hispanic (%)</td>
<td>40</td>
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<tr>
<td>Eligible for a free or reduced price meal (%)</td>
<td>89</td>
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<tr>
<td>English language learner (%)</td>
<td>31</td>
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<td>Lowest achieving (%)</td>
<td>42</td>
</tr>
<tr>
<td>With IEPs during 2012-13SY (%)</td>
<td>10</td>
</tr>
</tbody>
</table>
Near-term results are based on how students did soon after the 2013 summer programs ended

- Study administered general mathematics and reading knowledge assessments during the 3rd to 5th week of school (fall 2013)

- Compared scores of treatment students to the control students’ scores
Treatment students performed significantly better than control students on the fall 2013 mathematics assessment:

- Every district contributed to this overall effect
- The effects we identified are reasonably large
  - Particularly for a 5-week program
Our estimate is about 20% of mathematics learning over the course of a school year.

The effect of the program on students who attended was 0.11 of a standard deviation.

- Otherwise known as the “effect size”
- Over one calendar year, third-graders advance in mathematics achievement by a 0.52 effect size.
Treatment students did not perform better on the fall 2013 reading test

Hypotheses for why we find no effects in reading include:

• Reading comprehension is a difficult skill to improve and to measure
• Control group students may not have lost ground in reading over the summer
• Instructional quality may not be sufficient

Neither did treatment students perform better on our measure of social emotional competency
We collected implementation data to shed light on the “black box”

- RCTs are often criticized for telling practitioners whether or not something worked, but not why or why not

- We collected implementation data on several aspects of the 2013 programs
  - 207 academic teacher surveys
  - Observations of 215 language arts and 182 mathematics blocks
We examined whether features of the programs were related to student outcomes

• Features: attendance, hours of instruction, instructional quality, site orderliness, opportunity for instruction, appropriateness of curriculum

• These analyses are correlational and do not demonstrate that the feature causes outcomes
Attendance and dosage were related to higher treatment effects in mathematics

• Students who attended at least 22 days had largest treatment effects

• As did students who received at least 26 hours of instruction
Aspects of quality were positively correlated with reading outcomes

- Students who had teachers who had just taught 3rd or 4th grade
- Students who received higher-quality language arts instruction
- Students in orderly summer sites
Recommendations Align to Prior Research on What Comprises an Effective Summer Learning Program

- Design programs to span 5-6 weeks, with 60-90 minutes per day for mathematics
- Promote consistent attendance and adhering to schedules
- Attract “effective” teachers with relevant grade-level experience
- Provide coaching and PD on instructional quality
- Maintain positive student behavior
Q & A:

Panel Discussion

Join in the conversation.
Resources:

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Additional Resources:
AASA, The School Superintendents Association
www.aasa.org/content.aspx?id=10536

The Wallace Foundation Knowledge Center
www.wallacefoundation.org/knowledge-center/summer-and-extended-learning-time/Pages/default.aspx
Thank you!