Today’s Presenters

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GEORGIA POLICY LABS
Since 2018, we have worked together on nearly 20 projects that have provided actionable evidence on policy-relevant topics, ranging from informational nudges to reduce absenteeism to teacher hiring practices and the efficacy of dual-language immersion programs.
Forward Together: Student Achievement Growth During COVID-19

Building the Context Around the Pandemic

Dr. K. Jurée Capers
Maggie Reeves
COVID-19 and Student Learning Impacts

Dr. Tim Sass
Project Goals

- Information to understand the magnitude of learning impacts related to the pandemic
  - How big is the problem and who has been impacted the most?
- Insights on how learning gains change as students return to in-person instruction
  - Is returning to the classroom enough to get students back on track?
- Guidance on strategies for addressing reductions in student achievement growth
  - How can districts best help those who were significantly impacted?
- Evidence on how to improve future use of virtual education when the pandemic is over
  - What lessons can we learn from remote instruction over the last year?
Calculating Learning Impacts

**Student Scale-Score Achievement Change**

| \[\text{Actual Fall 2020 Test Score} - \text{Projected Fall 2020 Test Score (Based on Characteristics and Two Prior Scores plus Pre-Pandemic Trends)}\] |

**Student Months-of-Learning Achievement Change**

| \[\frac{\text{Student Scale-Score Change}}{\text{Typical School-Year Scale-Score Growth for Grade Level and District}} \times 9.5 \text{ Calendar Months per School Year}\] |
What we are Measuring

• Reduced **student achievement growth** associated with the pandemic and school closures
• Captures everything “atypical” that happened affecting student achievement
  • Includes all impacts associated with the pandemic
  • Captures any other atypical impacts starting at the beginning of 2020
  • Accounts for regular summer breaks students take in “normal” years
• Much of this is outside the control of districts, schools, and parents
• COVID-19 had far reaching effects on each student’s life; we are just examining the impact on academics
We are measuring how each student’s individual learning trajectory has been altered by the pandemic up to the start of SY 2020-21.
We are measuring how each student's individual learning trajectory has been altered by the pandemic up to the middle of SY 2020-21.
**Finding #1: Average Impacts on Achievement**

- By start of SY 2020-21 (winter to fall)
  - MATH: **Up to 3 months of learning** on average within a grade
  - READING: **Up to 7 months of learning** on average within a grade

<table>
<thead>
<tr>
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<th>Projected</th>
<th>Actual</th>
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<tbody>
<tr>
<td>MATH</td>
<td>3 months</td>
<td>7 months</td>
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<tr>
<td>READING</td>
<td>7 months</td>
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Finding #1: Average Impacts on Achievement

- By start of SY 2020-21 (winter to fall)
  - MATH: Up to 3 months of learning on average within a grade
  - READING: Up to 7 months of learning on average within a grade

- By the middle of SY 2020-21 (winter to winter)
  - MATH: Up to 7 months of learning on average within a grade
  - READING: Up to 7.5 months of learning on average within a grade
Finding #1: Average Impacts on Achievement

• By start of SY 2020-21 (winter to fall)
  • MATH: Up to 3 months of learning on average within a grade
  • READING: Up to 7 months of learning on average within a grade

• By the middle of SY 2020-21 (winter to winter)
  • MATH: Up to 7 months of learning on average within a grade
  • READING: Up to 7.5 months of learning on average within a grade

By the middle of the current school year, impacts had grown to be quite substantial.

Average impacts don’t tell the whole story. Impacts varied considerably across grades, subjects, and districts.
Student Achievement Growth Impacts – Math

District A

District B

District C

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Student Achievement Growth Impacts – Reading

**District A**

- Months Growth:
  - Grade 4: Fall = 0.2, Winter = -1.4
  - Grade 5: Fall = -0.5, Winter = -2.8
  - Grade 6: Fall = -1.7, Winter = -3.8
  - Grade 7: Fall = -2.5, Winter = -4.2
  - Grade 8: Fall = -2.1, Winter = -4.2

**District B**

- Months Growth:
  - Grade 4: Fall = -0.2, Winter = -2.3
  - Grade 5: Fall = -1.1, Winter = -2.7
  - Grade 6: Fall = -1.0, Winter = -2.0
  - Grade 7: Fall = -1.0, Winter = -2.1
  - Grade 8: Fall = -1.9, Winter = -3.1

**District C**

- Months Growth:
  - Grade 4: Fall = -1.1, Winter = -2.7
  - Grade 5: Fall = -2.5, Winter = -3.9
  - Grade 6: Fall = -5.4, Winter = -6.9
  - Grade 7: Fall = -7.5, Winter = -6.2
  - Grade 8: Fall = -7.3, Winter = -7.3
Finding #2: Impacts by Student Demographic Groups

- Household Economic Status
  - Free/Reduced-Price Meal Eligibility (FRPM)
- Race/Ethnicity
- Other demographic groups
  - English learner status
  - Gender
  - Disability status
Effects through the middle of the current school year are generally larger for students who are eligible for free/reduced-price meals, a crude measure of household income.
Impacts by race/ethnicity also show variation in impacts across students – achievement generally slowed more for Black and Hispanic students than for White students, but patterns vary considerably across grades and districts.
Finding #3: Effect of Returning to In-Person Learning

• On average, achievement is growing more rapidly for students who returned to in-person instruction than students who continued with virtual learning, but rate of achievement growth is still behind what occurs in a typical school year.
Achievement Growth per Day by Instructional Mode

**District A: Math**

- Elementary (G4-G5): 0.16, 0.13, 0.09
- Middle (G6-G8): 0.09, 0.10, 0.11

**Scale score**

- 0% remote learning (pre-pandemic)
- 30-50% remote
- 90-100% remote

**District A: Reading**

- Elementary (G4-G5): 0.23, 0.16, 0.09
- Middle (G6-G8): 0.10, 0.06, 0.07

**Scale score**

- 0% remote learning (pre-pandemic)
- 30-50% remote
- 90-100% remote
What’s the Bottom Line?

• Through the first half of the current school year, the pandemic had a substantial negative effect on student achievement growth—up to 75% of a normal school year for some students.

• However, the pandemic didn’t impact students’ learning trajectories evenly—some students are doing well academically.

• On top of disparities prior to the pandemic, historically marginalized groups, including students experiencing poverty, Black and Hispanic students, and English Learners, tended to experience greater reductions than White and English proficient students.

• The rate of achievement growth increased when students returned to in-person instruction, but not enough for them to be back on track.
Policy Recommendations

Dr. Tim Sass
How Can We Move Forward Together?

- Use federal funds to help students get back on track academically.
- Provide differential supports and interventions based on each student’s achievement growth changes.
- Collect data to track who is offered additional learning opportunities, the extent of participation, and utilize formative assessments to assess student progress.
- Commit to evaluating impacts of remediation strategies and making mid-course adjustments as needed.
Three Evidence-Based Strategies

1. Target students with the most significant impacts
   - **High-intensity, small group tutoring**
     - 3 students per tutor
     - 3+ sessions per week
     - 30-60 minutes per session
     - $3,500-4,300 per participant per year

2. Target students with significant impacts
   - **Summer school and other programs during breaks**
     - Tied to classroom content
     - Incentives for enrollment
     - Incentives for full participation

3. Include all students
   - **Extended school day** that is tailored toward student needs and teacher led
What Do We Already Know?

What Doesn’t Work

• Same resource allocations for all students
• Watered down interventions
• No data on student participation or what they experience
• No evaluation of whether interventions improved student outcomes

What Works

• Target interventions to students who need it most
• Incentivize participation and engagement
• Remove barriers to participation
• Collect data on participation and criteria
• Assess what works and adjust strategy as needed
We acknowledge the trauma and burn-out that many students, families, and educators face.

We also believe in students’ aspirations to learn and succeed.

We recognize our measures don’t capture the moments of joy and out-of-school learning that students have experienced.

We believe there it is imperative to target interventions for students to avoid exacerbated disparities in public education that could last a lifetime.

It’s our collective work to support students’ goals and aspirations through the tools we have.
What’s Next?

• Roles of student engagement, parental resources/preferences and teacher training in determining the effects of virtual instruction on student learning

• What has happened to students who didn’t take tests

• Unpacking unexpected findings, like relatively milder impacts on girls and on students experiencing disabilities

• Measure efficacy of interventions to help students
  • Summer school
  • Potentially tutoring and extended day offerings

• Effects of the pandemic on teacher supply and retention
Forward Together: Student Achievement Growth During COVID-19

Questions?
Forward Together: Student Achievement Growth During COVID-19

Leveraging the RPP for Positive Impact

Ryan Moore, Ed.D.
Fulton County Schools
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