Student Academic Achievement and COVID: How Far Our Students Are Behind and How We Can Catch Them Up

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WHO ARE THESE PEOPLE?

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WHERE ARE WE GOING?

• Session logistics
  • Chat feature
  • Emojis
  • Breakout room
  • Q&A

• Overview of GEAR UP, 60x25, and Vela connection
  • Evidence-based practices

• COVID learning impact
  • Review of previous research
  • Project data
  • Remediation strategies

• Q&A and networking
60x25, GEAR UP, and VELA

GEAR UP ILLINOIS

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MAKING GOOD DECISIONS

Vela Institute
ILLUMINATING EDUCATION
WHAT IS EBP?

**SCIENTIFIC LITERATURE**
What research has been published to support or guide the development of the study?

**ORGANIZATIONAL INFORMATION**
What does our internal data tell us?

**TECHNOLOGY**
What can we learn from technology and how can we leverage it to communicate?

**PROFESSIONAL EXPERTISE**
What does your professional expertise tell you is happening?

**STAKEHOLDERS**
What are the stakeholder perspectives, values or concerns?

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**ASK**
Translating the practical issue into an answerable question.

**ACQUIRE**
Systematically searching for and retrieving evidence from all sources.

**APPRAISE**
Critically judging the trustworthiness or relevance of the evidence collected.

**AGGREGATE**
Weighing and combining evidence from each source.

**APPLY**
Incorporating the evidence into the decision-making process and conversation.

**ADVISE**
Communicating ongoing feedback.

**ASSESS**
Evaluating the outcome of the decision that was made.
How Can We Predict the Academic Impact of An Unprecedented Event?

- Summer Learning Loss
- Absences
- Virtual Learning

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SUMMER LEARNING LOSS

What Can It Tell Us?

• Students tend to decline over the summer
  • Focus on recreation over learning
  • Like a “faucet,” students slowly drip and lose information they had learned
  • Estimated losses around a month of learning

• COVID extended the summer
  • More time off, more drip
  • Exaggerated effects among student groups
    • Parental resources for summer learning opportunities


ABSENTEEISM

What Can It Tell Us?

- As absences increase, academic performance decreases
  - Linear relationship with academic achievement
    - Stacking effects
    - Particular effects observed with chronic absenteeism
- Absences impact the whole class
  - Students attending, on track get held up
- Covid health concerns and change to virtual led to increased student absences
  - Nearly doubled: pre pandemic average of 6 days, whereas Fall of 2020 was up to 12% in online-only courses (Education Week)

Kurtz, H. (2020, October 15). *In-Person learning expands, student absences up, teachers work longer, survey shows.* Education Week
VIRTUAL LEARNING

What Can It Tell Us?

• High potential, poor results
  • Online education isn’t inherently bad, it’s just difficult to switch to

• Unprepared teachers & students
  • Decreased social activity
  • Decreased teach monitoring abilities
    • Difficult to facilitate learning, more focus on feedback
  • Increased student independent work
    • Students lack self-regulation ability

• Covid - technology access
Projecting the potential impacts of COVID-19 school closures on academic achievement

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Angela Johnson
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Erik Ruzek
University of Virginia

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Brown University

With 55 million students in the United States out of school due to the COVID-19 pandemic, education systems are scrambling to meet the needs of schools and families, including planning how best to approach instruction in the fall given students may be farther behind than in a typical year. Yet, education leaders have little data on how much learning has been impacted by school closures. While the COVID-19 learning interruptions are unprecedented in modern times, existing research on the impacts of missing school (due to absenteeism, regular summer breaks, and school closures) on learning can nonetheless inform projections of potential learning loss due to the pandemic. In this study, we produce a series of projections of COVID-19-related learning loss and its potential effect on test scores in the 2020-21 school year based on (a) estimates from prior literature and (b) analyses of typical summer learning patterns of five million students. Under these projections, students are likely to return in fall 2020 with approximately 63-68% of the learning gains in reading relative to a typical school year and with 57-50% of the learning gains in math. However, we estimate that losing ground during the COVID-19 school closures would not be universal, with the top third of students potentially making gains in reading. Thus, in preparing for fall 2020, educators will likely need to consider ways to support students who are academically behind and further differentiate instruction.

Breakout Room Discussions

What is the academic impact due to COVID are you seeing in your schools?

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Identifying and Closing the Gap

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REMEDIATION PLANNING

Remediation

The ongoing effort to support students in catching up on learning through a variety of means
• Take into account well-being and socio-emotional needs

Four-steps

1. Envision and Understand
2. Decide and Design
3. Enable and Execute
4. Monitor and Adjust

REMEDIATION ALIGNMENT

Learning loss can be mapped on a matrix of needs

<table>
<thead>
<tr>
<th>Extent</th>
<th>Distribution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Significant learning loss</td>
<td>Significant learning loss</td>
</tr>
<tr>
<td>with limited inequality</td>
<td>with significant inequality</td>
</tr>
<tr>
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</table>

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REMEDIATION IMPLEMENTATION

Strategies

• **More time**
  • Weekend school
  • Extended day
  • Summer school
  • “Vacation academics”
  • Re-enrollment

• **Dedicated attention**
  • Peer-to-peer learning
  • Breakout groups
  • Tutoring

• **Compressed content**
  • Reduced or revised curricula

• **“Looping”**

Delivery

• **Additional instructions**
  • Teachers, tutors, TAs
  • Peer-to-peer support
  • School administrators

• **Technology**
  • Online platforms
  • Video or phone calls
  • Phone

• **Mail**

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THE STUDY

• Grades K-12
• Quarterly GPA
• Monthly Absence Totals
• MAP Growth standardized testing scores, 2-3 per year
  • Growth: Math CCSS 2010 V2
  • Growth: Reading CCSS 2010 V3
  • Growth: Science for use with NGSS 2013 (limited)
• Demographic Information
  • Race/Ethnicity
  • Student Gender
  • Low Income
  • Homeless
OUR PRELIMINARY DATA

Median MAP Scores in 2019-2020 and 2020-2021

2019-2020 N ranges from 89-168 per grade, 1157 total students
2020-2021 N ranges from 60-85 per grade, 659 total students
OUR PRELIMINARY DATA

Median MAP Math Scores by Grade

Median MAP Reading Test Scores by Grade

2019-2020 N= 1,157 total students
2020-2021 N=659 total students
OUR PRELIMINARY DATA

Winter MAP Growth 9-11 Grade Median Test Score – By Subject and Student Gender

Male Reading Gain – 1.33 points
Female Reading Drop – 3 points

Male Math Drop – 2.66 points
Female Math Drop – 6 points

2019-2020
N= 295

2020-2021
N= 191
HOW CAN WE USE THIS INFORMATION?

• Identify the current learning levels of your students
  • Who is behind? Catch them up.
  • Who is still on track? Make sure they can continue their progress

• Keep online learning more engaging

• Make the transition back to in-person learning as smooth as possible
WRAP UP

What data and/or results have you examined to help better identify students whose learning is being impacted by COVID?

Learning remediation strategies are you investigating?
• Any evidence of promise for those strategies?

What is the one thing that you learned in this session that makes your time spent here worthwhile?

Would you like to connect to other who are interested in learning, discussing, and working further on COVID learning impact?
• Please put your contact info in the chat

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Questions?

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THANK YOU!

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