



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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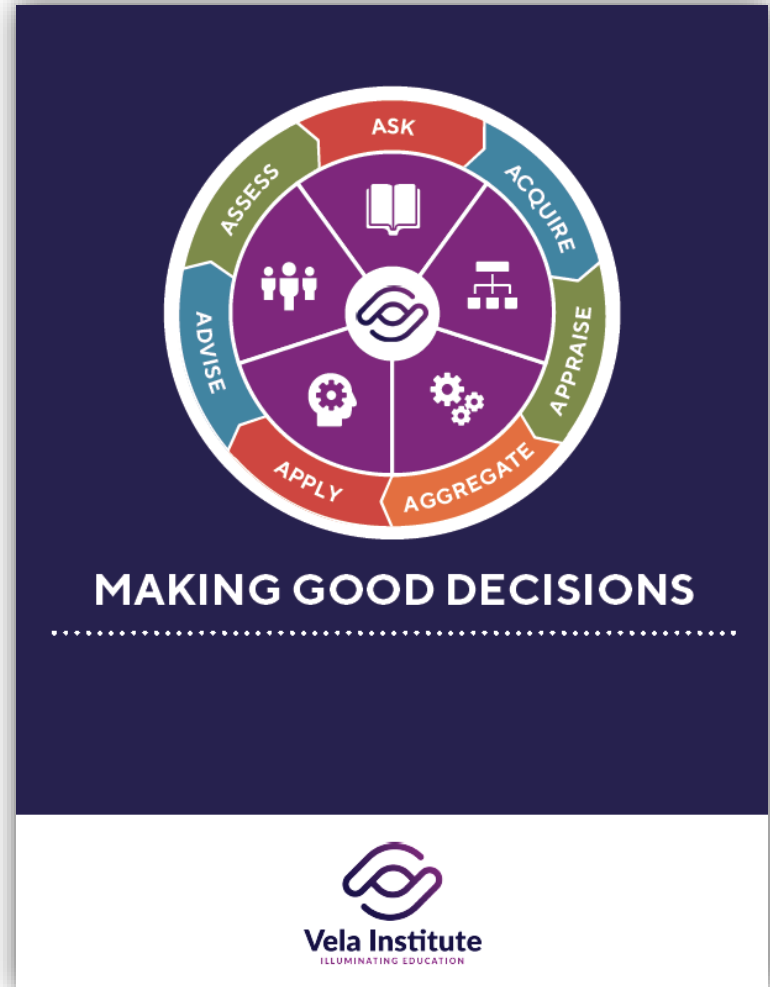
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WHERE ARE WE GOING?

- 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



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

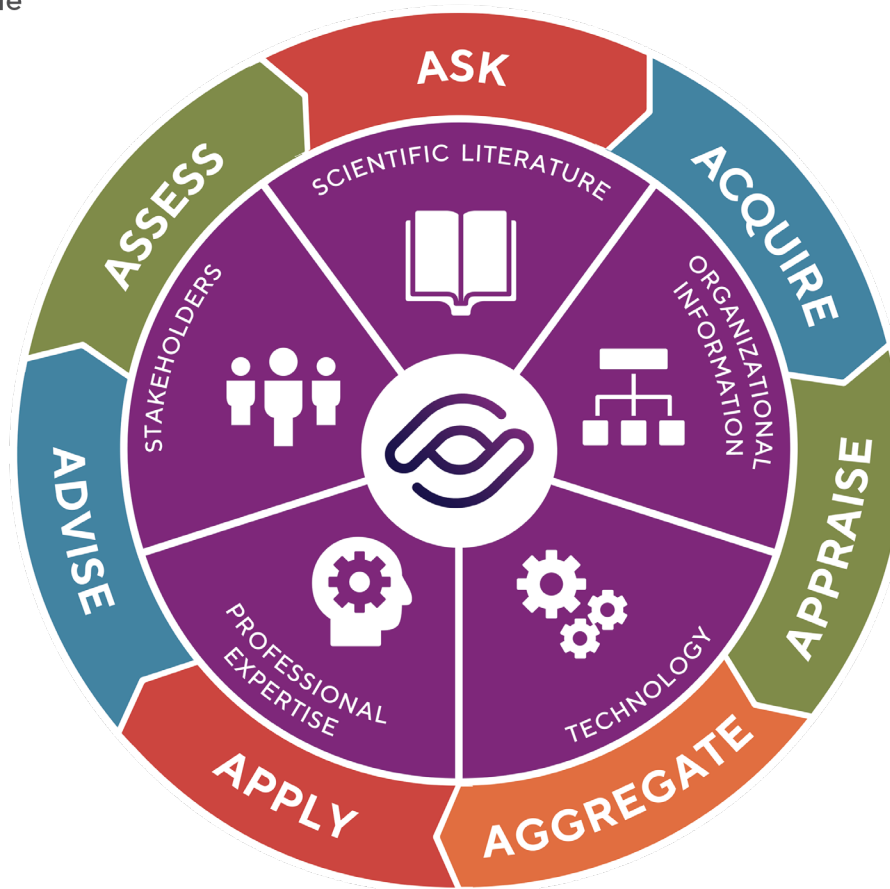
What can we learn from technology and how can we leverage it to communicate?

PROFESSIONAL EXPERTISE

What does your professional expertise tell you is happening?

STAKEHOLDERS

What are the stakeholder perspectives, values or concerns?



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.

Bergman, S.M., Wilson-Kearse, J., & Costello, H. (2020). Making Good Decisions: An Overview of Evidence-Based Decision-Making. Boone, NC: Vela Institute.



How Can We Predict the Academic Impact of An Unprecedented Event?

- Summer Learning Loss
- Absences
- Virtual Learning

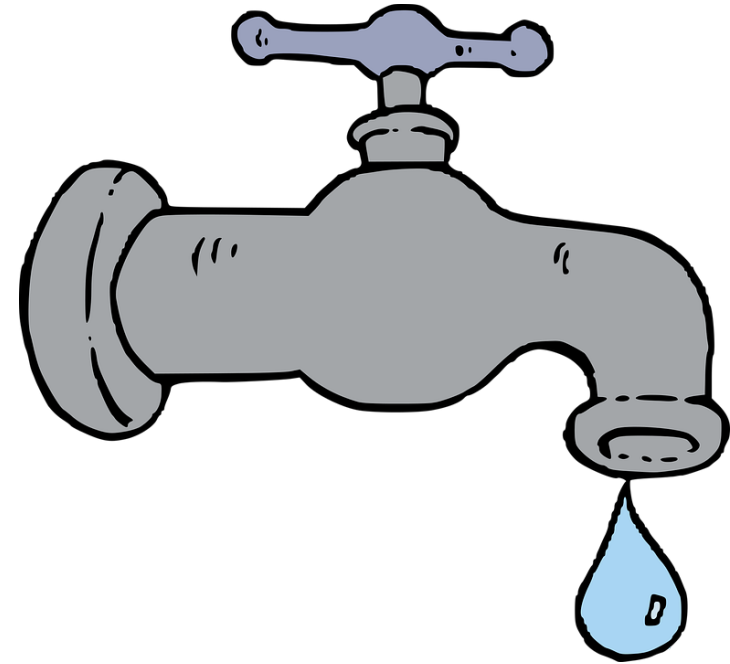
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SUMMER LEARNING LOSS

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



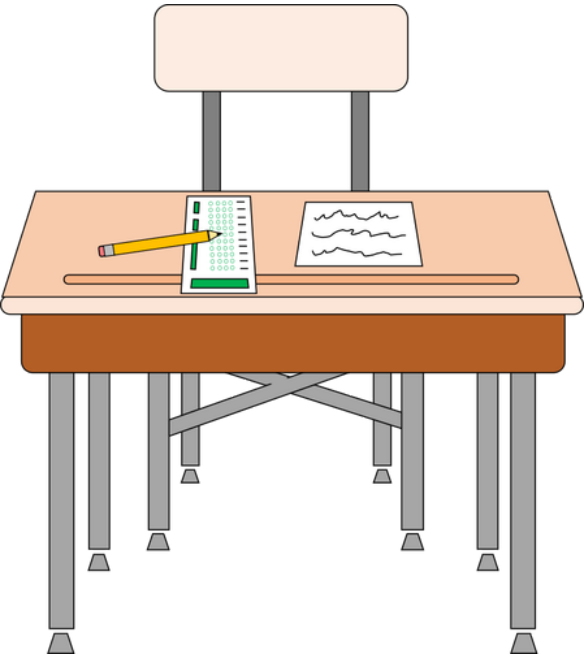
Alexander, K. L., Entwisle, D. R., & Olson, L. S. (2001). Schools, achievement, and inequality: A seasonal perspective. *Educational Evaluation and Policy Analysis*, 23(2), 171-191.

Cooper, H., Nye, B., Charlton, K., Lindsay, J., & Greathouse, S. (1996). The effects of summer vacation on achievement test scores: A narrative and meta-analytic review. *Review of Educational Research*, 66(3), 227-268.

Kuhfeld, M. (2019). Surprising new evidence on summer learning loss. *Phi Delta Kappan*, 101(1), 25-29.

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)

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



- Cavanaugh, C. S. (2001). The effectiveness of interactive distance education technologies in K–12 learning: A meta-analysis. *International Journal of Educational Telecommunications*, 7(1), 73–88.
- Cavanaugh, C., Gillan, K. J., Kromrey, J., Hess, M., Blomeyer, R., & North Central Regional Educational Lab (2004). *The effects of distance education on K-12 student outcomes: A meta-analysis*. Learning Point Associates / North Central Regional Educational Laboratory.
- Rice, K., & Dawley, L. (2009). The status of professional development for K-12 online teachers: Insights and implications. *Journal of Technology and Teacher Education* 17(4), 523–545.
- Ahn, J., & McEachin, A. (2017). Student enrollment patterns and achievement in Ohio's online charter schools. *Educational Researcher*, 46(1), 44-57.

Projecting the potential impacts of COVID-19 school closures on academic achievement

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NWEA

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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 37-50% 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

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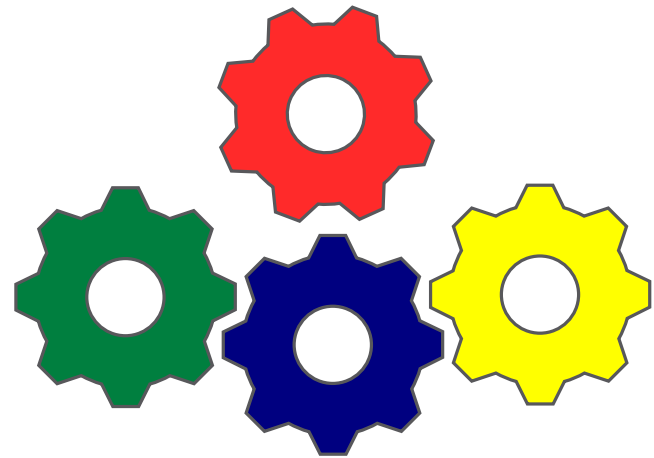
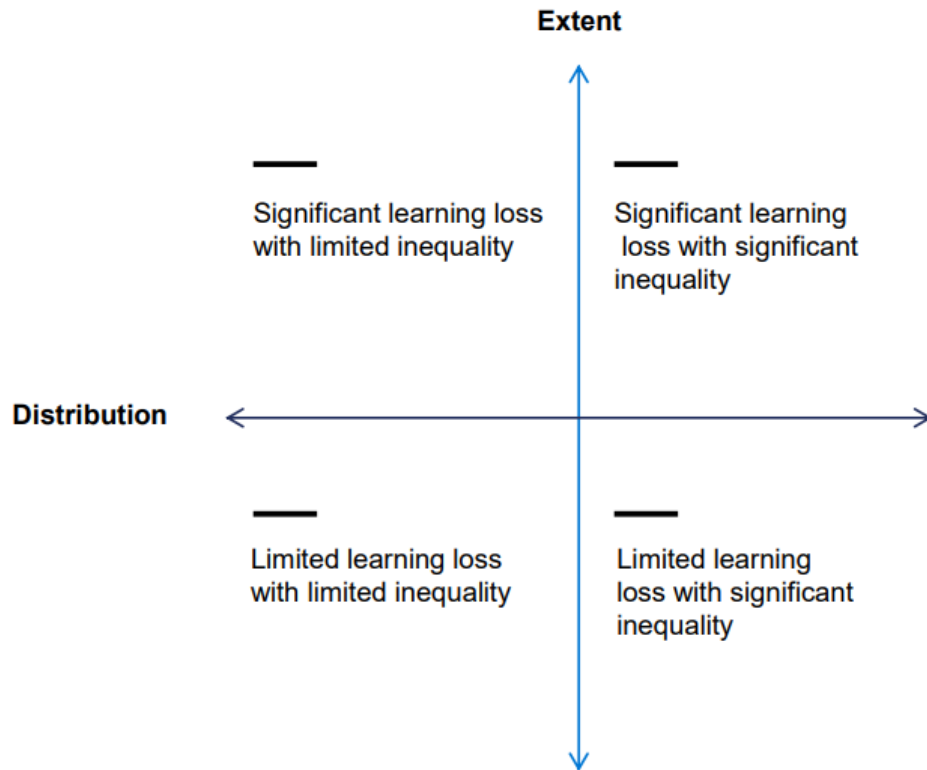
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UNESCO (2020, July). COVID-19 Response Toolkit.

<https://globaleducationcoalition.unesco.org/response-toolkit>

REMEDIAL ALIGNMENT

Learning loss can be mapped on a matrix of needs



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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”**



Advance
ILLINOIS

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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Pan, W., & Sass, T. (2020, July). Potential Remediation Strategies in the Wake of COVID-19 School Closures: A Review of the Literature.

<https://gpl.gsu.edu/publications/remediation-covid-19/>

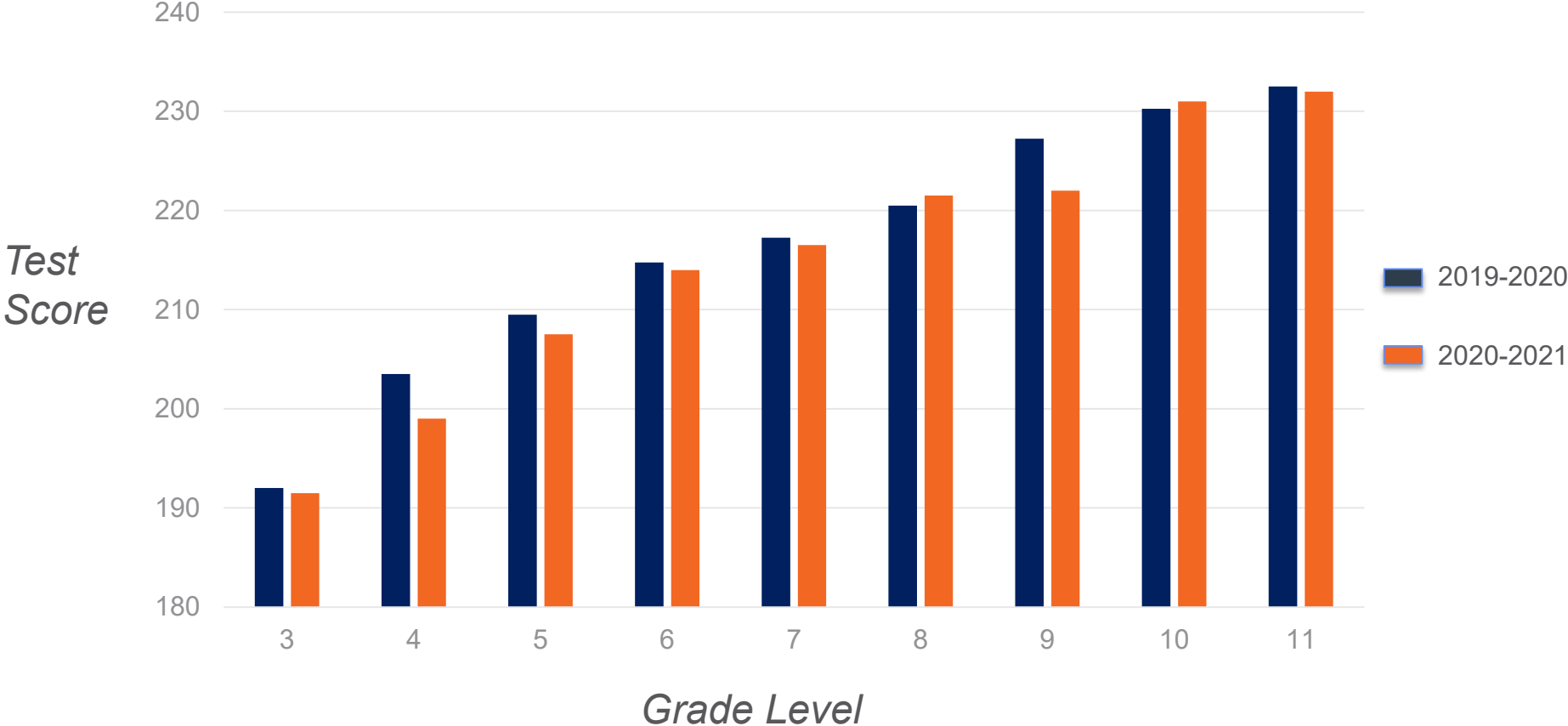
THE STUDY



- 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



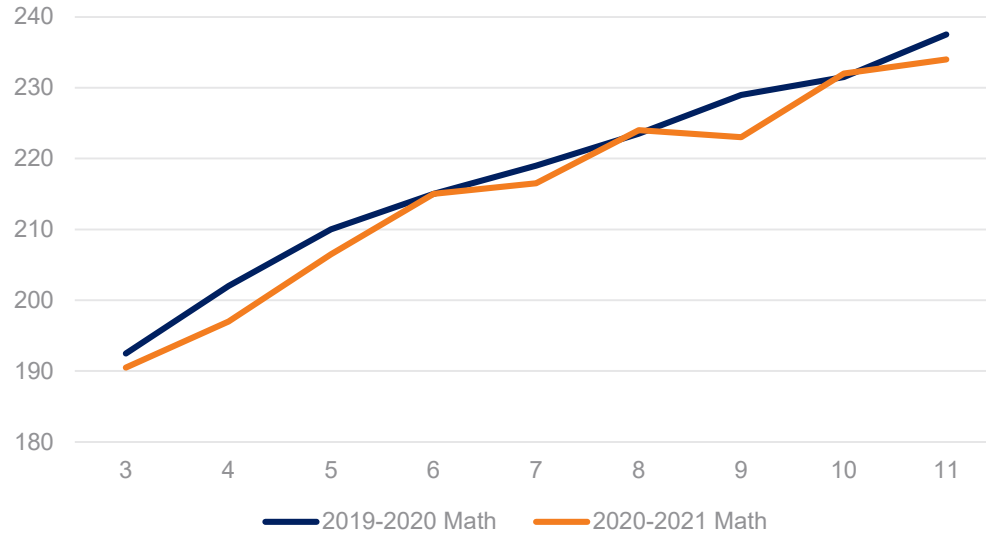
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2019-2020 N ranges from 89-168 per grade, 1157 total students

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



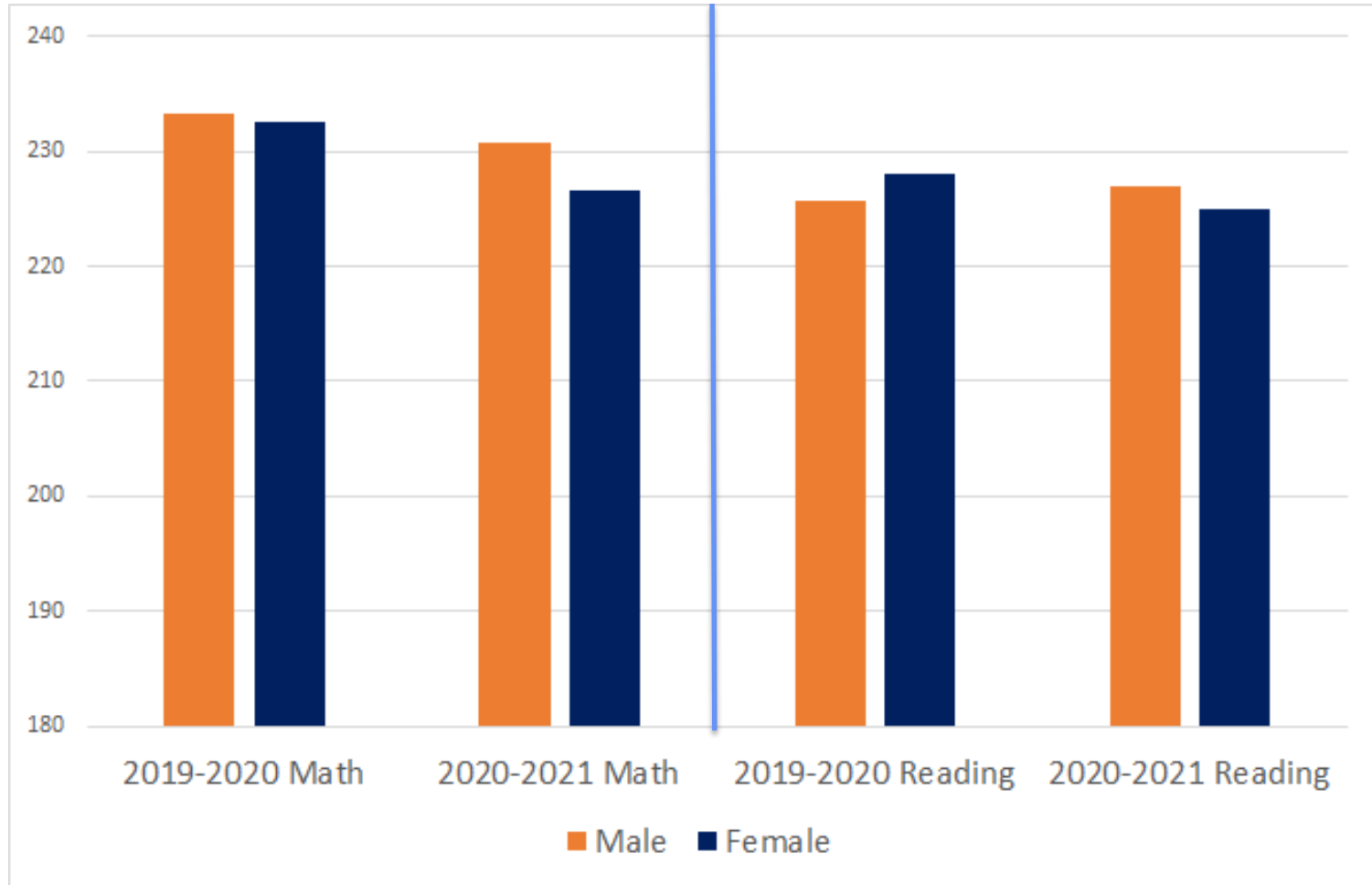
2019-2020 N= 1,157 total students

2020-2021 N=659 total students

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OUR PRELIMINARY DATA

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



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

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

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



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WRAP UP

What data and/or results have you examined to help better identify student 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?

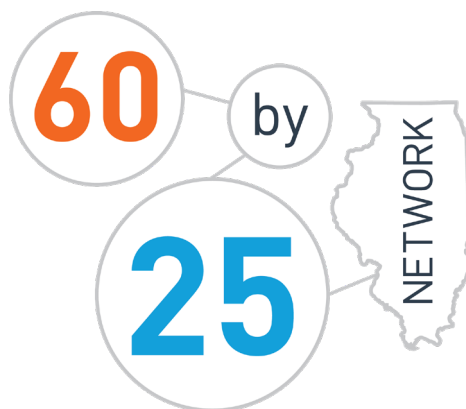
Would you like to connect to other who are interested in learning, discussing, and working further on COVID learning impact?

- Please put your contact info in the chat

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Questions?

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THANK YOU!

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