

# Examining Unfinished Learning Associated With the COVID-19 Pandemic

## The COVID-19 pandemic disrupted the education of students in Illinois and around the nation.

Regional Educational Laboratory (REL) Midwest worked with leaders at the Illinois State Board of Education and Illinois public school districts who wanted to better understand how student learning changed during the pandemic. This study examines data from 17 Illinois districts throughout five years, including four years prior to the pandemic, to measure how student learning changed in fall 2020 relative to earlier fall terms.

### Key findings

In fall 2020, following the onset of the COVID-19 pandemic, **students in grades 4–8 scored lower than expected in math** after adjusting for other factors,<sup>1</sup> but not in reading.

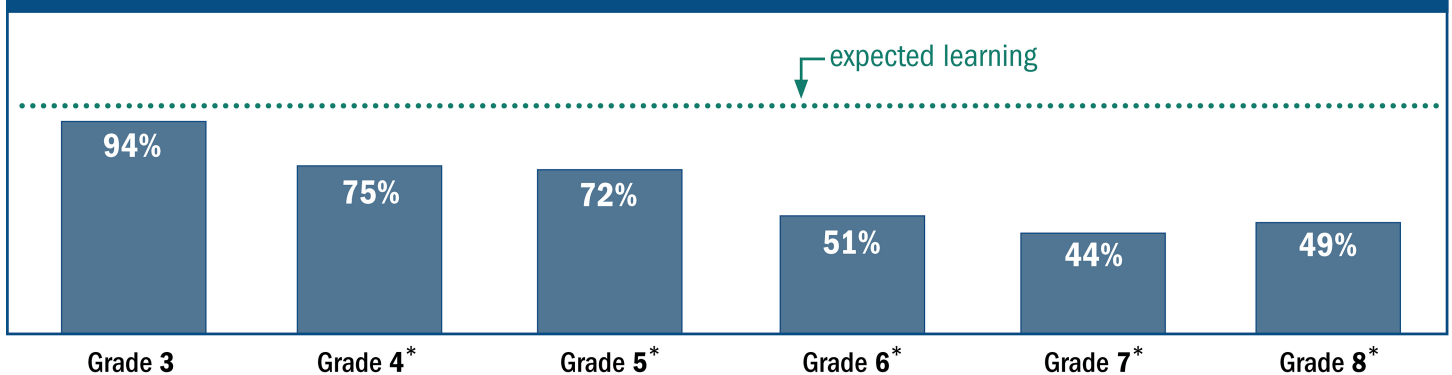
### Limitations

The study findings should be interpreted with caution, especially when generalizing to the student population of Illinois or other states. **The study includes a small number of Illinois districts and the students in these districts may not represent the Illinois student population or that of other states.**

**Unfinished learning in math was notably greater in middle grades 6, 7, and 8** than in elementary grades 4 and 5. The unfinished learning experienced by students in participating districts in Illinois was similar to what school and district leaders have found in classrooms across the nation.<sup>2</sup>



### Math learning by grade level

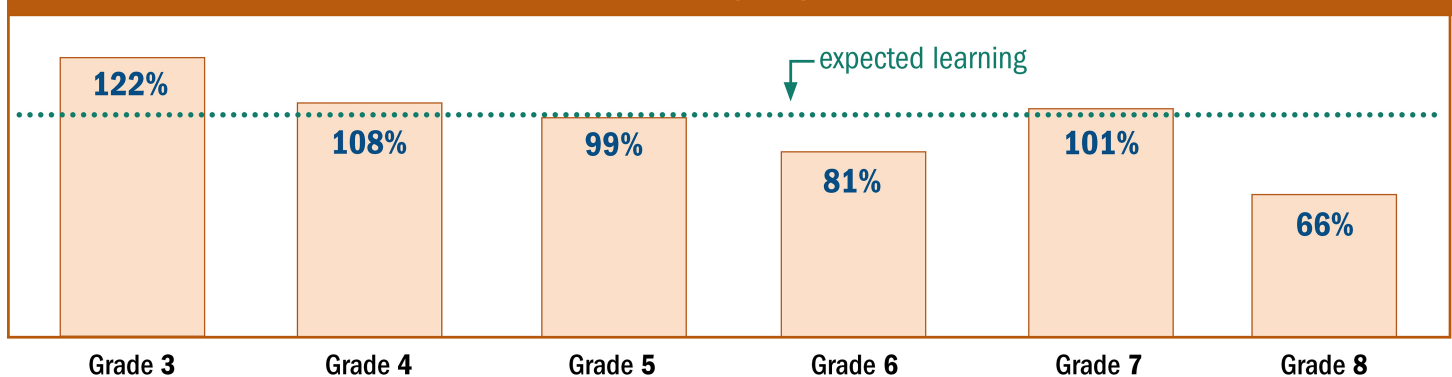


\* Estimated difference between expected and actual learning was statistically significant at  $p < .05$ .

**In reading, the pattern was different.** Student scores were not significantly different from expected learning in grades 3–8, after adjusting for other factors.



### Reading learning by grade level



**View the full report:** <https://ies.ed.gov/ncee/edlabs/projects/project.asp?projectID=6728>

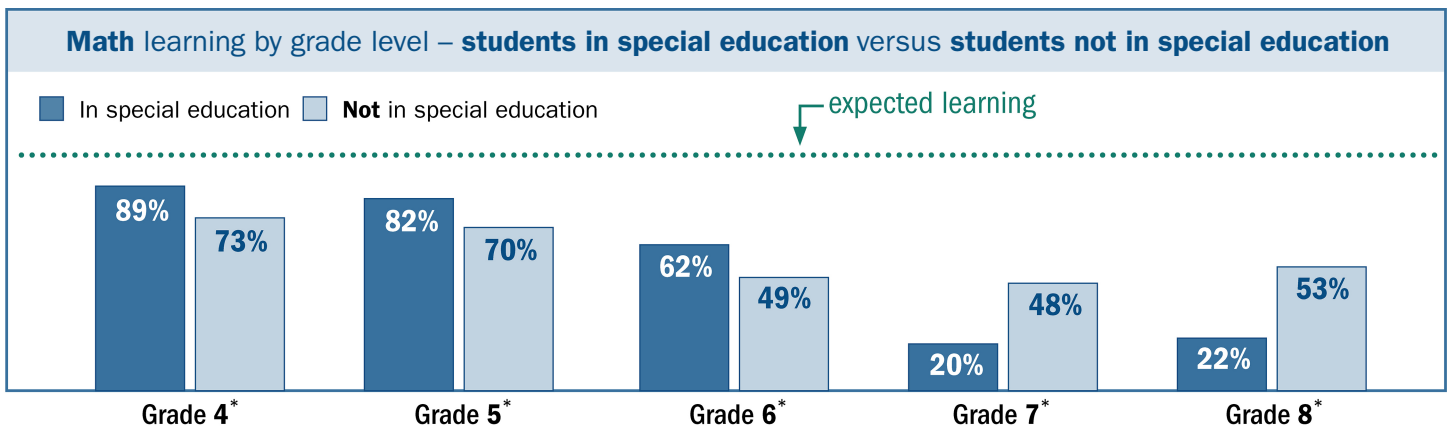
1 The study team included student demographic characteristics and prior test scores, factors known to be associated with student achievement, in the analytic model. By adding these items to the model, the study team was able to hold them constant, minimize their influence on the results, and increase the precision of the estimated relationship between the COVID-19 pandemic and student achievement.

2 Kuhfeld, M., Tarasawa, B., Johnson, A., Ruzek, E., & Lewis, K. (2020). *Learning during COVID-19: Initial findings on students' reading and math achievement and growth*. NWEA. <https://www.nwea.org/content/uploads/2020/11/Collaborative-briefLearning-during-COVID-19.NOV2020.pdf>

## Digging into math findings

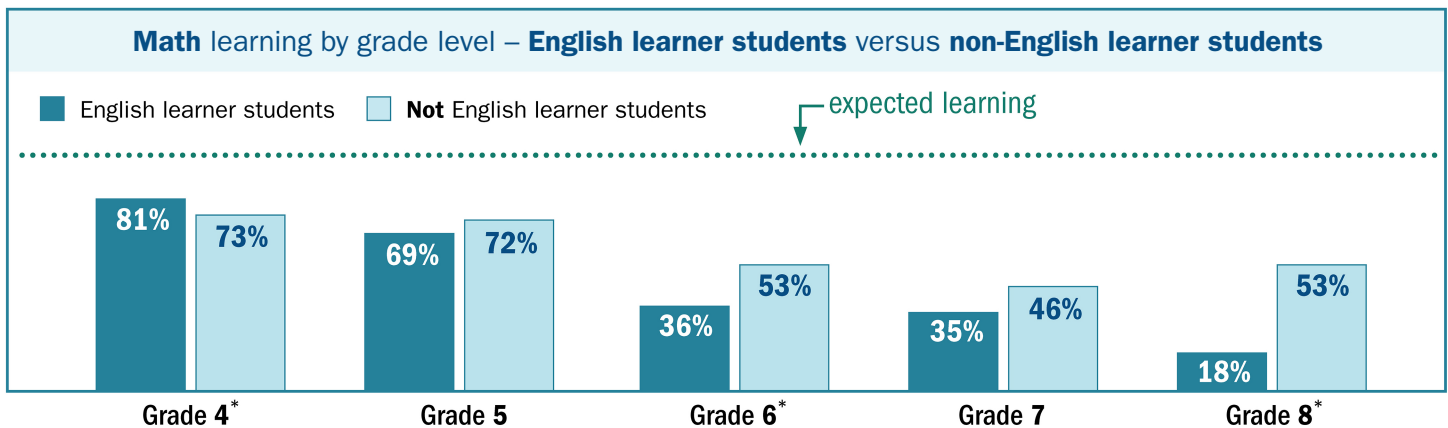


In grades 7 and 8, **students in special education experienced more unfinished learning in math** than did students who were not in special education, after adjusting for other factors.



\* Estimated difference in learning between students in special education and students not in special education was statistically significant at  $p < .05$ .

In grades 6 and 8, students who were **English learners experienced more unfinished learning in math** than did students who were not English learners, after adjusting for other factors.



\* Estimated difference in learning between English learner students and non-English learner students was statistically significant at  $p < .05$ .

## How to address unfinished learning — systemwide reflections



The following **guiding questions** are for Illinois district leaders to consider as they allocate resources and plan supports for students and continue to navigate the COVID-19 pandemic:

- 1** How do these results compare to what's happening in your district?
- 2** What evidence-based strategies have your schools and district used with elementary grades (which experienced less unfinished learning) and middle grades (which experienced more unfinished learning)?
- 3** Which evidence-based strategies did your schools and district find most helpful for accelerating learning in math with elementary grades? With middle grades?
  - Which of these strategies are transferable to other grade levels?
  - How can districts support the use of the strategies in their schools?



See REL Midwest's **Toolkit for Assessing Learning Changes After Spring 2020 COVID-19 School Closures** for guidance on how to measure learning changes in your district.

<https://ies.ed.gov/ncee/edlabs/regions/midwest/training-and-coaching/covid-19-learning-changes-toolkit.aspx>

### WHAT WORKS CLEARINGHOUSE



**What Works Clearinghouse** practice guides present recommendations for educators to address challenges in their classrooms and schools: <https://ies.ed.gov/ncee/wwc/practiceguides>

#### Math

- Assisting Students Struggling with Mathematics: Intervention in the Elementary Grades:  
<https://ies.ed.gov/ncee/wwc/PracticeGuide/26>
- Improving Mathematical Problem Solving in Grades 4 Through 8  
<https://ies.ed.gov/ncee/wwc/PracticeGuide/16>
- Teaching Strategies for Improving Algebra Knowledge in Middle and High School Students  
<https://ies.ed.gov/ncee/wwc/PracticeGuide/20>

#### Reading

- Foundational Skills to Support Reading for Understanding in Kindergarten Through 3rd Grade  
<https://ies.ed.gov/ncee/wwc/PracticeGuide/21>
- Improving Adolescent Literacy: Effective Classroom and Intervention Practices  
<https://ies.ed.gov/ncee/wwc/PracticeGuide/8>
- Teaching Academic Content and Literacy to English Learners in Elementary and Middle School  
<https://ies.ed.gov/ncee/wwc/PracticeGuide/19>

## REL MIDWEST

**REL Midwest** works to bridge the worlds of education research and practice and build a more evidenced-based education system. REL Midwest has developed several resources related to learning recovery due to the COVID-19 pandemic.

- Evidence-Based Literacy Interventions to Support Young Learners During and After the COVID-19 Pandemic  
<https://ies.ed.gov/ncee/edlabs/regions/midwest/events/2021/april-14.aspx>
- Looking Back to Face What Is Ahead: District Strategies to Engage With English Learner Students, Students With Disabilities, and Their Families  
<https://ies.ed.gov/ncee/edlabs/regions/midwest/events/2021/april-14.aspx>
- COVID-19: Evidence-Based Resources  
<https://ies.ed.gov/ncee/edlabs/projects/covid-19/>

## CCNETWORK REGION 9

Comprehensive Center Network

**Region 9 Comprehensive Center** helps state, district, and school leaders identify and implement evidence-based programs and practices with the goal of improving outcomes for educators and students alike.

- What's Working in Education During COVID-19?  
<https://region9cc.org/blog/whats-working-education-during-covid-19>
- Let's Invite Parents and Families Into the "Room Where It Happens"  
<https://region9cc.org/blog/lets-invite-parents-and-families-room-where-it-happens>
- Using a Peer-to-Peer Approach to Coordinate a Statewide Back-to-School Response to COVID-19  
<https://region9cc.org/blog/using-peer-peer-approach-coordinate-statewide-back-school-response-covid-19>