Are Academic Interventions Catching Students Up or Leaving Them Behind?

Susan Barrett and Joanna Bruno

April 8, 2022

Introductions

We've come to better understand the extent to which **remediation prevents many students from accessing grade-level work**—especially students of color, students with disabilities, students whose home language is not English, and students from low-income families or rural communities. Instead of waiting until students master all concepts from previous grades before moving on, **schools should accelerate access to grade-level work while providing targeted support on foundational concepts**.

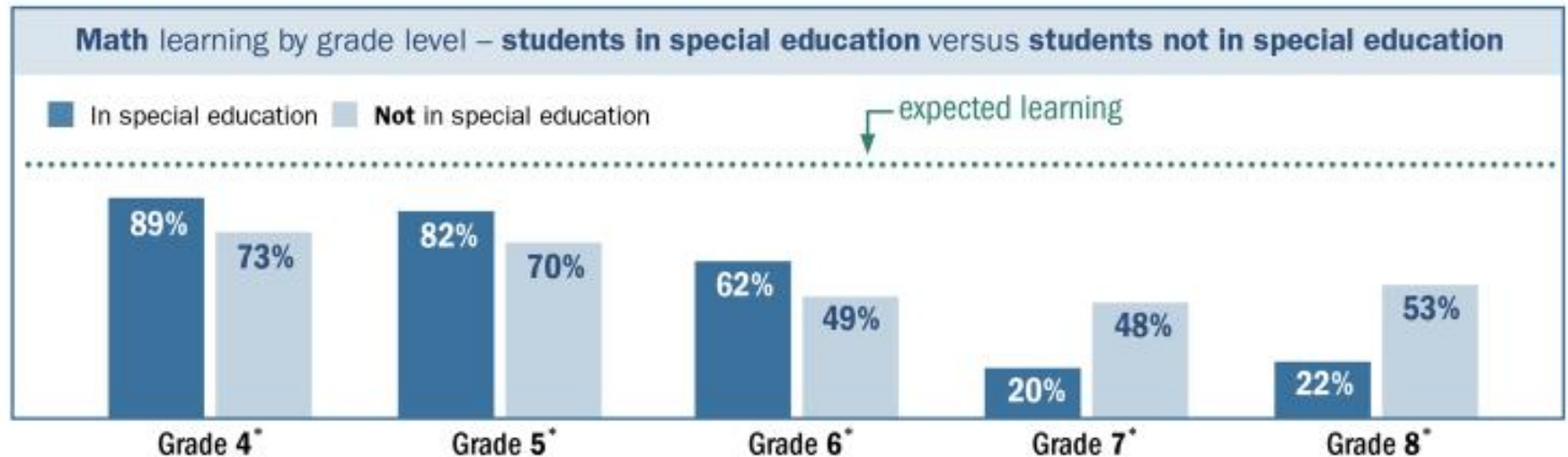from "Disrupting Barriers To Strong Instructional Scaffolding" from TNTP
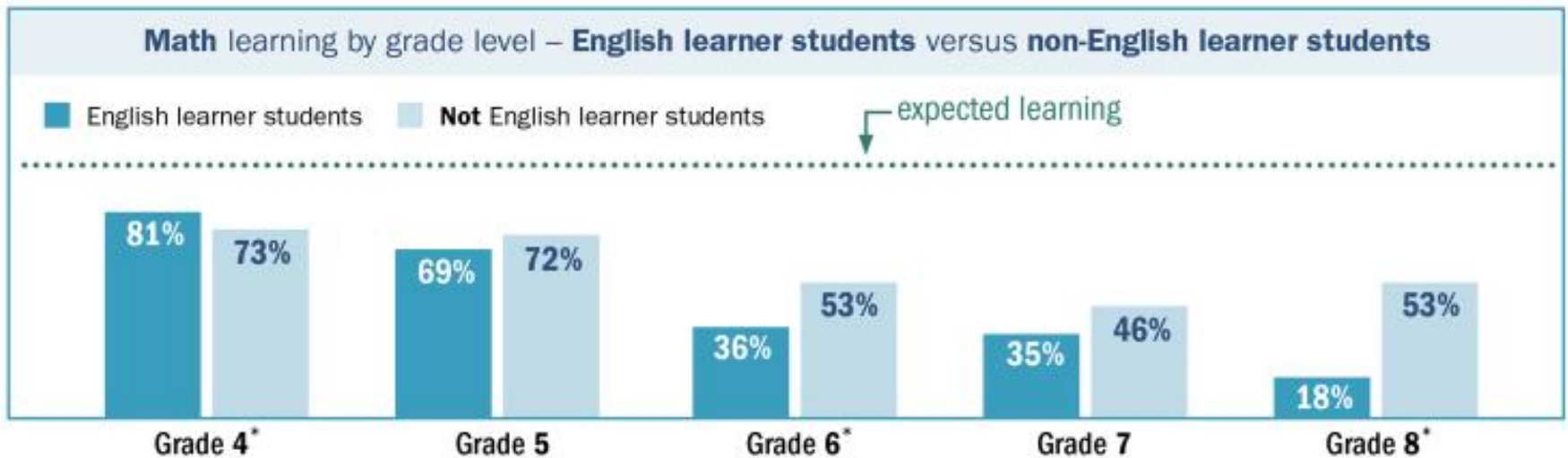
Impact of Pandemic on Learning

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.

Math learning by grade level – **students in special education** versus **students not in special education**

- In special education
- **Not** in special education

expected learning

89% / 73%	82% / 70%	62% / 49%	20% / 48%	22% / 53%
Grade 4*	Grade 5*	Grade 6*	Grade 7*	Grade 8*

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

IES Institute of Education Sciences

Pulled from, *Examining Unfinished Learning*
(Institute of Education Sciences)

1

6

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.

Math learning by grade level – **English learner students** versus **non-English learner students**

- English learner students
- **Not** English learner students
- expected learning

	Grade 4*	Grade 5	Grade 6*	Grade 7	Grade 8*
English learner students	81%	69%	36%	35%	18%
Not English learner students	73%	72%	53%	46%	53%

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

IES — Institute of Education Sciences

Pulled from, *Examining Unfinished Learning*
(Institute of Education Sciences)
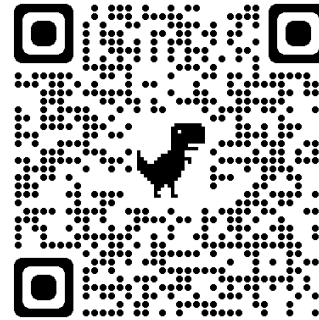
7

What Does Research Say?

- Science of Learning & Development principles apply.

- Unfinished teaching is just as crucial as naming unfinished learning.

- You cannot have students move forward by holding them back.
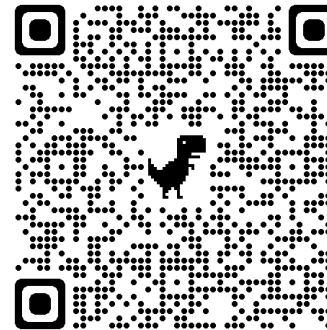
Unfinished Teaching and Learning Resources to Consider

- Examining Unfinished Learning
 (Institute of Education Sciences)

- Why Unfinished Instruction is More Accurate and Equitable Than Learning Loss
  (UnboundEd)

Why we should accelerate rather than remediate ….

REMEDIATION	ACCELERATION
Spending significant time in below-grade level content before moving into new learning	Connecting unfinished learning into the context of new learning
….. covering many objectives or standards from prior grades/units (usually extending to a month or more of instruction) ….	…. integrating a few lessons from prior grades/units
.… isolated from grade appropriate learning	…. Just-in-time to grade appropriate learning (whether in core or extended time)
…. usually with greater than 50% of time on procedural fluency	…. always with an appropriate balance of fluency, conceptual understanding, and application work
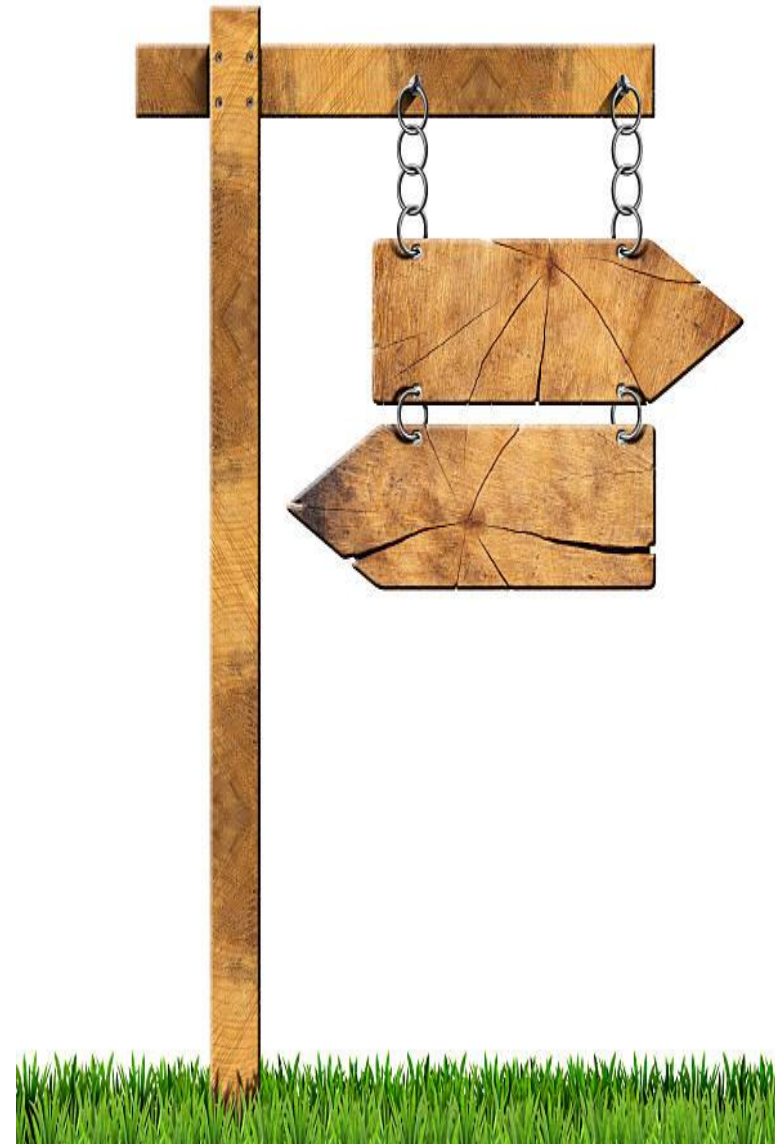
Adapted from Accelerate, Don't Remediate: New Evidence from Elementary Classrooms. TNTP, May 2021.

Effectiveness of Learning Acceleration versus Remediation

- A study from TNTP with schools using ZEARN mathematics

- Classes receiving acceleration struggled 10x less than those with remediation

- Increased percentage in the number of grade-level lessons completed
  - All classrooms: 27% increase
  - Classrooms with high percentages of students of color: 49% increase
  - Title I eligible: 28% increase

Pulled from, Accelerate, Don't Remediate: New Evidence from Elementary Classrooms. (TNTP)

Key Takeaways…

- ## Invest in the Infrastructure for Learning Acceleration
  - Adopted **aligned curriculum**

  - Appropriately **train teachers** to implement the curriculum.

- ## Execute Equitably
  - Provide *instructional support* that fosters all students' persistence with **grade-level learning**.

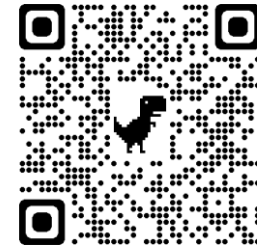 - Provide *targeted intervention* in addition to and in service of **grade-level learning**.

Acceleration vs. Remediation Resources for Consideration

- Disrupting Barriers to Strong Instructional Scaffolds (TNTP)

- Accelerate, Don't Remediate: New Evidence from Elementary Classrooms.
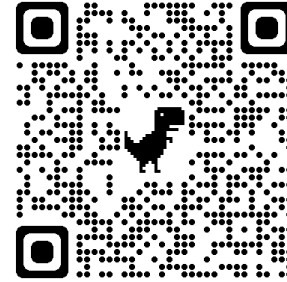
  (TNTP)

Research Methodologies to Support Accelerating Learning

High-Impact Tutoring and Expanded and Extended Learning Opportunities Resources for Consideration

- School practices to address learning loss (EdResearch for Recovery)

- Strategies to Solve Unfinished Learning (Education Trust)

Putting Accelerated Learning Into Practice

University Prep Case Study

University Prep is a public charter network operating two elementary schools in Northeast Denver.

87% qualify for free or reduced lunch	**11%** have IEPs

Grade Level Curricula

English/Language Arts	**Math**	**Science**
CKLA Skills Wit and Wisdom	Eureka Math	Amplify

Three Year Acceleration Plan

U Prep's Acceleration Plan Pillars

Grade Level is Grade Level

- Continue to use strong existing core curriculum and critical grade-level assessments, delivering grade-level content.

Rapid Acceleration

- Adopt a small school model (K-1, 2-3, and 4-5) in order to provide tiered support based on anticipated student needs.

- Implement a tutoring program to provide additional academic support to students who need it most.

Family and Community Partnerships

- Conduct home visits and other events to engage families.

- Create opportunities to share openly and honestly with families about students' progress throughout the year.

Implementation Focus

Grade Level is Grade Level

- Every student is getting access to grade-level content every day.

Rapid Acceleration

- All students have time within the day for acceleration.

- Target students are receiving after-school tutoring.

Family and Community Partnerships

- Family conferences have been prioritized, resulting in greater family engagement.

Student Outcomes Mid-Year

- English/Language Arts: Significant acceleration for all grades
  - Ranging from 9%-17% increase from BOY to MOY in percent of students on grade level
  - K-2 students not growing as quickly as 3-5
  - Students below 25% decreased significantly from BOY to MOY.
- Math: Inconsistent acceleration
  - One grade level is accelerating quickly; others are not yet

Acceleration Efforts So Far

Celebrations

- Students are getting experience with grade-level material every day.

Challenges

- Made an incorrect assumption that K-1 students would need less support.
- Underestimated students' social-emotional needs.
  - Didn't plan well enough for what students would be bringing back into this space with them after 18 months of isolation.
- Teachers were not prepared for rapid acceleration; they needed a clearer vision for what successful acceleration looks like.

Tutoring Efforts So Far

Celebrations

- Finding the right partnerships were what enabled this to succeed.
- Tutoring initiative is prioritized and a senior member of team is leading it.

Challenges

- Connecting tutoring to the work done in class.
- Providing tutors with specific training and support.

- **Have a strong progress monitoring plan in place**.
  - Know what you will look at to gauge progress and when you'll reflect on it.
- **Have an Implementation Team in place**
  - Empowered to take thoughtful and decisive action as needed to respond to evolving challenges.
- **Keep stakeholders (including school staff) looped in** as needed through any adjustments.
  - Team members
    - have a part in the decision-making OR
    - are able to give input

Case Study- more to come!

Strategy Guides:
A Starting Point

What are Strategy Guides?

Resources aimed at supporting schools and districts to better understand what research says about common practices that are implemented as part of school improvement efforts.

Strategy Implementation

Implementation Guide

Components, and elements within each component, should be implemented sequentially in the following order to increase the likelihood of successful outcomes.

Core Component 1: Plan to Implement Trauma-Informed Practices

Action Steps	Description
Create a Trauma Leadership Team	School leaders should consider creating a trauma leadership team made up of various stakeholders, including teachers, support staff, families and others, to collaboratively perform a trauma audit, analyze results, set goals and prioritize action steps in the development of an implementation plan.
Perform a Trauma Audit	School leadership teams should understand what procedures and practices are currently in place and what are needed by performing an audit on trauma-informed school systems. Consider the use of the Trauma Responsive Schools Implementation Assessment, adapting the Trauma Informed Care Project's self-assessment for organizations, or considering SAMHSA's questions for implementing a trauma-informed approach in regards to the ten implementation domains.
Set Goals	School leadership teams should set immediate, short-term, mid-term and long-range goals around implementing trauma-informed practices based on results from the trauma audit. Schools leaders and staff should understand that implementing trauma-informed educational practices is a whole school effort. Implementing this level of change is a developmental process and will occur gradually over time.

Available Strategy Guides

Most Relevant	Also Helpful
High-Dosage Tutoring	Data-driven Instruction
Learning Loss Recovery	MTSS
Trauma-Informed Education	PBIS
Summer School	Coaching

Links to resources

UPrep Case Study Website

CDE Strategy Guides

Most Important Takeaways

Student Access Grade Level Content Each Day

Productive Struggle= Learning

Attend to Student and Staff Social-Emotional Needs

Breakout Sessions

203 A: Accelerating Learning: High Quality Tutoring Strategies
11:30 am-12:30 pm

204 A: Accelerating Learning: High Quality Tutoring Strategies
12:45 pm-1:45 pm

Q & A

Susan Barrett

Office of School Improvement and Planning

barrett_s@cde.state.co.us

Joanna Bruno

Office of Standards and Instructional Support

bruno_j@cde.state.co.us