

la SCUOLA **e**

26 marzo 2021





Cosa stiamo perdendo degli apprendimenti di Matematica?

Giorgio Bolondi

FEDERAL POLICY AND REFORM

CORONAVIRUS

COVID STIMULUS

Billions for learning loss: How Joe Biden's stimulus plan would work

By Matt Barnum | Feb 8, 2021, 5:54pm EST

K-12 schools would get nearly \$130 billion, or to be precise, \$128.6 billion. That amounts to about \$2,600 per public school student, although the exact amount would vary by district. It's significantly more than what has already been allocated by Congress for schools (about \$13 billion in March 2020 and another \$54 billion late last year).

Money would be targeted at high-poverty schools. The proposal says that dollars would flow to states and districts in the same way they did in the last relief package. That means the money would largely follow Title I of the federal education law, which sends money to school districts with more low-income students. In other words, some states and districts would get more than \$2,600 per student, and some will get less.



UNESCO Building peace in the minds of men and women

ENGLISH 

One year into COVID: Prioritizing education recovery to avoid a generational catastrophe

 **When, Local Time** From Mar 29, 2021, 2:00 PM To Mar 29, 2021, 4:00 PM

 **Contact:** Cynthia Guttman

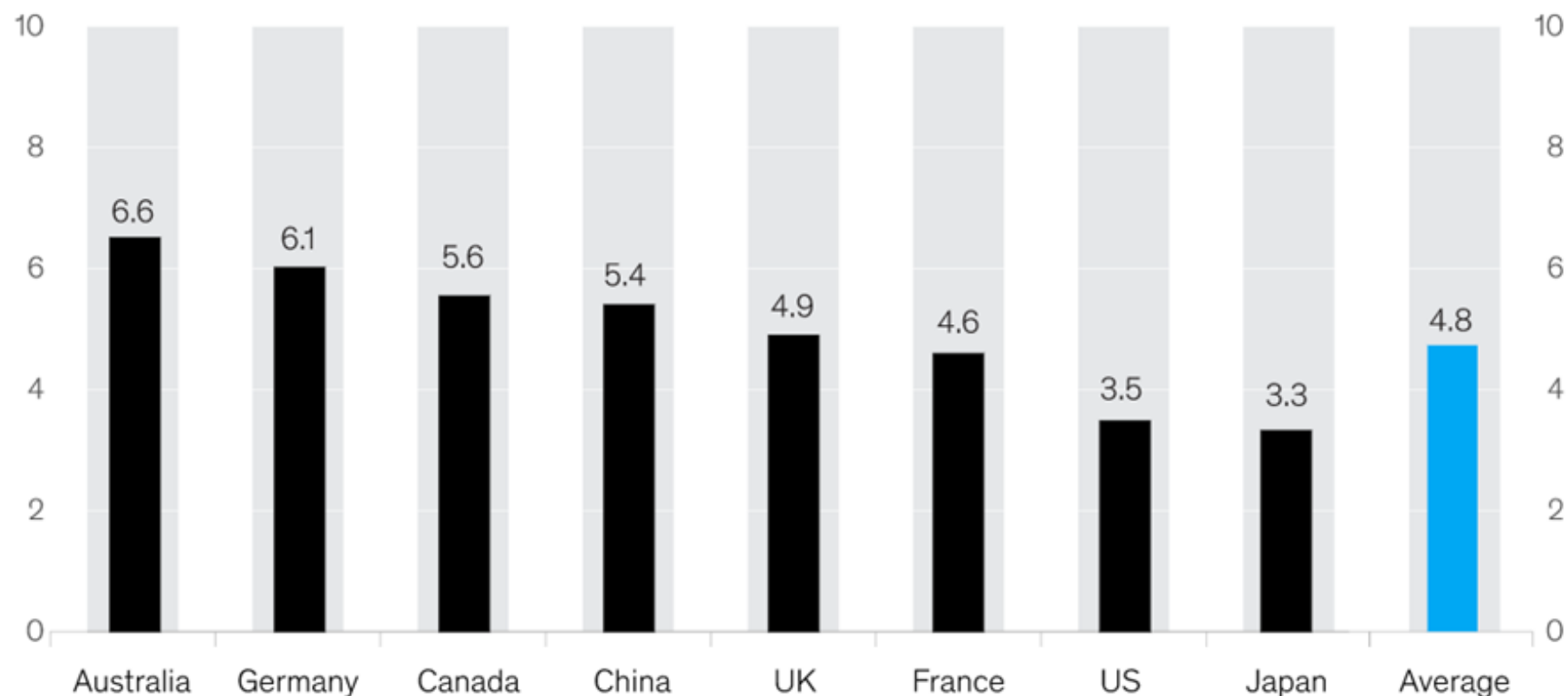
 **Event Type:** Cat VII – Seminar and training

 **Where:** Online from Paris, , Online, , France



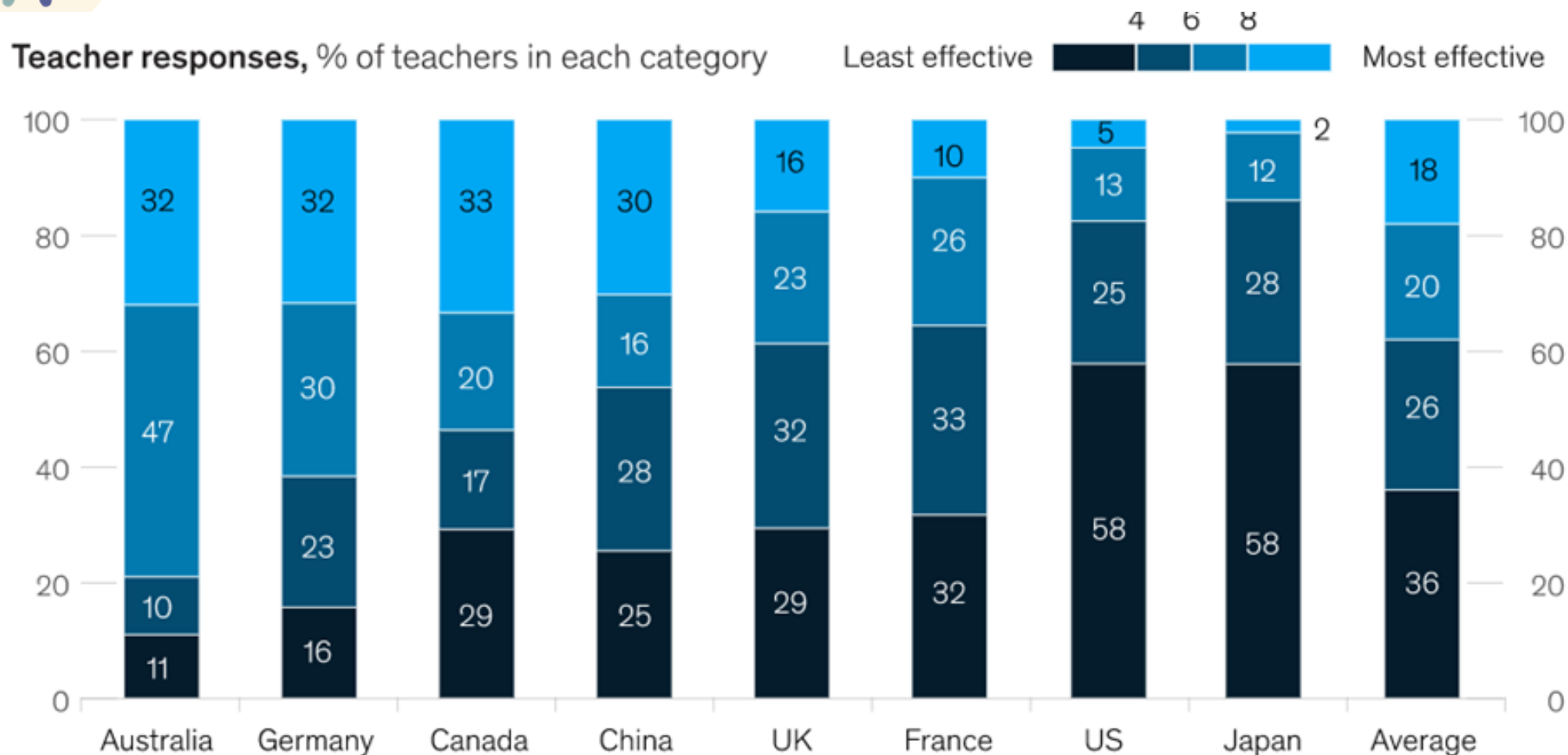
As classes went online, teachers saw the effectiveness of instruction decline.

Average effectiveness of remote learning,¹ score



Teacher responses, % of teachers in each category





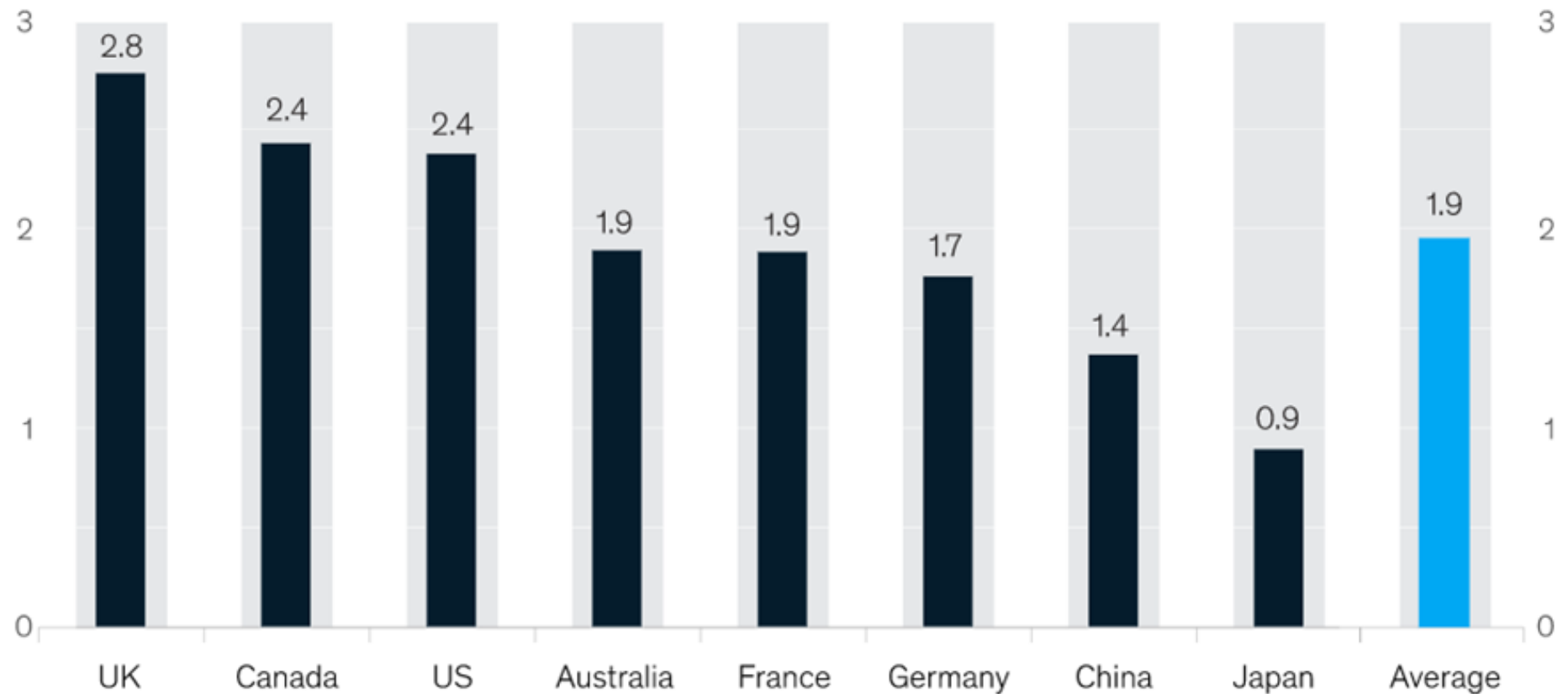
Note: Bars may not total to 100%, because of rounding.

¹Question: How effective was remote learning in the spring compared with in-person learning? (1 = least effective; 10 = most effective, equivalent to in-person learning).

Source: McKinsey Teacher Sentiment Survey, carried out October 28 to November 17, 2020, of 2,549 teachers across Australia (146), Canada (350), China (350), France (278), Germany (274), Japan (350), United Kingdom (351), and United States (450)

Teachers reported that students were on average two months behind where they usually would have been by early November 2020.

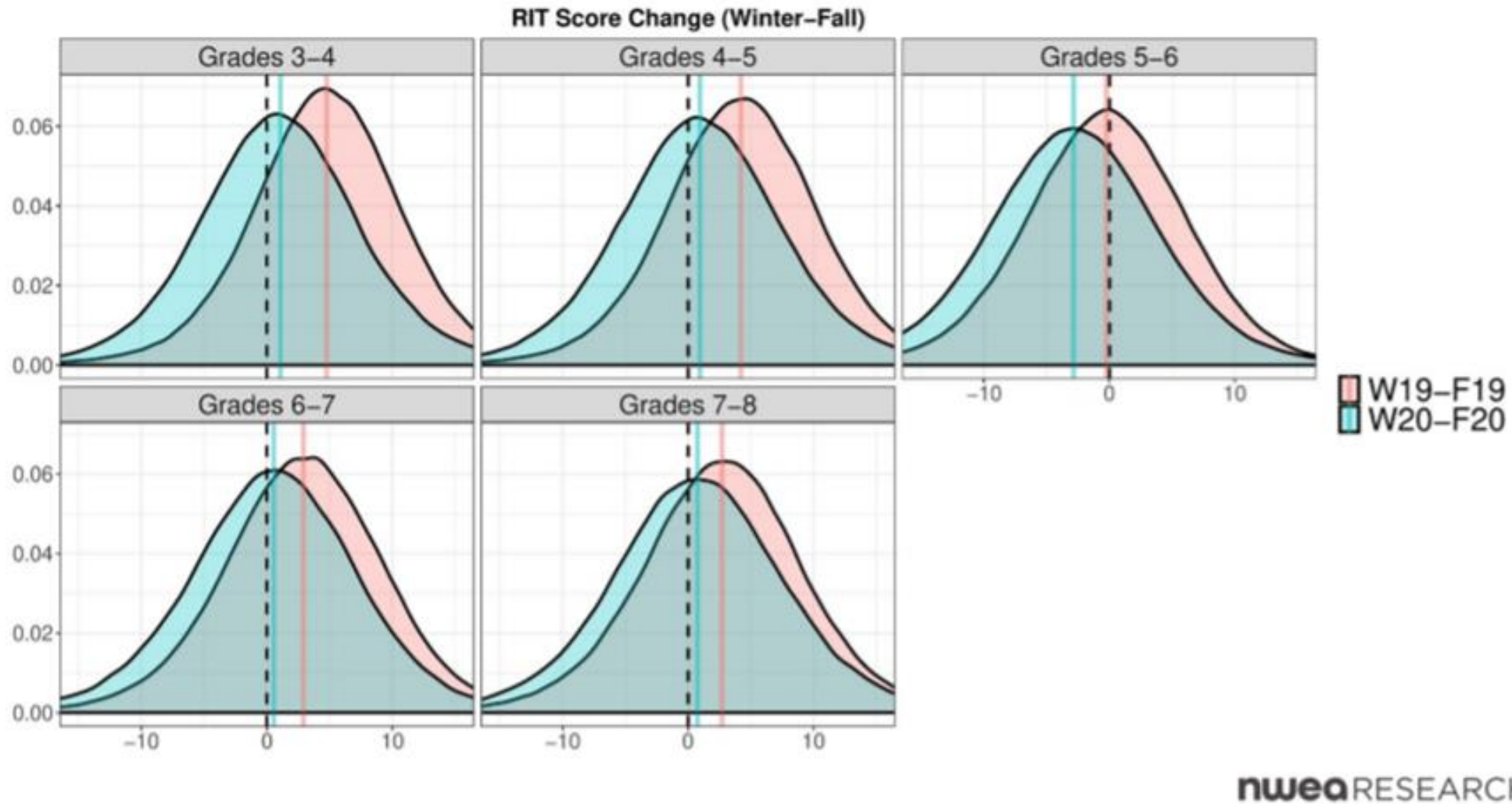
Amount of learning lost,¹ months (average)



Comparazione “giorni in presenza” A.S. 2020/21

Ordine Scolastico	Numero di Giorni di scuola in presenza							
	Milano	Roma	Napoli	Bari	Reggio C.	Torino	Palermo	Firenze
Giorni teorici previsti	107 (*)	108	97	107	97	104	107	106
Scuola dell’Infanzia	112	108	70	48	86	104	103	106
Scuola Primaria	107	108	53,6	48	79	104	99	106
Scuola secondaria di 1° grado	100,7	108	42	48	60,8	79,5	95,5	95,5
Scuola Secondaria di 2° Grado	61,9	80,6	27	30,5	35,5	54,1	61,5	75,1

(*) per la scuola dell’infanzia 112 giorni



*Figure 3: Distribution of within-student change from winter 2019–fall 2019 vs. winter 2020–fall 2020 in math.
 Note: The vertical red and blue lines display the median growth estimate for winter 2019–fall 2019 and winter 2020–fall 2020 respectively. The black dashed line represents zero growth (e.g., winter and fall test scores were equivalent).*

No Longer a Prediction: What New Data Tell Us About the Effects of 2020 Learning Disruptions

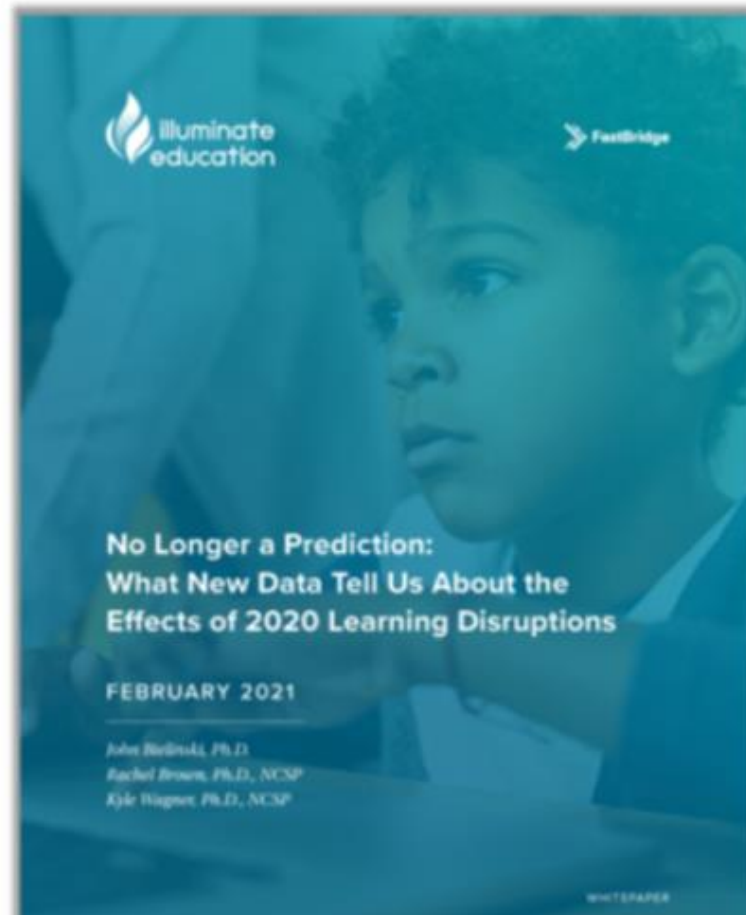


FIGURE 1: aREADING FALL TO FALL GAIN SCORES BY GRADE

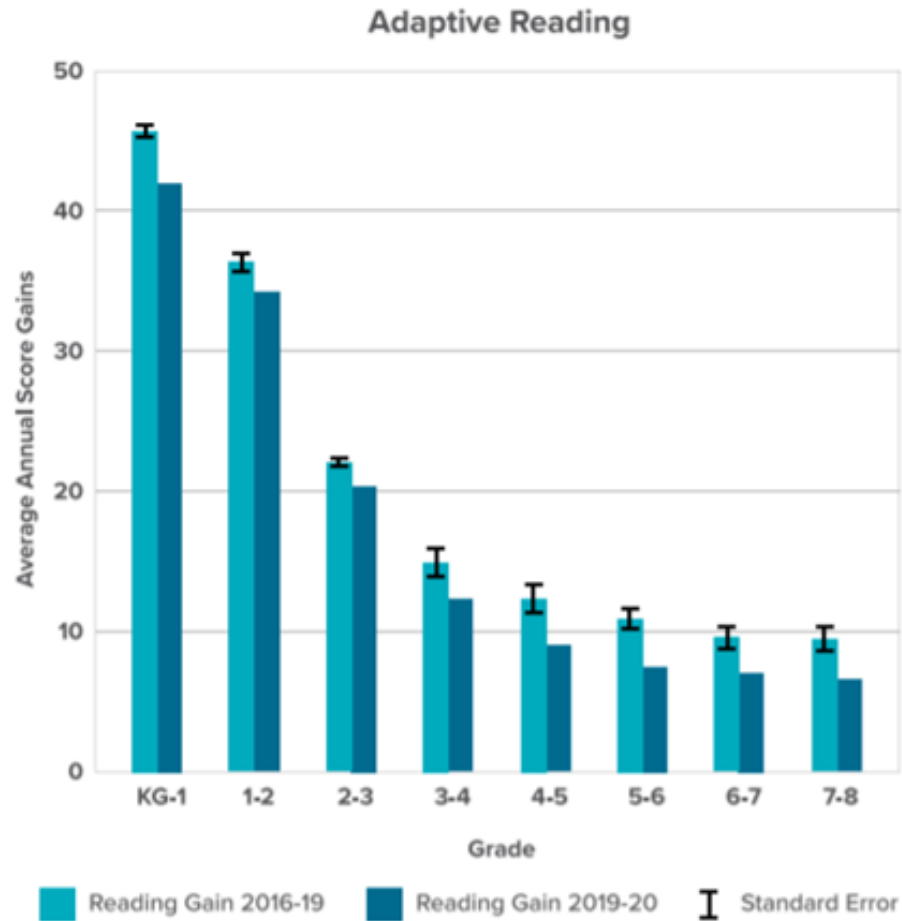
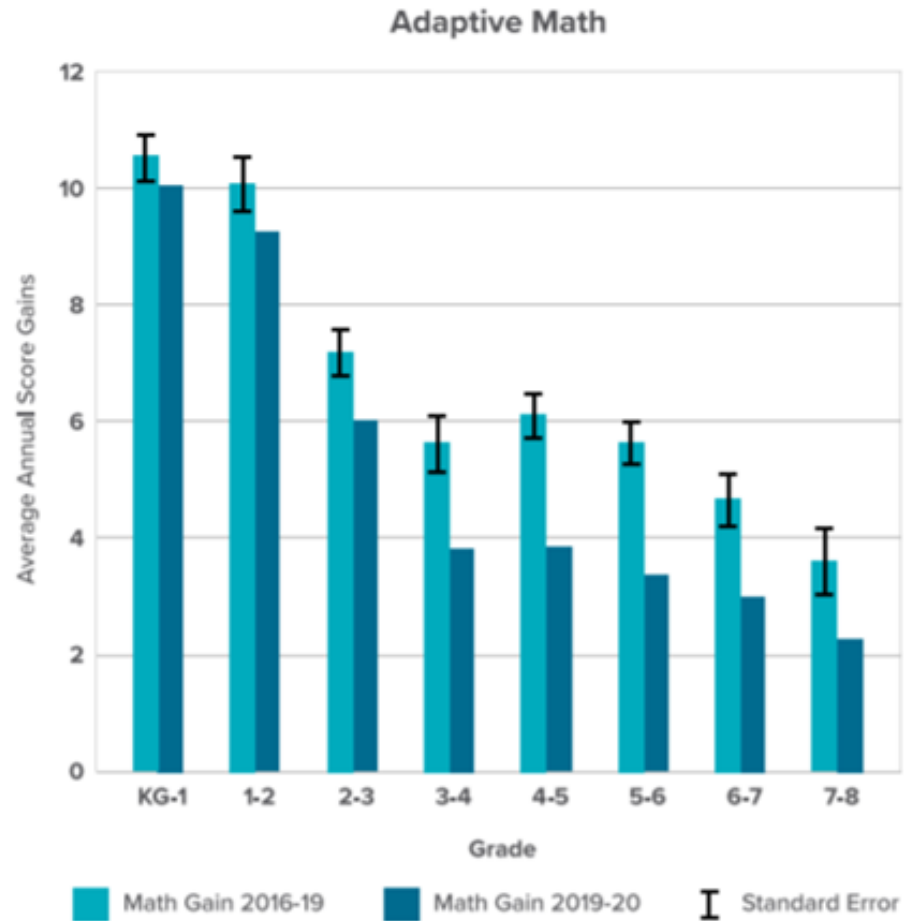


FIGURE 2: aMATH FALL TO FALL GAIN SCORES BY GRADE



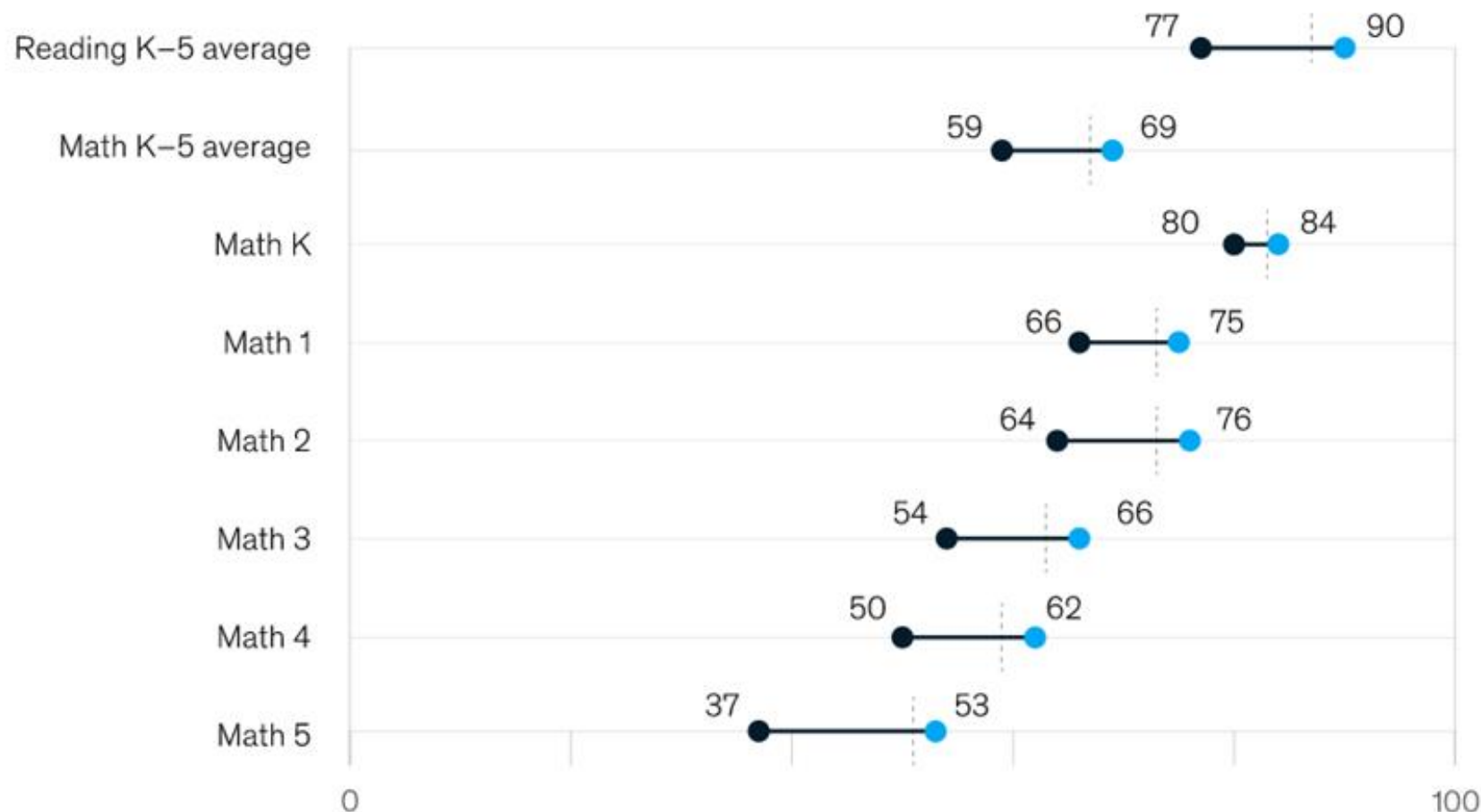
Most students are falling behind, but students of color are faring worse.

Amount students learned in the 2019–20 school year, % of historical scores¹

● Schools with >50% students of color

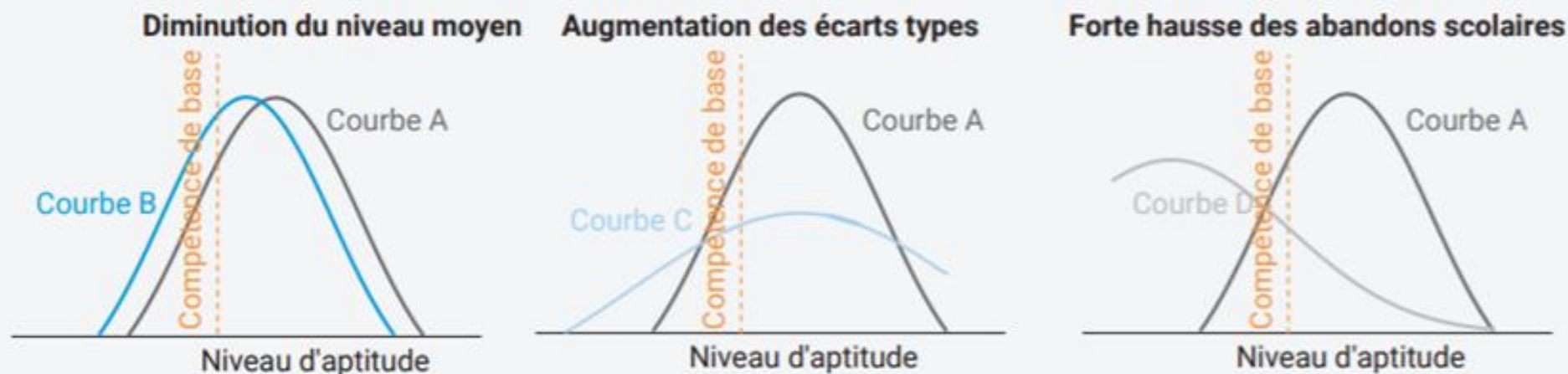
--- All schools average

● Schools with >50% white students

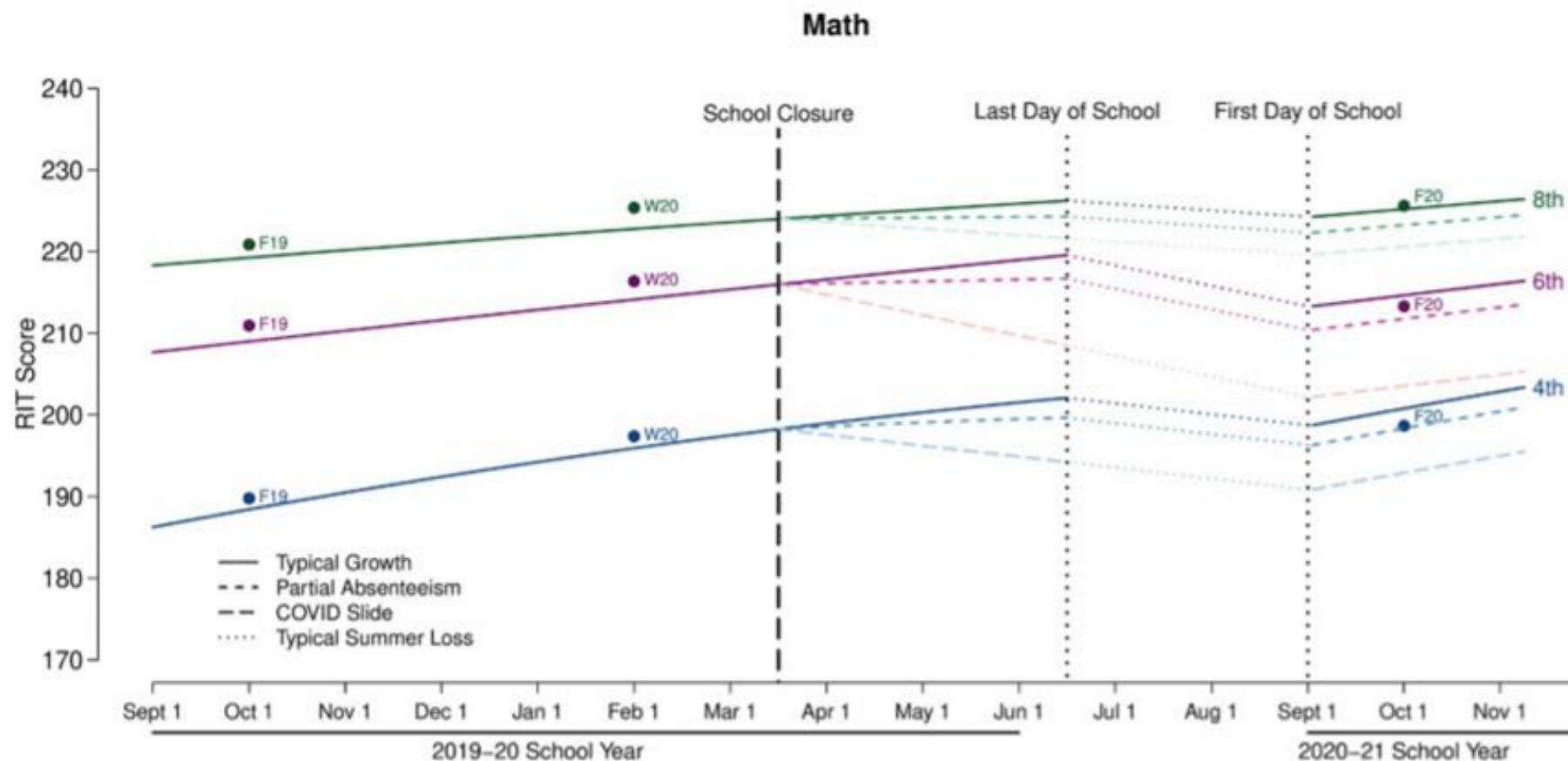


¹Percent of an "average" year of learning gained by students in 2019–20 school year, where 100% is equivalent to historical matched scores over previous 3 years.
Source: Curriculum Associates

FIGURE 3. SCENARIOS POUR L'APRES-COVID-19 : BAISSE DU NIVEAU MOYEN, AUGMENTATION DES ECARTS TYPES OU FORTE HAUSSE DES ABANDONS SCOLAIRES



Source: <https://blogs.worldbank.org/education/we-should-avoid-flattening-curve-education-possible-scenarios-learning-loss-during-school>.



nweaRESEARCH

Figure 6: NWEA COVID-19 learning projections with observed fall 2019, winter 2020, and fall 2020 average RIT scores overlaid. Note: The projected lines were estimated based on student data collected in the 2017-18 and 2018-19 school years. The observed points (RIT score averages from the testing windows with the most observed data) reflect data from our study sample collected during 2019-20 and 2020-21, which was higher performing than average relative to the overall NWEA sample. More information about each projected scenario is available in our recent paper.⁹

Significant investments will be required to catch up on lost learning.

What might it cost? Examples of scaling existing evidence-based approaches

Acceleration Academies

6 months of additional
learning over 2 weeks of
vacation academies

- Weeklong academies in reading
- 25 hours of targeted instruction
- Small groups of 8–12 students
- \$1,600 per student per year

\$42 billion

to reach 50% of the United States'
53 million schoolchildren

High-intensity tutoring

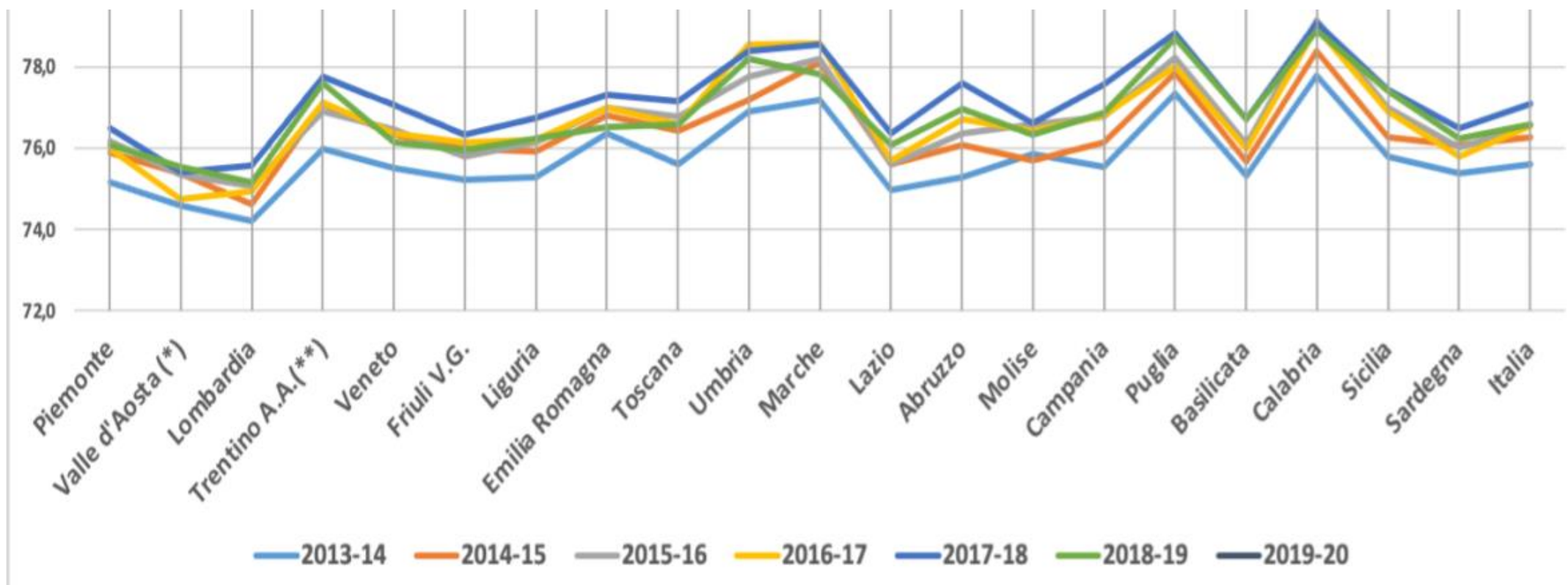
1–2 years of additional
learning over 1 year

- 50 minutes of tutoring daily in math
- Provided by paraprofessionals
- 2 students per teacher
- \$2,500 per student per year

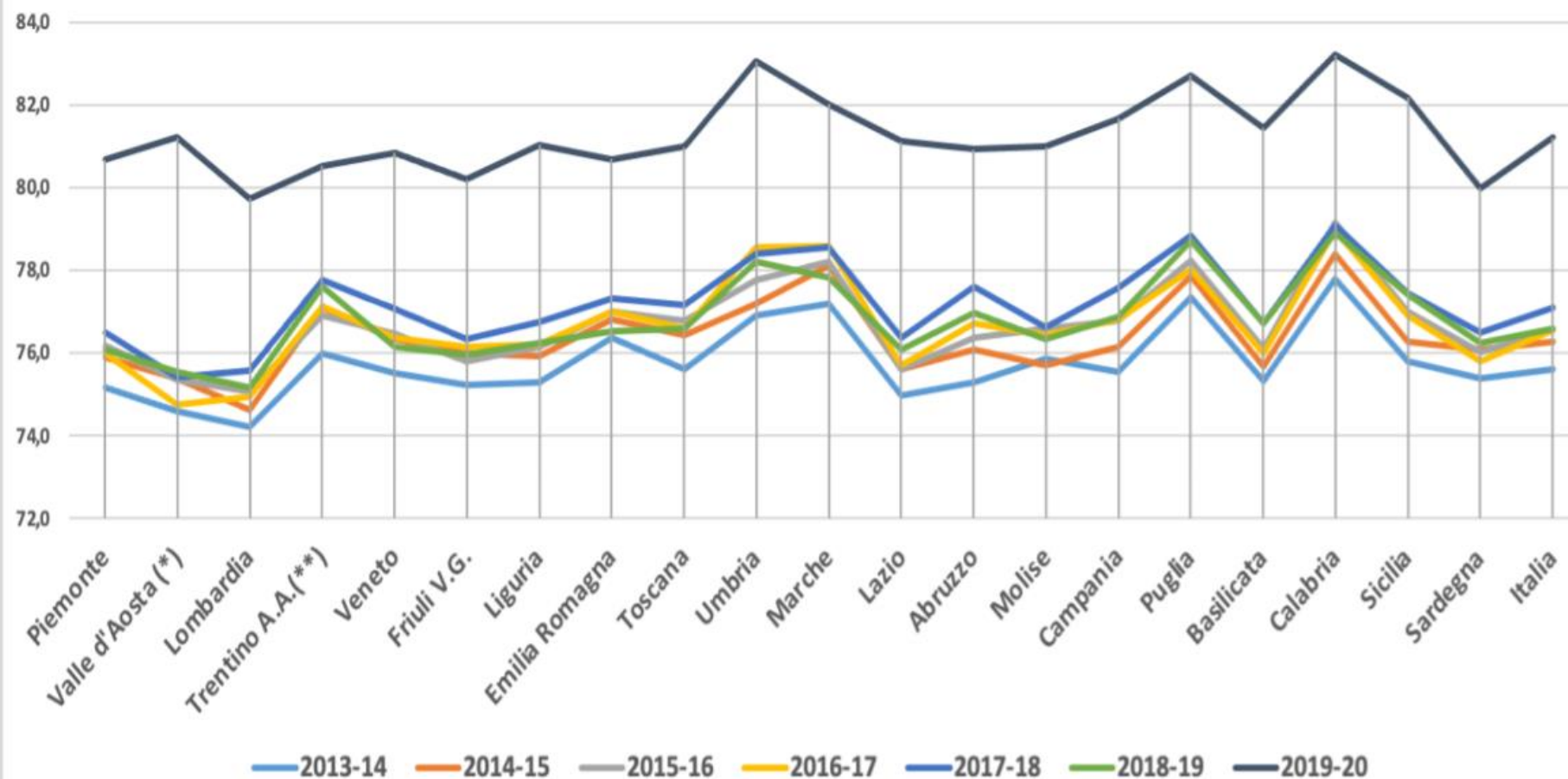
\$66 billion

to reach 50% of the United States'
53 million schoolchildren

Source: McKinsey projections, based on studies by *Educational Evaluation and Policy Analysis*, EdResearch for Recovery Project, and Hamilton Project



Voto medio per regione all'esame di Stato al termine della scuola secondaria di II grado Anni 2014-2020



1. Occorre diagnosticare i **gap-chiave** con adeguati strumenti di valutazione



2. Non è necessario sanare tutti i gap ereditati dal grado precedente



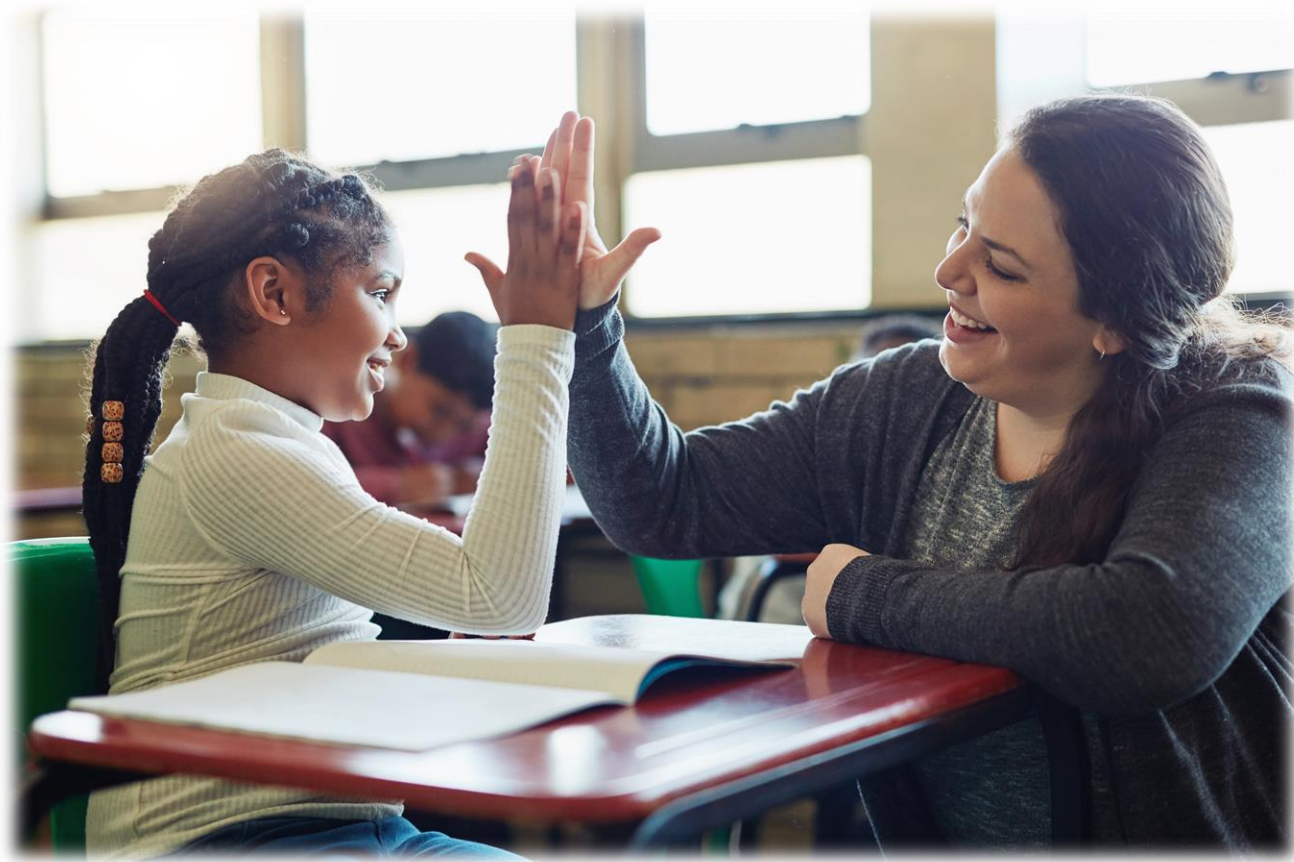
3. Cercare di **integrare** il recupero dei gap del grado precedente con i nuclei centrali del grado presente e dei successivi



4. Occorre supportare gli allievi con gap consistenti con ore aggiuntive dedicate alla Matematica



5. Occorre pensare a **interventi di recupero personalizzati**



6. Probabilmente occorrerà prevedere interventi sul **medio-lungo periodo** (diversi anni)



***Cosa fare in
questi mesi?***



Cosa fare durante l'estate?



Cosa fare al rientro, soprattutto nelle classi di raccordo?



Cosa abbiamo imparato?





Grazie