Accelerate, Don't Remediate: An Instructional Framework for Meeting the Needs of the Most Vulnerable Students after COVID School Closures

by Melissa Lambert, M.Ed., and Joseph Sassone, MA

Abstract

Research on seasonal learning and time in and out of school provided the foundation for preliminary projections that students would 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 (Kuhfeld, Soland, Tarasawa, Johnson, Ruzek, & Liu, 2020). This is detrimental for all students, but potentially catastrophic for those who were already academically behind grade-level. Responding to this unprecedented crisis will take more than the typical academic remediation for students, there is a need to improve access to rigorous, grade-level academics with targeted support to accelerate learning. In this article the authors provide a narrative review of research related to the impact of COVID-19 school closures on student achievement and what it means for educators. Findings were applied to an instructional framework that incorporates critical considerations toward equitably serving the most vulnerable students.

Introduction

There is no precedent for what school districts face following the COVID-19 global pandemic school closures. Impacts on student achievement are far reaching particularly for the most vulnerable and marginalized students including, students with disabilities, students with limited or interrupted formal education (SLIFE), lower income-socioeconomic status (SES), and English language learners (ELL). Students spent nearly double the amount of time away from classroom learning in 2020 in comparison with a typical 10-week summer break (Kurtz, 2020).

While COVID learning interruptions are unprecedented in modern times, existing research on the impacts of missed instruction due to chronic absenteeism, summer learning loss (learning slide), economic impacts, and catastrophic event closures informed projections of potential learning impacts due to the pandemic (Kuhfeld & Tarasawa, 2020; Perry, 2020). Known broadly as "learning loss" researchers have studied contributing factors to "unfinished learning" for decades (Cooper, Nye, Charlton, Lindsay, & Greathouse, 1996). Unfinished learning refers to concepts and skills students have not yet mastered - rather than deficit terminology such as "loss" and "gap," unfinished learning suggests that with more targeted support, students can and will achieve mastery (Council of Great City Schools [CSGS], 2020).

Findings from research on unfinished learning hold implications for schools in the current crisis. In order to also integrate emergent themes from work specifically related to COVID-19 impacts, we conducted a narrative review of published and grey literature. Key findings from this and earlier literature were used to develop a framework for responding to unfinished learning.

Method

We conducted a narrative review of articles and reports on the impacts of the COVID-19 school closures on students (K-12). We searched electronic databases (Institute of Educational Sciences (IES) What Works Clearinghouse (2020), ERIC, Sage Pub, and ERIC) from April 2020 until August 2020. We carried out the search using free text terms and Boolean operators; COVID-19 and School Closures [All Fields] OR Instructional Impacts of COVID-19 on Diverse Learners; [All Fields] OR COVID Unfinished Learning OR COVID Learning Loss [All Fields] OR COVID Learning Slide [All Fields] OR COVID Instructional Recovery [All Fields]. This search strategy and terms were modified for other databases as appropriate. Twenty-two articles and reports were included from guidance published in White Papers, Policy Briefs, and Reports from the Annenberg Foundation at Brown University, Rand Corporation, Brookings Institute, Council of Great City Schools, Chiefs for Change, Council of Chief State School Officers (CCSSO), The New Teacher Project (TNTP), Learning Policy Institute (LPI), Northwest Evaluation Association (NWEA), National Academies of Sciences, Engineering, and Medicine (NAP), and the National Center for the Improvement of Educational Assessment (NCIEA).

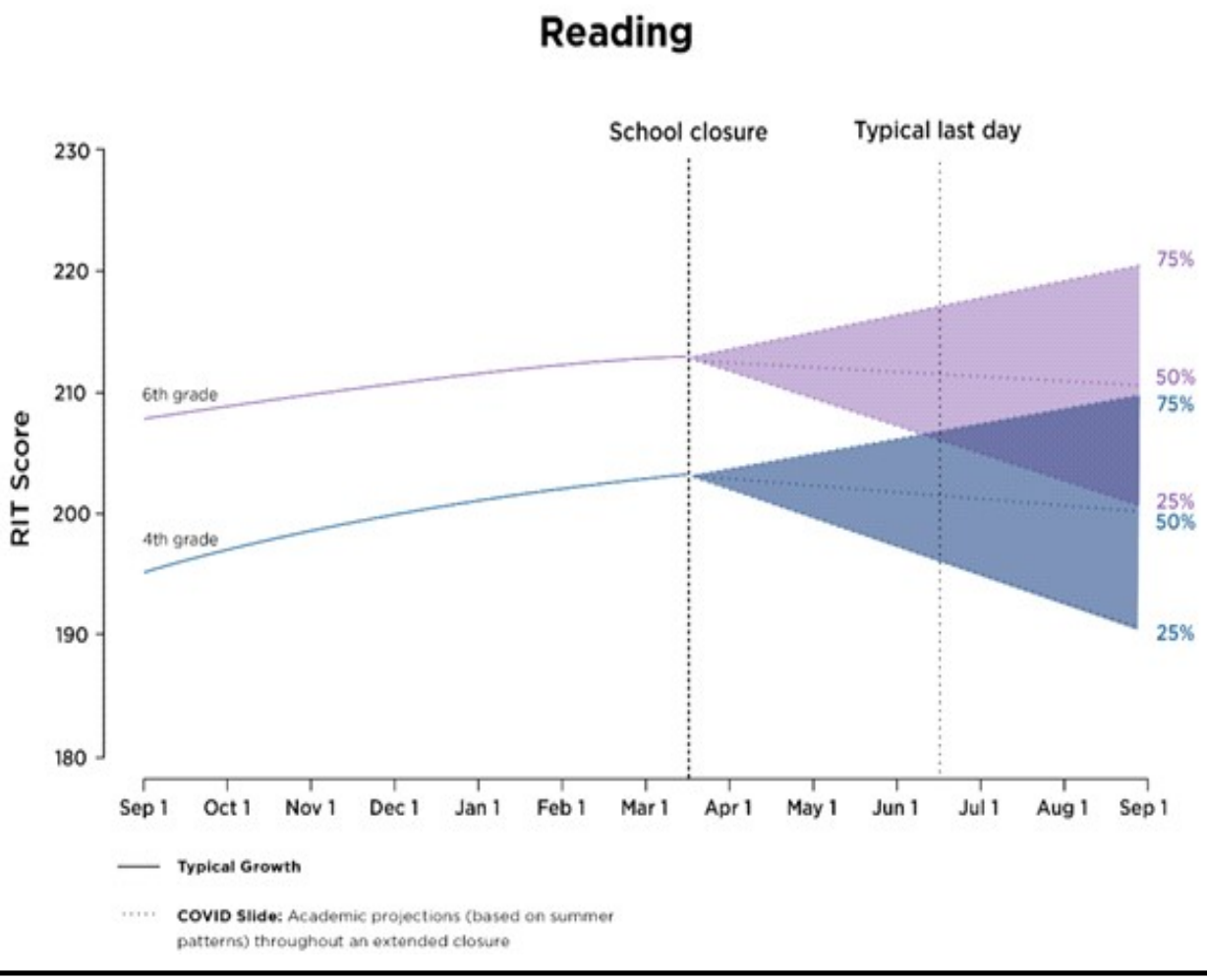
Key Findings

Impact of COVID School Closures and Unfinished Learning

The Annenberg Institute at Brown University defines the "loss of students' educational gains" over the summer as the "summer slide". Three trends are consistent across seasonal learning research findings: achievement typically slows or declines over the summer months, declines tend to be steeper for math than for reading, and the extent (proportionally of loss) increases in the upper grades (Kuhfeld & Tarasawa, 2020; Polikoff, 2020). Researchers used summer slide research, combined with the time lost during the school year due to the pandemic, to determine learning impact projections. These results were analyzed from a national sample of five million students in Grades 3-8 who took NWEA Measures of Academic Performace (MAP)® Growth™ assessments as they compared typical growth trajectories across a standard-length school year to learning projections that assumed students were out of school for the last three months of the 2019-20 school year (Kuhfeld & Tarasawa, 2020). Results estimated students exited the 2019-20 school year with roughly 63-68% of the learning gains in reading and 37-50% of the average gains in mathematics-compared to a typical year (Kuhfeld, Soland, Tarasawa, Johnson, Ruzek, Liu, 2020). Additional range projections report outlined variability by subject (reading and mathematics) for 4th and 6th grade using the Rasch UnIT (RIT), to measure student achievement and growth **(Figure(s) 1-2)**. These forecasts assumed students lost instructional gains at the same rate over a typical summer since mid-March, when school closures commenced.

The shaded areas display the distribution in potential outcomes between students who showed the steepest decline in summer learning (25th percentile) and those who showed no change, or small gains (75th percentile). In mathematics, the majority of students show the learning slide over the extended closure and summer period

Figure 1. Estimated variation in achievement range between very high and very low performing students in reading Source: Brookings Institute & Northwest Evaluation Association (NWEA), 2020.



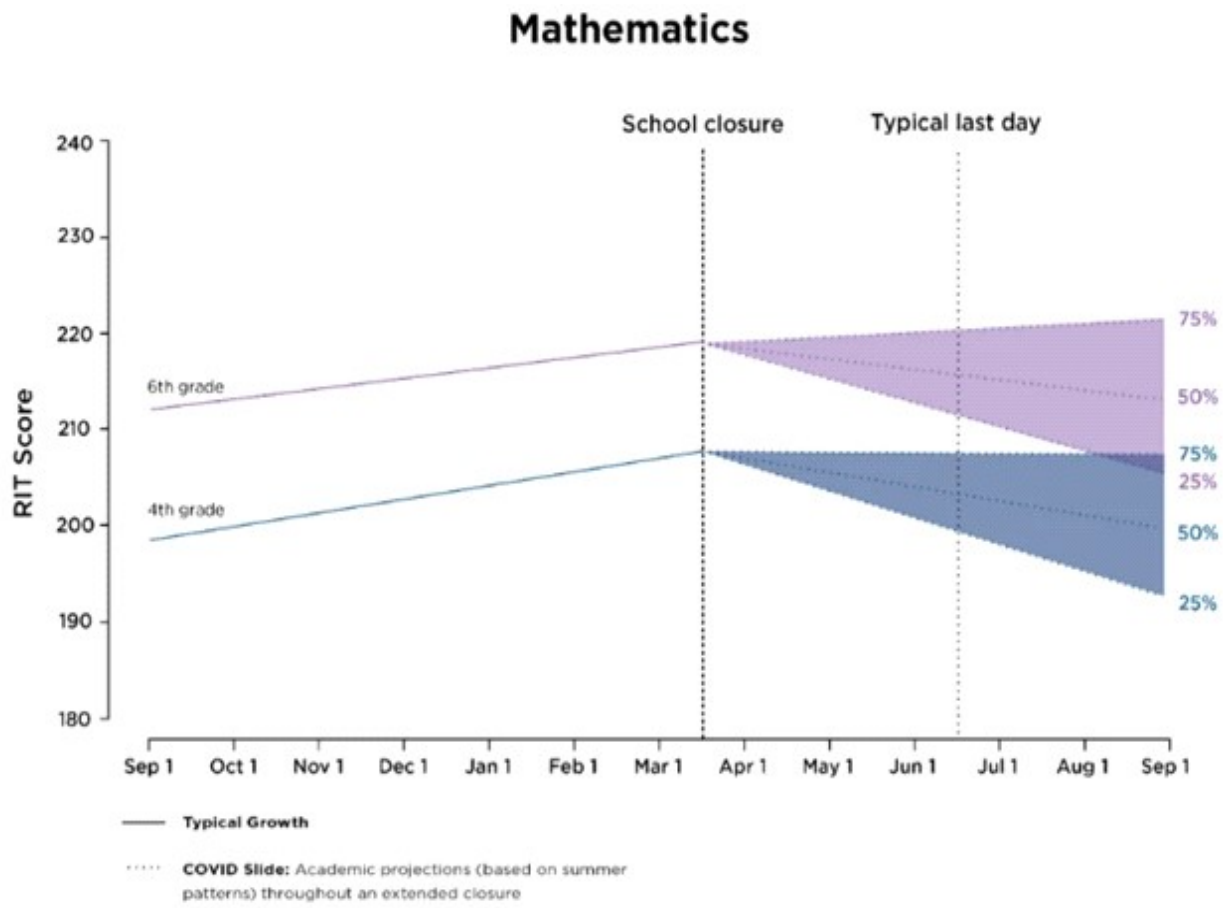
while reading presents a wide spread of potential outcomes (Kuhfeld, et al., 2020). Though extreme, these projections assumed students did not have access to instruction during school closures, for many marginalized students, this is the reality.

Instructional Implications

Unfinished learning has the protentional to show up differently across grades and subjects, with intensive recovery needs concentrated in the early grades and among already struggling students (Council of Great City Schools [CGCS], 2020). School closures of this scale can potentially have long term effects. A recent study found that teacher strikes in Argentina had a negative impact on the incomes of students, now in their 30's, who had lost 80 to 90 days of school as children. Those deficits extended to the children of those students, presenting a generational impact. That research also suggested that lost learning in early grades had the biggest impact (Jaume & Willén, 2017). The recovery process for unfinished learning would be in addition to the new knowledge and skills aligned to the standard expectations of the current grade level. This requires growth above and beyond one year's worth. All students need support to access rigorous and challenging work, yet despite support for standards, marginalized students already lacked access to grade-level work, and remediation programs that supplanted regular instruction prevented students from learning new, grade-level content (The New Teacher Project [TNTP], 2018).

Across the field there is consensus around the importance of responding to recent unfinished learning with the following recommendations and guidance (1) prioritize grade-level content and instructional rigor and depth of instruction, with support (rather than pace) (2) maintain the inclusion of each and every learner and (3) identify and address gaps in learning through instruction, avoiding the misuse of standardized testing to place students into high or low ability groups or provide low levels of instructional rigor to lower performing students, and (4) focus on the commonalities that students share in this time of crisis

Figure 2. Estimated variation in achievement range between very high and very low performing students in mathematics Source: Brookings Institute & Northwest Evaluation Association (NWEA), 2020.



(Darling-Hammond et al., 2020; Council of Chief State School Officers [CCSSO], 2020; CGCS 2020; Kuhfeld, et al., 2020).

Implications for the Most Vulnerable Learners

While school closures have impacted all students, the most vulnerable students will be disproportionately affected by school closures. Unequal access to learning during the pandemic further exacerbated the vast differences between learning opportunities for the most vulnerable learners (i.e., students with disabilities, SLIFE, lower-SES, and ELLs).

Too often, educators are tempted to rely on traditional remediation, which involves administering diagnostic assessments to identify deficits to provide below grade-level instruction for unfinished learning (CCSCO 2020; CGCS 2020). However, there is significant evidence that this remediation approach compounds unfinished learning by taking time away from core instruction and thus further isolates marginalized students, impeding access to rigorous grade-level content. Often delivered in "pull-out" time (removal from standards-based instruction) is used to reteach basic-skills work with minimal real-world relevance. This form of remediation is based on the misconception that in order to learn any new information, students must learn all the information they previously missed. This means missing out on rigorous, engaging coursework, and learning alongside proficient peers (National Academies of Sciences, Engineering, and Medicine, 2018).

Remediation was found to have few benefits and many risks where less able students, when segregated from their more able peers, are at risk of being taught an inferior curriculum and consigned to low tracks for their entire academic career (Molnar, 2002). Moreover, review of the literature showed that giving students below-grade-level content stigmatizes learners and reinforces inequities which not only negatively impacts immediate recovery, but also diminishes access to grade-level work in the future (Darling-Hammond et al., 2020; CGCS 2020; TNTP 2018).

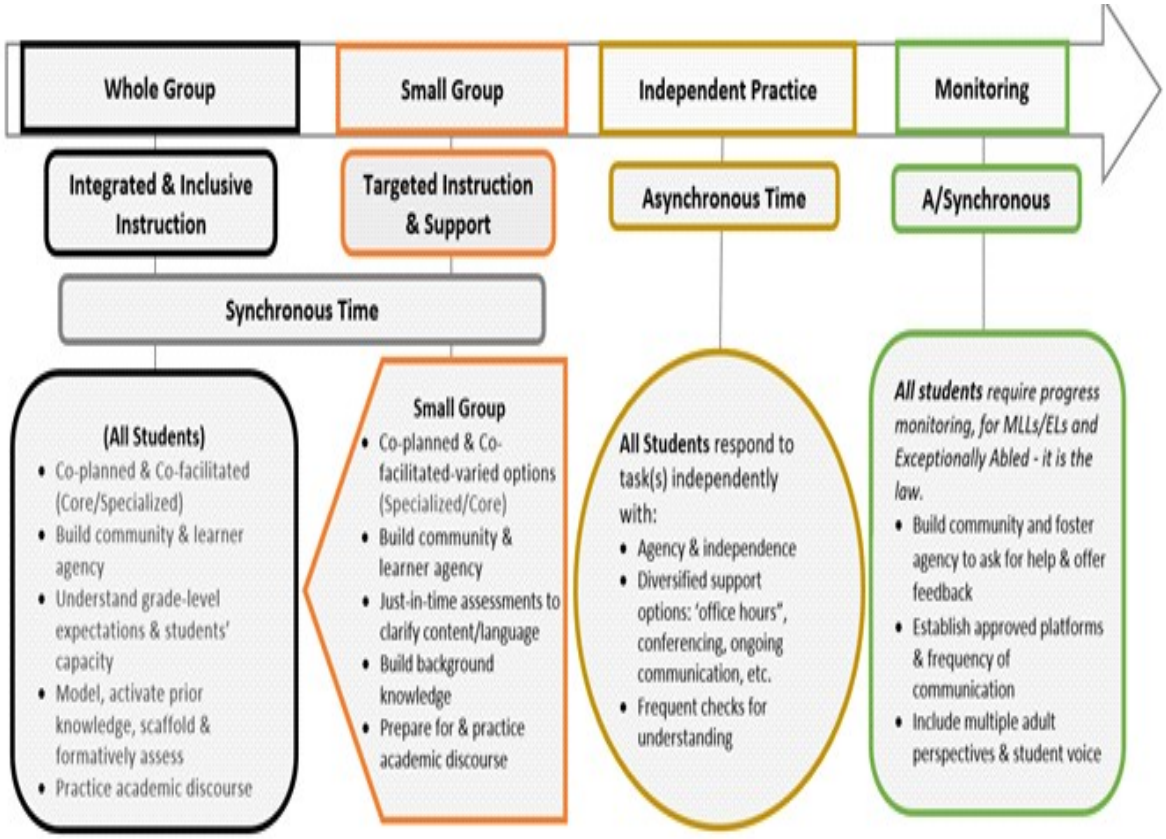
Instead of delaying access to grade-level work for students who are below-grade level, educators should provide opportunities to accelerate learning (Darling-Hammond et al., 2020; Rand Corporation 2020; TNTP 2018). The process described includes teaching concepts and skills in the purposeful context of immediate (and future) learning. Heterogenous group instruction with targeted (small group) support aimed at accessing grade-level rigor academic opportunities for all students, especially struggling students, alongside their more successful peers (CCSSO, 2020; CSGS, 2020; TNTP 2020).

Research findings showed that heterogenous inclusion is a strong predictor of academic growth for students with disabilities-the greater the level of inclusion (80% or more of the day), the greater the rate of academic growth (Hehir, 2014). Also, four randomized controlled trials conducted on reading interventions for struggling English learners showed that providing small-group support in literacy and English language development benefitted learners' access heterogenous grade-level academics (Gersten, Baker, Shanahan, Linan-Thompson, Collins, & Scarcella, 2007). Recent findings also showed ELLs develop academic language during content area instruction in meaningful and motivating situations along with English proficient peers. English learners develop the concepts and skills needed to master grade-level coursework (e.g., providing middle school ELLs with materials at the same grade level as that of their peers) is important to enable them to meet the requirements for deep understanding of academic texts in English, as long as such instruction is coupled with evidence-based methods that support ELLs in comprehending the core content (National Academies of Sciences, Engineering, and Medicine, 2017). Recommendations related to these studies call for ensuring English language learner support programs are implemented effectively and directly prepare students for grade-level tasks (Goldenber, 2008).

A middle school longitudinal study examined the effects of providing an accelerated mathematics curriculum in heterogeneously grouped middle school classes in a diverse suburban school district. A quasi-experimental cohort design was used to evaluate subsequent completion of advanced high school math courses as well as academic achievement. Results showed completion of advanced math courses increased significantly in all groups, including minority students, and students of low socioeconomic status (Burris, Heubert, & Levin, 2006). Providing access to rigorous and engaging grade-level instruction with targeted small groups support led to successful new learning. Students received both instruction in prior knowledge and prerequisite skills.

Furthermore, with the objective of grade-level learning the recommendations emphasized that educators commit to redesigning assessments to emphasize purpose and increase applied learning and complex problem-solving (CCSSO, 2020). Informal formative assessment information was used to identify students' current thinking, skills, language, and ideas, allowing teachers to provide students with the specific supports to be able to engage with new information. Tailored acceleration strategies used formative assessments to explicitly address learning associated with skills that were meant to be previously learned. Educators are advised to avoid using unnecessary tests and data as gatekeepers for grade-level instruction, instead they should link formative assessments to grade-level concepts to accelerate progress which was shown to be more effective than remedial courses (Darling-Hammond et al., 2020; CCSSO 2020).

Figure 3. Sample Instructional Framework to Meet the Needs of the Most Vulnerable Students after COVID School Closures. Source: Fostering Quality Schools, 2020.



Instructional Recommendations

A Sample Instructional Framework to Meet the Needs of the Most Vulnerable Students

Adopt an instructional framework to exemplify access to grade-level academics with targeted support to accelerate learning opportunities. Developed to support and accelerate learning in a hybrid and/or remote learning environment, this sample framework clarifies how inclusive and integrated instruction can be achieved through a balance of synchronous and asynchronous delivery **(Figure 3)**. The framework was based on the principles of co-teaching (instruction that is co-planned and when possible, co-facilitated) in tandem with targeted support. Structured grade-level instruction must maintain clear learning goals and success criteria, extended and ongoing formative assessment, targeted support with feedback, ongoing family communication, and teacher collaboration (Black & Wiliam, 2018). Conditions and capacities that lead to results include a high-quality curriculum, approved communication platforms, and a collaborative team of teachers who take an assets-based approach. Heterogenous instruction includes the most vulnerable students learning alongside their grade-level proficient peers (Darling-Hammond et al., 2020).

Conclusion

Review of the literature revealed further implications beyond academics - students are grappling with both the trauma from the pandemic and the results of racial discrimination clear throughout the course of the pandemic (Darling-Hammond et al., 2020). Several reports asserted educators address these critical issues and simultaneously provide students with specialized learning needs the same challenging work and cognitive demands as their peers.

There is a pressing need for planning longitudinal studies and implementing an evidence-based plan of action to address the educational needs of the most vulnerable students affected by COVID-19 school closures - now and post-pandemic. Education policy reform, with direct and virtual collaborative networks of educators, education specialists, families, and communities - are deemed necessary.

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