State policymakers should take the opportunity to reimagine their education systems.

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How a Crisis Can Transform Learning, Teaching, and Assessment

When states issued the first coronavirus stay-at-home order last March, few could have foreseen how the foundations of learning and teaching would be shaken. As hopes for a brief disruption confronted reality, state and district leaders began plans to extend some form of distance learning into the 2020–21 school year. They also began to think about how to turn a daunting crisis into an opportunity to rethink policies and practices from the ground up—accountability policies in particular.

For many years, the majority of U.S. students have not met grade-level expectations, with socioeconomically disadvantaged students disproportionately affected.¹ The pandemic only underlined and exacerbated these disparities. The coronavirus hit historically underserved communities harder, and the digital divide has harmed students in these communities more.

These facts loom as state policymakers consider the environment that students and teachers face this school year. Despite the heroic efforts of teachers, students, and families, some students may have returned to school with as little as 70 percent of the learning gains they typically would have made in reading (figure 1) and less than 50 percent of the gains they would have made in math (figure 2), according to research from assessment nonprofit NWEA. Some may be as much as a year behind in math.²

Researchers further project that existing achievement gaps will likely widen as a result of the school closures, with some students benefiting from remote and self-driven learning environments and others—more likely those already behind, lacking learning opportunity at home, or both—losing ground.³

To put this potential variance in context, researchers from several

universities conducted an analysis of NWEA data across 10 states to understand the range of instructional levels present in a "typical" fifth-grade classroom after a regular summer break. They found students with instructional needs ranging from third grade through high school (figure 3).⁴ Given that gaps are expected to be even larger this school year, this figure represents a best-case scenario.

What can state boards of education do in the face of this challenge? We believe they and their peers in state policymaking have an unprecedented chance to not only recover learning loss due to COVID-19 but also address the longstanding problem of learning opportunity by effecting change at the systems level. They will need to ask some hard questions: How can educators best serve the diverse leaning needs of any given cohort of students? Should all learners be "ready" at the same time? How do we know the system is helping our kids grow and prepare for the future?

Teaching and Learning

Other major disruptions, such as Hurricane Katrina in 2005, have demonstrated that helping students get back on track is a long-term challenge. Even under "normal" circumstances, it is uncommon for students to achieve a year and a half of growth in a single year.⁵ For some, it may be tempting in the face of this challenge to do away with accountability for challenging all students to reach their highest potential. But a better response is to systematically pursue new approaches to learning, teaching, and assessment that better withstand disruption and more efficiently accelerate student achievement.

Reimagining learning should start with new structures and systems. Agrarian school calendars inherently

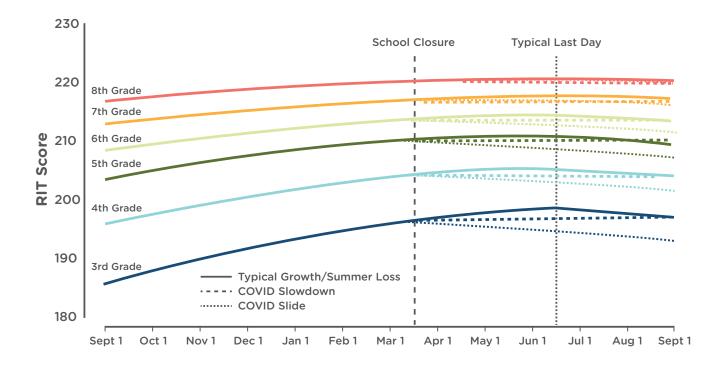


Figure 2. Projected COVID Slide in Math

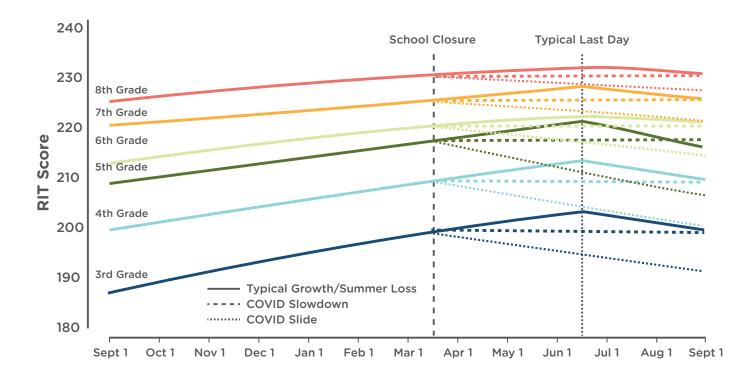
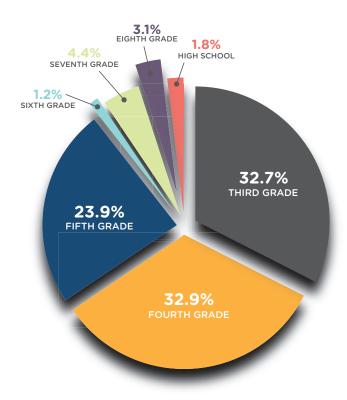


Figure 3. Instructional Needs in Average Grade 5 Class Span Seven Grades



State leaders must assume that blended learning is a core instructional strategy, not just an emergency response. disrupt learning continuity and yield learning loss.⁶ Rhythmic, year-round, school calendars are politically difficult to implement but are a precious opportunity to mitigate lost learning by increasing learning opportunity. Evolving in this direction will not happen overnight, so we recommend that state and district leaders start thinking through what a potential transition might look like and what steps can be taken immediately to serve learners during summer months. It will be important to move beyond sending summer reading lists to more formal blended and online summer learning strategies—not only in summer 2021 but also in the summers that follow.

State leaders must invest in distance learning infrastructure and assume that blended learning is a core instructional strategy, not just an emergency response. Before the pandemic, authors of a Bellwether Education Partners report said that teachers think digital learning has a positive impact on student learning but do not always leverage it in ways that motivate and engage students. They also found that teachers value assessment data but have limited time to digest it, have too much of it, and do not always receive it in a timely fashion. They concluded that the education sector must "reimagine how targeted intervention for students with learning gaps is delivered so as to maximize access to grade-level knowledge and skills."⁷

Coronavirus school closures intensified the urgency of this reimagining. Ready or not, state and district leaders are grappling with the need to leverage digital learning tools and assessments to address the unique needs of every student. They must continue to invest in those tools and the professional learning that teachers will need to support challenging, personalized learning for every student—whether in person or remotely.

Technology cannot replace a caring, highquality teacher, but in combination with adult and peer interactions, digital tools and data can expand teachers' reach and increase their impact. Addressing the complexity of administering assessments remotely while protecting the validity of results and the security of test questions is central to this effort. In this new world of more flexible, resilient learning and teaching, educators still need timely, accurate information to make good decisions for each learner. Thus it is necessary, though challenging, to provide quality remote proctoring capabilities that ensure data integrity.

Age, Grade, and Opportunity

Making good decisions for individual learners means understanding what they know and are ready to learn next—whether on or off grade level—and acknowledging that opportunities to learn are not limited to schooling. In a global digital world, learning can happen on demand, inside and outside the formal classroom. It will be important for education leaders to foster connections with supplemental and community-based learning opportunities and to support teachers with assessments that can capture the full range of learning strengths and gaps for each learner.

Grade-level standards are essential for establishing expectations for what each learner should know and be able to do at particular points in time. However, they are not a prescription for meeting a learner's needs, especially high achievers and struggling learners. And they cannot address the broad range of the pandemic's impacts on student achievement. Given that economic hardship often drives student mobility,8 COVID-19 could present teachers with even more learners than usual for whom they have little context. In this environment, a student's age and grade level will be less reliable as a proxy for learning needs than ever before. Understanding the unique needs of each learner, regardless of where they fall on the continuum, will be paramount.

As personalized learning experts suggest, focusing on grade-level content in spite of lost or unfinished learning makes it harder for students to master more advanced concepts and hinders their college and career readiness.9 Yet too often, well-meaning efforts to meet students where they are result in students not being appropriately challenged, which can lead to a systematic lowering of expectations for students who are behind.¹⁰ Maintaining high expectations for all students is essential, but expectations alone do not outline the interventions and scaffolding required to optimize learning for each student, especially given the greater-thanusual variance in skill that teachers are expected to see this school year.

Meeting student needs and maintaining high expectations is not an either/or dilemma but rather an opportunity to implement more efficient, scalable ways to personalize and accelerate learning.¹¹ The technology and knowledge required to achieve this is available now. Consider these ideas:

- Make distinctions to maximize learning based on developmental needs and/ or content areas. Earlier grades may require more time (i.e., more than one school year) to master the basic skills on which everything else builds. Students in later grades may need more individualized, scaffolded support to fill critical skills gaps. Educators have an opportunity to make better, more granular, studentcentered decisions to optimize learning for each student, in each subject.
- Rethink grouping and regrouping students based on learning needs. Especially in K-5/6 environments, cohorts of learners staying with the same teacher for all learning needs and instruction in a year make differentiating at the student level challenging, but grouping and regrouping cohorts of learners is scalable and achievable. Accountability and teacher effectiveness models will need to evolve to support this team-based approach.
- Facilitate the implementation of high-quality curriculum. One reason that students may not be challenged at the appropriate level is a disconnect between learning expectations and curriculum. State leaders can help establish criteria for selection of high-quality, coherent curriculum that is not only standards aligned but also engaging in a digital environment—an essential criterion in a blended learning world.
- Align assessments to high-quality curriculum. Alignment between assessments and curriculum can help teachers place students in a curricular progression (versus using only grade level or age as a proxy for identifying learning needs) and more effectively close learning gaps. In states where districts are using multiple high-quality curricula, selecting assessments that can be configured to align with those curricula is ideal.
- Support the adoption of adaptive assessments administered throughout the school year. Administering adaptive, standardsaligned, interim assessments that identify student learning needs (regardless of age/ grade level) and performance relative to learning expectations will be critical. Now more than ever, educators will need rhythmic,

COVID-19 could present teachers with even more learners than usual for whom they have little context.

shorter-cycle evidence of student learning to make good decisions for each learner.

Expand the value of statewide assessment. States can support systems that provide timely learner-specific feedback as well as coherence relative to summative expectations by providing standards-aligned formative and interim assessments for districts. They can also rethink statewide summative tests so that students can demonstrate proficiency when they are ready (competency-based and through-year assessment models, for example) as opposed to current systems, which expect all students to proceed on the same timeline.

Innovative State Assessment Systems

The Every Student Succeeds Act (ESSA) permits innovation in summative assessment either statewide or within a subset of a state's local educational agencies (LEAs) or schools through the Innovative Assessment Demonstration Authority (IADA) program. Nebraska is moving toward statewide innovation, and Georgia, Louisiana, Massachusetts, New Hampshire, and North Carolina are exploring innovative approaches through the IADA pilot program (see also article, page 40).

This movement to change assessment began before the pandemic, with many states looking for ways to reduce overall testing and better support districts in their efforts to foster student learning. However, the cancellation of spring 2020 statewide summative testing across the nation due to school closures opens the door even wider for states to reconsider the best way to gauge how well schools are serving students.¹² This rethinking could usefully go beyond measuring whether learning happened at year's end to providing educators with timely, actionable data for improving learning throughout the year.

NWEA has partnered with Nebraska, Georgia, and Louisiana on their innovative assessment efforts, which focus on these through-year models. The models are designed to streamline and connect assessments that districts use to inform instruction with those the state designed to meet accountability requirements. Thus a single assessment system produces information for districts during the school year and summative scores, which along with other measures are critical to provide a holistic view of school performance for school improvement efforts.

Most districts administer interim assessments during the school year to inform instruction and measure academic growth plus a summative test to meet accountability requirements in the spring. Through-year assessment eliminates the need to double-test in the spring and produces timely results during the school year showing where students are in their learning as well as how they are performing relative to summative grade-level expectations. This information supports teachers in addressing individual student learning needs while keeping proficiency and college and career readiness goals in view so all students are challenged to reach their full potential.

In summary, there are several benefits to through-year models:

- Coherence. A unified, cohesive approach avoids the use of one compass in the classroom and another in accountability frameworks.
- Efficiency. A single assessment system eliminates the need to administer both interim and summative assessments in the spring.
- Utility. Information on student performance throughout the year helps teachers target instruction and take action to ensure student mastery of foundational skills and concepts.
- Fairness. A fall-to-spring growth measure provides a more accurate view of schools' impact on learning than models rooted in summative performance alone.¹³

Even so, through-year assessment models are not without potential challenges. Some critics express concerns that using a single assessment solution to serve more than one purpose could compromise the value of the information produced. However, the goal of through-year assessment is not to produce one type of data to serve multiple purposes. Rather, it is to increase coherence by using one assessment system to yield different types of data. Advances in technology and test design support the development of models that address clarity in purpose and validity of score calculations.

In contrast, separating formative, interim, and summative assessments at the expense

The goal of throughyear assessment is to increase coherence by using one assessment system to yield different types of data. of coherence in design can send a confusing message to educators about which actions to take. A disconnect between the assessments used to inform instruction and the ones used to ensure accountability for instructional outcomes can result in competing priorities. The coherence created with through-year assessment avoids this by supporting a match across all tests in the system with theories of learning and teacher action.

That said, innovation takes time, patience, and resources. The six states and participating districts currently pursuing innovative approaches are making sacrifices to effect change; it can take several years to make innovative assessments operational. If state leaders do not feel ready to take the leap, they may wish instead to innovate by creating more efficient and coherent summative tests and/or investing in balanced systems of assessment—for example, providing high-quality, standardsaligned formative and/or interim assessments to districts to ensure they have instructionally useful information during the school year.

Aligning Accountability with Teaching and Learning

Even as states and districts improve education systems to accelerate learning, they must consider how much growth is realistic in a year. Particularly in the wake of the pandemic, where students may lose as much as a year of learning, state leaders should evaluate the fairness of using proficiency standards set under different learning conditions for accountability purposes. That does not mean proficiency expectations should be lowered, but it is worth reckoning how long it will take to get many learners back on pace to be college, career, and life ready.

This crisis gives state boards a chance to reassess the best way to hold schools accountable and identify those most in need of support—not just in 2021 but in the years that follow (box 1). As more states move toward interim assessments as part of balanced assessment systems or toward through-year models of assessment, they should leverage those assessments to measure fall-to-spring and cross-year growth, regardless of summative performance, for two reasons:

Avoids attribution of seasonal learning loss (or gain) to schools. School effectiveness

Box 1. How State Boards Can Catalyze Innovation

When reimagining systems of learning, teaching, and assessment, purpose is a driving factor. With this in mind, state boards should ask the following:

- What are the biggest challenges, learning gaps, and pain points our state and district leaders, teachers, students, and families are facing?
- What do we most want our schools to provide for our students?
- What is working well in supporting student learning in our state, and what evidence do we have of this?
- Are the board, the state education agency, and districts invested in and in sync on effecting change, and are roles clearly defined?
- How can technology help teachers develop caring, personal relationships with students and meet individual needs in a scalable way?
- What questions do we wish to answer by using assessments, and what decisions will we make with the resulting data?
- What are the impacts of new models and new data—on teacher evaluation and accountability?
- What trade-offs are we willing to make? Are we willing to reimagine our system and how?

Discussion generated by these questions can reveal who state boards need to convene, as well as the policy shifts required to design systems that better foster student learning.

measures are sensitive to summer loss, and this will continue to be a concern as long as agrarian school calendars are the norm. An NWEA research study found that school accountability data based on students' fall-tospring growth were often different from data based on spring-to-spring growth, a common practice under ESSA.¹⁴

Avoids using short-term student growth to measure school efficacy in achieving

long-term goals (college and career readi-

ness). Schools held accountable for short-term student growth are often very different from those that would be identified for improvement under ESSA if more years of data were used.¹⁵

Reimagining accountability does not mean that states should stop looking at student performance on summative tests or growth in proficiency over time. These data are crucial to identifying and addressing educational inequities. Rather, states should assess this information alongside additional measures such as growth over time, regardless of proficiency level, and reconsider whether an annual review period is appropriate.

The Road Ahead

It has been heartening to see state leaders, district administrators, teachers, students, and families rising to the challenges created by the pandemic and working hard together to keep students learning. Yet unless state leaders seize this chance to effect change, the crisis risks making longstanding opportunity-to-learn problems even worse.

Everyone working in education has had to foster learning in new ways and make related decisions about systems of learning, assessment, and accountability. Approaching these changes as a stopgap to get through a period of uncertainty would be a missed opportunity to make education more equitable, resilient, and effective.

State boards of education and other education leaders can drive discussion and action around models of blended learning that employ student-centered practices and embrace the global digital world in which we live. Specifically, they can support systems that

- leverage digital tools, increase learning opportunities, extend beyond age- and gradebased structures, and maintain common, high expectations for all students;
- adopt high-quality curriculum, professional learning, and coherent assessment models that not only measure learning but also support teachers in fostering learning throughout the year; and
- create fair, meaningful accountability models that more effectively reveal which schools across all communities—are thriving and which need additional support.

By reimagining education in the wake of an extraordinary experience shared across the world, state boards can better ensure that every student can develop the skills and knowledge they need to succeed in college, careers, and life.

¹National Assessment of Educational Progress, The Nation's Report Card, "How Did U.S. Students Perform on the Most Recent Assessments?" web page, https://www.nationsreportcard.gov/.

²Megan Kuhfeld and Beth Tarasawa, "The COVID-19 Slide: What Summer Learning Loss Can Tell Us about the Potential Impact of School Closures on Student Academic Achievement" (Portland, OR: NWEA, April 2020).

³Megan Kuhfeld et al., "Projecting the Potential Impacts of COVID-19 School Closures on Academic Achievement," EdWorkingPaper (Providence, RI: Annenberg Institute at Brown University, May 2020).

⁴NWEA, "Researchers Estimate Students Coming Back after COVID-19 Closures May Have Greater Variances in Academic Skills," press release, May 27, 2020.

⁵John Cronin, "How Many Students and Schools Actually Make a Year and a Half of Growth during a Year?" *Teach. Learn.Grow. The Education Blog* (June 16, 2016).

⁶Chiefs for Change and Johns Hopkins University Institute for Education Policy, "The Return: How Should Education Leaders Prepare for Reentry and Beyond?" (Washington, DC: Chiefs for Change, May 2020).

⁷Gwen Baker, Lauren Schwartze, and Amy Chen Kulesa, "Unfinished: Insights from Ongoing Work to Accelerate Outcomes for Students with Learning Gaps" (Washington, DC: Bellwether Education Partners, September 2019). ⁸Rebecca Cohen and Keith Wardrip, "Should I Stay or Should I Go: Exploring the Effects of Housing Instability and Mobility on Children" (Washington, DC: Center for Housing Policy and MacArthur Foundation, February 2011).

⁹New Classrooms, "The Iceberg Problem: How Assessment and Accountability Policies Cause Learning Gaps in Math to Persist below the Surface . . . and What to Do about It" (Washington, DC: New Classrooms, 2019).

¹⁰The New Teacher Project, "The Opportunity Myth: What Students Can Show Us about How School Is Letting Them Down—and How to Fix It" (Washington, DC: TNTP, September 2018).

¹¹Michael J. Petrilli, "When It Comes to Catching Kids Up, Let's Stop with the Generalities," *Flypaper Blog* (Washington, DC: Fordham Institute, May 6, 2020).

¹²Lynn Olson and Craig Jerald, "The Big Test: The Future of Statewide Standardized Assessments" (Washington, DC: FutureEd, April 2020).

¹³Andy Hegedus, "Evaluating the Relationships between Poverty and School Performance" (Portland, OR: NWEA, October 2018).

¹⁴Jim Soland and Yeow Meng Thum, "School Effectiveness, Summer Loss, and Federal Accountability" (Portland, OR: NWEA, March 2019).

¹⁵Jim Soland, Yeow Meng Thum, and Gregory King, "Reconciling Long-Term Education Policy Goals with Short-Term School Accountability Models" (Portland, OR: NWEA, March 2019).

Reimagining accountability does not mean that states should stop looking at student performance on summative tests or growth in proficiency.

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