The State Education

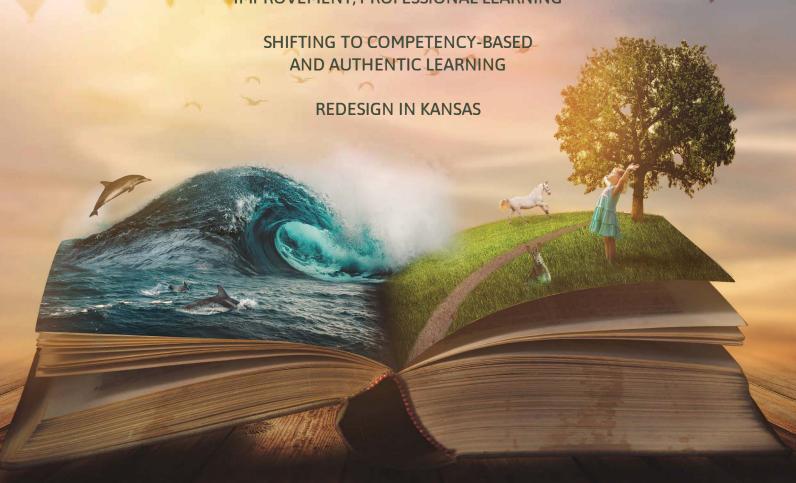
May 2021

Standard

The Journal of the National Association of State Boards of Education

REMAGINING SCHOOL

RETHINKING ACCOUNTABILITY, TECHNOLOGY, IMPROVEMENT, PROFESSIONAL LEARNING



Standard

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Editor's Note

Valerie Norville

Editorial Director

If there is a seed of opportunity buried in every crisis, then there is a chance something good can emerge from the pandemic year of building closures, shifting schedules, and disruptions to school. With the aid of American Rescue Plan funds and enriched by lessons learned from teachers, leaders, students, and parents, state boards with a vision have a chance to remake their education systems. Or—if your vision already seemed powerful to you—to propel it more swiftly forward.

The authors in this issue should inspire state boards of education to take a fresh, post-pandemic look at their systems. The ideas themselves may not be new, but the stress test that schools faced over the last year casts new light on them.

Systemic change without good data amounts to wishful thinking. Thus the issue begins with an offering from Bellwether Education Partners authors that can help state boards weigh the role of assessment and accountability. How can state leaders get the information they need to act without burdening schools and districts with penalties for circumstances they cannot control? Data can also buttress the technology needed to deliver remote instruction effectively and safely. Past NASBE CEO Kris Amundson and former Virginia state board member and technology executive Andrew Ko pose questions state boards can ask about Virtual School 2.0.

AEI's Frederick M. Hess revisits his seminal, decade-old work on what it means to approach school reform as a "greenfield" and how state leaders might apply it today.

Two articles focus on how state boards might rethink student learning. The Aurora Institute's Susan Patrick details ways state boards can make personalized learning—rooted in competencies rather than seat time—a reality for students. In systems reimagined as competency based, she explains, "Learning is the constant; time becomes the variable." Learning Policy Institute's Monica R. Martinez and Dennis McGrath call out myriad examples of "authentic learning," which engaged students despite the pandemic because it was closely tied to real-world applications, crossed content areas, and reflected their own cultures.

Teachers' professional learning is also ripe for reimagining. New America's Melissa Tooley and Joseph Hood describe how high-quality microcredentials can bring the flexible, anywhere learning that education leaders seek for students to educators as well.

The pandemic year gave at least one state clues that a pilot program they had been launching in waves of annual cohorts was on track. The program seeks volunteers who lead Kansas schools to redesign them based on a set of principles that emerged from Kansas's vision-setting process and that its state board approved. Early adopters, who had been immersed in design thinking, were more readily able than their peers to shift instructional modes during school building closures.

Redesign is also the focus of our interview with Russlynn Ali, CEO of XQ Institute, which works with communities to transform high schools.

In his column, NASBE board of directors chair Byron Ernest sums up this issue on leadership imagination, asking what is a "return to normal," and why would we want it? "It is my hope that we take advantage of this path with no footprints and make the world a better place for our students," he writes.

The State Education



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On March 10, 2021, Congress approved a nearly \$1.9 trillion pandemic recovery bill dubbed the American Rescue Plan Act of 2021 (ARP). The measure provides approximately \$122 billion for public K-12 schools, \$40 billion for postsecondary education institutions and students, \$40 billion for childcare, and \$362 billion for state and local fiscal relief, and it includes policy provisions impacting the education sector more broadly. The ARP also includes \$7 billion for an Emergency Connectivity Fund to help schools connect students and teachers to home broadband and devices and \$10 billion for states and localities to address critical infrastructure needs, such as access to broadband for learning.

As with the CARES Act in March 2020 and the Relief and Recovery Act

of December 2020, states and school districts may use the ARP's K-12 funding to meet a wide range of needs. On March 17, Education Secretary Miguel Cardona sent a letter to chief state school officers notifying them of the availability of these funds. In the letter, Secretary Cardona encouraged states and districts to use these funds, to the greatest extent possible, to pursue strategies aimed at helping schools safely reopen for in-person instruction, as recommended by the Centers for Disease Control and Prevention (CDC). The U.S. Department of Education the same week released a factsheet on the use of these funds and a table on state-by-state allocations.

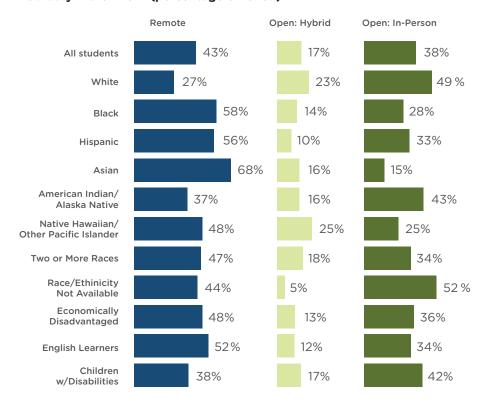
In February, before Secretary Cardona had been formally confirmed to lead it, the department issued guidance to chief state school officers on potential state waivers of the assessment, accountability, and reporting requirements contained in the Every Student Succeeds Act. The letter indicated that ED would waive accountability provisions for the current school year for states that applied for this flexibility but said states should plan to administer federally mandated statewide assessments this spring. Secretary Cardona reiterated the department's position after his confirmation, saying that the letter "is the guidance that we're going with moving forward on assessments."

The CDC announced in March that the agency would provide \$10 billion in additional funding for states, authorized by ARP, to support COVID-19 testing for K-12 students and staff. The move aligns with the Biden administration's pandemic response and recovery plan, which called for robust screening and testing in schools to mitigate the spread of the virus and help schools reopen for in-person instruction safely. Funding was expected to have reached states by early April.

NASBE published reports from two state board members this spring. In March, we published a policy brief by Kentucky state board member and teacher Allison Slone, "Developing State and District Family Engagement Policies." Given the big impact of family engagement on student achievement, Slone says, state policy ought to encourage and ensure it informs decision making. In April, we published "State Boards Seek Increased Educator Diversity," by Woody Exley, Connecticut state board member. In it, Exley reports on the efforts of four states to attract and retain a more diverse workforce.

Reg Leichty and Jamie Brandon of Foresight Law + Policy contributed to this update.

Figure 1. Fourth-Grade Students by Instruction Mode and Subgroup, February-March 2021 (percentage enrolled)



Source: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), Monthly School Survey 2021. The data collection period for the first month ran from February 22 through March 12, 2021.

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Byron ErnestChair, NASBE Board of Directors

State Board Voice

School Is No Longer Just a Place

s I write this, it is Day 372 of the COVID-19 pandemic. It was abundantly clear on March 11, 2020, that what happened next would be a path with no footprints. Our existence as individuals and communities has been forever altered. The pandemic drove home how dependent we are on each other. We suddenly realized our health is not our own but belongs to the community as a whole. People have begun to talk about "going back to normal." What is that? More important, do we want that? I'm not sure I want to go back, at least not fully, to the way it was. Going back to normal without having learned and grown from the experience would be a tragedy.

State boards, working collaboratively, now have a chance to reimagine how to make our education system better. We need to consider the measurable value of changing the way we educate—maybe even making systemic change. If we do this well, our next generations will be better able to understand and deal with the complexities of our world with a much more systemic understanding than their parents have.

We have learned much about leading through a crisis. The pandemic has challenged us to be more agile in educating our children. Responding to new conditions and new data has prompted states to see school no longer as a single place and instead recognize that learning occurs everywhere and must be available 24/7—whether through remote instruction at home, a hybrid setting, or onsite. Rethinking school has already set in motion a cascade of consequences—some positive, like the increased

evidence of, and appreciation for, parent and family engagement.

I hope we will double down on rethinking what success looks like in education and how that new version of success reshapes and realigns accountability. We must define this new version of success if the momentum the pandemic has generated is to catapult us toward a better education system—while simultaneously working toward recovery. We must have a shared vision of what success looks like for our students in order to benchmark what has worked. what has not, and what effect the influx of federal money to schools has really had. As we align accountability to our improved version of success, we need to consider what alignment between our schools and the workforce needs to look like. We need continued. improved alignments between higher education through dual credit, dual enrollment, and Advanced Placement. Industry certifications, internships, apprenticeships, and other work-based learning opportunities are important elements in this narrative of success.

Finally, we need to provide an education where schoolwork looks like real work and we produce more than the narrow, parochial outcomes to which we have become accustomed. We need to be guiding students toward their largest, best, life-long interests—not just the obstacle course we now control. Therefore, we need to create space and flexibility for educators' creativity, curiosity, and innovation. It is my hope that we take advantage of this path with no footprints and make the world a better place for our students.

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NCOSEA Voice

Student Free Speech and Social Media Posts

Youth internet activity was on the rise well before the pandemic struck. But as virtual learning became the norm in 2020, more students than ever have spent more time online, including on social media. School administrators have sought ways to address student conduct outside the school building that bears directly on the school environment.

Mahanoy Area School Dist. v. B.L., a student free speech case pending before the U.S. Supreme Court, illustrates this dilemma. At issue is whether the court's landmark 1969 ruling in Tinker v. Des Moines Independent Community School District—which held that public school officials may regulate speech that would materially and substantially disrupt the work and discipline of the school—applies to student speech that occurs off campus.

In Tinker, the Supreme Court ruled that public school students' passive, nondisruptive political speech—in that case, wearing black armbands to school in protest of U.S. involvement in the Vietnam War—deserved First Amendment protections. However, the speech at issue in Mahanoy occurred in an entirely different context. It involved Snapchat messages that rising sophomore B.L. posted after she failed to make the varsity cheerleading team for a second year straight while an incoming freshman made the team on her first attempt. One message consisted of a photo in which B.L. and a friend raised their middle fingers with an expletive-laden caption: "F--- school f--- softball f--- cheer f--everything" [dashes added]. The second stated: "Love how me and [another student] get told we need a year of jv before we make varsity but that's [sic] doesn't matter to anyone else? ..."

News of the post quickly spread throughout the school community, resulting in her removal from the team for the school year. B.L. and her parents sued the district, alleging it violated her First Amendment rights by disciplining her for off-campus speech.

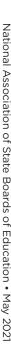
B.L. scored her first victory when the federal district court ruled that even if Tinker extends to off-campus speech, B.L.'s posts were insufficiently disruptive for the school to impose discipline. Then the Third Circuit affirmed the district court's decision but on the alternate ground that Tinker does not extend to off-campus speech. The Third Circuit explained, among other things, that allowing schools to regulate off-campus speech in the social media age would suppress too much speech. The court acknowledged, however, that its ruling is at odds with decisions by the Second, Fourth, Fifth, Eighth, and Ninth Circuits.

Whether or not B.L. secures an ultimate victory will be determined when the Supreme Court decides the case later this year. School systems across the country will undoubtedly be watching to see how the court resolves the split among the circuit courts on the reach of the *Tinker* rule to off-campus student speech.

There are many challenges policy-makers face that were heightened by the turn toward virtual learning environments—equitable access to devices, student privacy, and the long-term effects of increased screen time, to name a few. To these, policymakers can add the need to guide schools and districts as they balance creating safe, supportive learning environments with students' right to free expression on social media.



Tiffany LucasPresident, National Council of
State Education Attorneys





Jasper Coughlin Member, Massachusetts Board of Elementary and Secondary Education

Student Voice

Having an Equal Seat at the Table

"I've been receiving more work and losing my motivation to actually do it."

"I feel myself being less energetic and enthusiastic."

"This year blows."

Earlier this year, I distributed a survey to 5,000+ students in high schools across Massachusetts. The respondents (some of whom I've quoted above) were split on in-person versus remote learning, academic readiness, classroom engagement—you name it. It reinforced my belief that student voice is far from a monolith. Yet they agreed on a general frustration with their schools—a sense of being shut out of their own education.

In particular, students are often left out of the policy-level conversation on mental health—perhaps the most consequential issue they face. They must be part of discussions about remedying it.

I set myself a goal of elevating student voice when I was elected to the Massachusetts state board last October. (I often joke that the pandemic is either the best or the worst time to become a board member.) Ironically, I am the only elected member of my state board and as such represent Massachusetts's one million K-12 students.

For each and every discussion and vote, I listen to student voices and share them with the board before making my decision, but rarely are those voices taken seriously. "I'm sure your parents had some sort of sway in your vote" and "you're a sellout and didn't represent the students" are some of the comments I've heard from adult-age policymakers in response to my voice. Certainly, students often do not have the same experience or systemwide perspective, and I do not believe these adults' doubts are malicious. When reasonable doubt turns into

delegitimization, however, I draw the line.

For all their platitudes about "the next generation of leaders," many educational officials doubt whether student self-advocacy serves legitimate purposes. A student rep is advocating for mental health days? Well, the students are lazy and don't want to work. Students are asking that the school invest in racial equity training? They don't understand the issue and don't appreciate all we've done so far. Those in power will dismiss student voices and use lip service as an escape route.

Student advocacy ought not be equated with ingratitude. We students are grateful for what has been done by previous generations for our betterment. Our advocacy is not an insult to these accomplishments but a request to build upon them.

I air these concerns not because I take them personally but because students are increasingly angry. I have felt it in my state, and if you seek it out in yours, you will feel it too. When students and their representatives are neglected, progress stagnates on issues important to them. They can see things not getting better, which fosters frustration.

A more diverse, forward-thinking, productive education system will include student voices. The need to elevate the student voice at local and state levels will far outlast my tenure, but I will keep trying because I believe active listening and response to students creates a better learning environment for all.



Reshaping Assessment and Accountability in 2021 and Beyond

COVID-19 gave the country a crash course in public health data. It underscored the value of data that can support well-informed, timely action in a crisis. The experience with virus testing, contact tracing, and vaccine distribution illustrated the dangers of decision making with insufficient information. Even when the news is bad, it is always better for those in charge—and the public—to know the truth. Good data are just as important for education systems in crisis.

And they are in crisis. Schools and districts have been struggling to reach and educate students safely. Students who were disproportionately underserved before the pandemic—including low-income students, students of color, English learners, and students with disabilities—are experiencing more severe educational setbacks now. Although it may change as the public health situation changes, the education crisis is unlikely to end anytime soon. Its effects will almost

Data about system performance will continue to lie at the heart of school improvement.

Bonnie O'Keefe, Andrew Rotherham, and Jennifer O'Neal Schiess

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State leaders must beware the dangers of acting without the right information.

certainly outlive the medical part of this crisis in the United States.

As state and local education leaders, including state boards of education, contemplate the future, they should identify the data that parents, educators, and leaders need in order to act. Systems of assessment and accountability must evolve to meet that need, and state leaders must beware the dangers of acting without the right information.

In February, the U.S. Department of Education issued guidance to states that they could not wholly waive assessments this spring, as some states had hoped to do. This guidance balanced the critical importance of transparent information on student learning amid this crisis and offered states substantial flexibility to adapt testing to the current moment:

- waivers from the accountability requirements to identify lowest-performing schools and implement status quo school accountability consequences and 95 percent test participation requirements; and
- test design and administration flexibility, including options to shorten tests, push testing to the fall, administer tests remotely, or broaden the test window.

Assuming the Biden administration holds states to a meaningful standard in the waiver process, this approach creates the conditions for states to successfully administer low-stakes, modified assessments that give educators, parents, and leaders useful data on student performance with which to make decisions. With a pause on accountability, no student or school should be penalized for the circumstances of the pandemic. These waivers could start an important conversation about how to modify and refocus state assessments and accountability for long-term success.

As always, there is a risk that districts, advocates, or states will misuse or misinterpret 2021 test data, creating unwanted educational consequences in an already stressful time. Although 2021 tests could be a valuable source of information on student learning, among many other sources, state boards and state superintendents should set cautious expectations for educators and the public about test results. Substantially modified or shortened state assessments, or those given remotely, may not be comparable

to prior or subsequent years.² Consequently, any analysis of trends would need to come with caveats. Detailed performance information or growth data may also be limited.³ For these reasons, states should consider how to present results in new ways and combine test results with a variety of other metrics that reflect the unique learning circumstances of 2021.⁴ As in any other year, state test results are just one set of data points that parents, educators, and leaders should consider about student learning and school conditions in order to reflect on the past and make informed decisions for the future.

What might come next, beyond 2021?
Longtime opponents of standards-based accountability and assessments are pushing to permanently remove the best sources of data about student performance and progress. Robust state systems of assessment and data-driven school improvement efforts are still vitally important, and state and federal leaders should not give in to pressure to dismantle them. But this multiyear disruption may nonetheless create an opportunity to reshape assessment and accountability systems in a productive way.

State boards should lead the way toward new systems of assessment and accountability. In the past, accountability and assessment systems attempted to do too much for too many. The most valuable focus for these systems moving forward will be high-quality instruction, and resources and support for the schools and students that need them most.

A Short History of Accountability

Early iterations of nationwide accountability policy under the Improving America's Schools Act and the subsequent No Child Left Behind (NCLB) in 2001 brought unprecedented transparency to reading and math performance and graduation rates for individual students and subgroups, shining a spotlight on persistent equity and achievement gaps for students of color, low-income students, English learners, and students with disabilities. NCLB focused school intervention efforts on the lowest performing schools and largest achievement gaps, as primarily defined by math and reading proficiency rates. It also prompted states to overhaul their standards to align with college and career readiness.

This approach produced some meaningful gains in student outcomes on measures such as math proficiency and high school graduation rates.5 While the focus on standards and data moved results in the right direction, the implementation and application of that focus created new problems. NCLB's narrow set of success measures led some schools to implement poor pedagogy or narrow what students were taught in favor of tested subjects.6 Its system of school-level interventions was at once flexible enough for some states to do little to improve schools but also restrictive enough to get in the way of efforts by ambitious states.⁷ All of this, plus general reform fatigue, prompted Congress to increase flexibility for states when the Every Student Succeeds Act (ESSA) replaced NCLB in late 2015.

ESSA retained most of NCLB's annual testing and reporting requirements but gave states much more flexibility in how they designed and implemented accountability for schools. It thus created a much more varied accountability landscape. A few states created their own rigorous accountability systems, but many others took the opportunity ESSA offered to create opaque quality measurement systems and

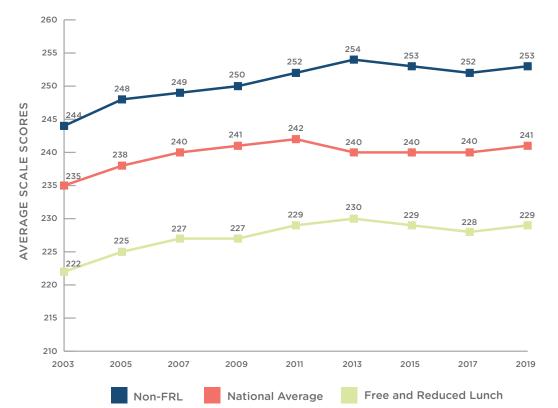
minimize interventions.⁸ For example, in some states a school could earn the lowest possible rating for multiple years before getting any additional support or being required to do anything differently.⁹

Modest but measurable progress on many student achievement metrics stalled during NCLB's later years, and these concerning student performance trends have continued under ESSA. Average math and reading scores among middle and elementary school students have been essentially flat, while gaps between low-income and higher income students have grown.¹⁰ For example, in the early years of NCLB (2003-11) average fourth grade math scores rose,11 but they plateaued around 2011 (figure 1), with slightly widened differences between higher income and lower income students (as measured by free- and reducedprice lunch status). Under ESSA, this plateau has continued, and the hoped-for benefits of statelevel flexibility have not yet materialized.

Flat achievement and persistent or widening gaps also appear in other grades and subjects.¹² As a result, only one in three American high school seniors in 2019 was proficient in reading, and fewer than one in four was proficient in

Only one in three American high school seniors in 2019 was proficient in reading, and fewer than one in four was proficient in math.

Figure 1. Fourth-Grade NAEP Math Scores, 2003-19 (average scale scores)



Source: National Assessment of Educational Progress, Data Explorer.

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State boards should focus first on directing accountability resources and energy toward supporting effective instruction in all schools.

math, a decline from the preceding four years.¹³ These trends cannot establish causal links with federal policy changes, but these metrics suggest that current policies and systems meant to close achievement gaps and improve student performance are not translating into better student outcomes.

Both NCLB and ESSA tried to serve multiple stakeholder groups, whose needs are often in tension: State and federal policymakers want a high-level understanding to guide resource and policy decisions and interventions. Schools and districts want faster, more detailed information to guide action in schools and to direct resources to respond to problems when they arise. Parents want to know how their children are performing and want to understand what is happening inside their schools and districts. When states try to do all these things within one framework, often no one has their needs fully met.

Politicized debates have mostly focused on removing the very data sources that educators, leaders, and the public use to understand student performance and growth. Yet we already know what education looked like before the introduction of rigorous state assessments and accountability systems: It was on the whole less equitable, less transparent, and lower performing. A revised framework for accountability should keep the best components of prior assessment and accountability systems, learn from experience, and respond thoughtfully to students' needs in the foreseeable future.

A New Vision of Accountability and Assessment

As schools attempt to move forward from COVID-19, it is already abundantly clear that millions of students lost significant opportunities for learning and endured multiple destabilizing events in their time outside school walls. ¹⁴ These opportunity gaps are very likely to affect student learning but not in evenly distributed ways. And we know that curriculum and classroom instructional practices are among the biggest in-school factors that determine student learning.

For these reasons, state boards should focus first on directing accountability resources and energy toward supporting effective instruction in all schools and second on intervening to change outcomes for the lowest performing schools and most underserved students. This kind of system would set out a clear, succinct set of high-level performance, progress, and equity indicators to guide state actions. Beyond those indicators, assessments and accountability would focus on what schools need to support effective, responsive instruction. Consequently, assessment systems must be fast, flexible, and embedded within high-quality curricula, and accountability systems must value continuous improvement and growth.

Such accountability systems could take the form of more streamlined end-of-year assessments, with other progress-monitoring assessments embedded into the school year. Parents and state leaders would still get the high-level information they need, but these systems would prioritize getting information to educators in a timely manner so they can act on it in close to real time.

Reliable, comparative information on student learning remains essential for state leaders to monitor educational equity and quality. The biggest potential trade-offs to faster, more flexible assessments are possible threats to precision in measurement or comparability. These are risks that assessment designers and researchers can anticipate and investigate. And states could offset these concerns with additional sources of nonacademic school performance data, sampled end-of-year assessments, or both, as well as new tools or frameworks to present data appropriately for different audiences.

Several states have taken steps toward this kind of approach by piloting more flexible assessments that can be administered in pieces throughout the school year. This way, teachers and school leaders get results faster, and tests are not such a disruptive end-of-year event. One example is New Hampshire's performance-based assessment and accountability pilot. The state streamlined standardized tests and supplemented them with assessments designed and administered by local educators, integrated into teaching and learning. All this work is aligned with the states' curricular and standards-based emphasis on deeper learning.15 However, this work is complex and can take time, especially under current policy structures: The New Hampshire pilot has grown and evolved over

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more than five years but has not yet rolled out to the whole state.

A stronger emphasis on instructional improvement would require most states to amp up their typically hands-off role in curriculum and teaching practices. For example, Louisiana's humanities exam pilot, which combines social studies and English language arts content and is administered in pieces throughout the school year, would not be possible if the state had not already invested substantially to create its own ELA curriculum, now in use by 75 percent of the state's school districts.¹⁶

The biggest risk of this kind of approach is that, even with high-quality curriculum and faster, more flexible assessments, students in some schools or subgroups might not be making sufficient progress to achieve college and career readiness by the time they graduate. ESSA creates a floor for states, but state boards, governors, state education chiefs, and state legislators should exceed that floor, intervening aggressively with an eye toward equity for underserved students.

One way in which state intervention could improve on current practice is by incorporating a stronger focus on district-level policies and practices. One big weakness of school-level improvement plans is that most school leaders do not control staffing, budget, enrollment policies, and curriculum—huge factors that constrain or enable improvement. States can correct for this by monitoring performance and equity indicators at a district level and requiring that district-level policy changes be part of improvement actions.

Finally, another important form of accountability is where families opt to send their children to school. In the past year, family choices have come to the forefront as COVID presented wholly new options, risks, and benefits for families to weigh. Families have made choices to send their children back into classrooms, continue virtual learning, homeschool, or switch school systems. As in the past, families with more economic resources had more choices. State and local policy should ensure that all families have an accurate picture of the educational options available to them and an equitable chance to make decisions for their children. Litigating the merits of various school choice structures is beyond the scope of this article, but

it is worth noting that education is an outlier. In most areas of American life, we balance choice and public regulation to protect the public interest while also harnessing the benefits and signaling of a choice-driven system. At a minimum, state boards focused on equity should examine who has the ability to vote with their feet on educational options and who does not.

Role of State Boards

State boards can advance a new vision of assessment and accountability in several ways. Perhaps most important, board leaders can clarify the role and mission of boards as it relates to improving outcomes for students. State boards serve different functions in different states and have very different contexts. Depending on the state, they also have varying powers and responsibilities relating to assessment, accountability, curriculum, and standards. Some are highly politicized, while others see themselves primarily as advocates for schools rather than regulators who base their decisions on evidence and equity. This role confusion can cloud board decision making. A good regulator seeks to protect the regulated from counterproductive or ill-considered regulations but never loses sight of its fundamental role to protect the public interest.

Boards can also take specific steps. The first is advocacy and communication with other education leaders at the state and federal level. Past federal administrations' interpretations of ESSA would not allow for full implementation of an assessment and accountability framework like the one described above. It seems likely, however, that the Biden administration's approach will differ from that of its predecessors, which might bode well for more state flexibility, especially around assessments, in the coming years.

State boards could have a powerful voice in this process, especially if they add theirs to those of state and district superintendents, educators, legislative leaders, civil rights advocates, parent advocates, and other critical stakeholders. Together, these groups can set a vision that will make assessment and accountability more effective and durable, without backing away from underlying principles of equity and transparency. They can also jointly communicate to the

State intervention could improve on current practice by incorporating a stronger focus on district-level policies and practices.

Very different approaches are possible, even under current federal law, but they require time, resources, and careful implementation.

public that assessment results are a valuable source of information but not the sole determinant of school quality and student success. This nuance, on which the vast majority of education stakeholders agree, has often been lost in polarized arguments to abolish or uphold standardize testing.

State boards must also maintain or adopt rigorous college- and career-ready standards and approve, incentivize, or adopt high-quality curricular materials and resources, if that is part of their purview. The multiyear process to reshape curriculum and instruction from the state level in places such as Louisiana and New Hampshire show that very different approaches are possible, even under current federal law, but they require time, resources, and careful implementation.

Assessment and accountability alone will not deliver the school improvements students need, and significant changes in accountability and assessment will intersect with many other factors. For example, how should school choice and enrollment systems use information from assessments to communicate to parents effectively and equitably? And how can parents and students play a key role in defining school quality based on a variety of academic and nonacademic factors, and partner on plans for school and systemic improvement? Other critical factors—equitable school finance, teacher and leader preparation, and professional development, for example—also shape student outcomes and school quality. However, well-designed assessment and accountability systems can help states, educators, parents, and others better understand how students are progressing and make decisions with the best information available.

State boards can lay the groundwork now for reexamining, revising, and rolling out changes to current accountability and assessment plans that will bring states closer to a stronger, revised vision for accountability and assessment in the future.

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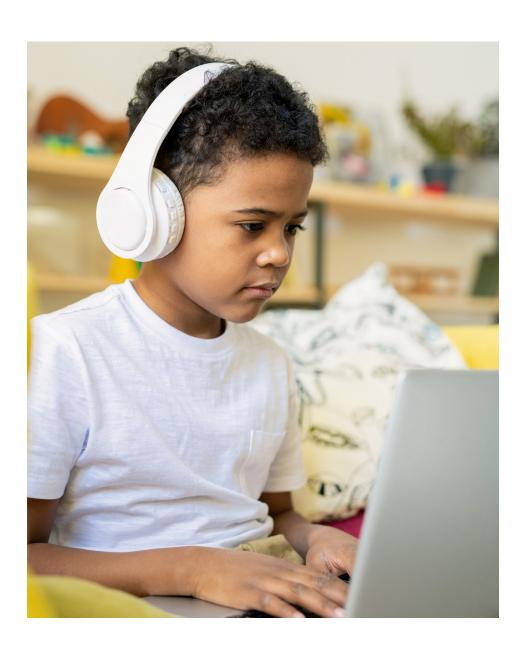
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The Role of Technology in Reimagining School

"Imagination," Albert Einstein famously observed, "is more important than knowledge." The COVID-19 school closures offered states and local school districts an opportunity to reimagine education—to tailor it to meet students' needs, support teachers and aid their professional development, keep schools safe, and better support families. Thus far, we do not see a lot of imagination

on display. In particular, schools are not taking advantage of the tremendous opportunities that technology provides—or at least have not made them available to all students.

We predict that even if school looks more like "normal" in fall 2021, schools will at some point need to rely on virtual learning again. State boards of education should therefore start now to imagine and Pandemic or no, states ought to press for better technology for personalizing learning and making staff and students safer.

Kristen Amundson and Andrew Ko

The shift to remote learning was a blow to

many students who were

already vulnerable.

plan for Virtual School 2.0. State boards have varying levels of authority to accomplish this task, yet all have the power of the question. We suggest five:

1. How well have students been served by remote learning, and are there significant gaps between groups?

Education policy conferences over the last decade have typically included a panel on "The Future of Schooling" that reflected a desire to move students to individualized, online learning—at some time in the distant future. And then last spring, schools shifted to online learning over a weekend, with so little advance warning that some families quickly regretted signing up for *that* weekend to take the class gerbil home. Instead of school-happens-inclassrooms, the model became school-happenson-the-couch. Or, if the family had no access to high-speed internet, school happened in the parking lot of the local public library, where Wi-Fi was available.

Clearly, that shift will in part be permanent. Whether by mutation of the COVID-19 virus, a new pandemic, natural disaster, or blizzard, schools are looking ahead to the next time they will rely on virtual learning. A recent Rand survey of school district leaders found that "remote learning is here to stay." It found that one in five districts was considering, planning to adopt, or had already adopted a virtual school or fully online option, while about one in ten had adopted or planned to adopt a blended or hybrid form of instruction. ¹

While these leaders expressed a commitment to future online learning, they also noted that their biggest worry was the disparities in student learning that online learning laid bare. Half of all respondents rated learning disparities as a significant challenge, with another 36 percent saying it was a moderate challenge.

They are right to worry. Disparities that existed before the pandemic were in many cases exacerbated. The shift to remote learning was a blow to many students who were already vulnerable, particularly students of color and lowincome children and youth.

Data are still being collected, but there are some results that should concern state boards. In Houston, the seventh largest school district in the country, 42 percent of students received at least one failing grade in the first marking period. That compares with 26 percent in the fall of 2019.²

Fairfax County, Virginia, the nation's 11th largest school district, reported an 83 percent increase in the number of middle and high school students receiving an F in two or more classes. Students with disabilities, English learners, and economically disadvantaged students did even worse, with jumps of failing grades of more than 350 percent.³

2. Can technology help reduce disparities in student learning?

There are lessons to be learned from health care. In both education and health care, an accurate diagnosis is the critical first step in treating a problem. We believe that the first, most critical task for state boards should be to capture information on how students are engaged in learning, whether in a digital environment or not. Hundreds of millions of dollars have been spent over several decades on amassing data, yet much remains unknown about what captures students' attention, sparks their curiosity, or piques their interest. That information can lead teachers to design assignments for challenging content in ways that engage students: project-based learning, for example, or relating class content to real-life situations.

Students should also be engaged in policymaking. Many state boards have student members, who can add the student voice to policy decisions. Surveys, formal school visits, and even public comment time are other ways to engage students.⁴

State boards need a more nuanced picture of the whole learner. Social media companies can predict individual sentiment, online commerce companies can predict interest in products, and Netflix can recommend movies. But data systems in schools fall well short of providing meaningful insight about learners. Which students do not have high-speed access to the internet at home? What are the early-warning signs that students need help?

Differences among subgroups must also be analyzed. Virginia's Department of Education found that after one semester of at-home learning, nearly half of kindergarten English learners

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and more than one-third of low-income kindergarteners in Virginia are at high risk of reading failure. Black students, students with disabilities, and Latino students were similarly struggling. Results for first graders were nearly the same. So the state board of education has been crafting a plan to help those most vulnerable students.⁵

State boards can also examine the differences between students who spent the entire school year in virtual learning versus those who were in classrooms. They should pay close attention to the data received this spring and summer, with a careful look at subgroup data. Where do students need the most support? Early reports from school districts show that students with disabilities may have faced particular learning challenges this year. State boards should then ask questions about plans to address these learning challenges. Is Recovery Act funding addressing the real learning needs?

At the same time, it is important to remember that online learning will not disappear in the fall. For some students, the option to learn at home will remain a pathway to success. For districts that cannot find a certified teacher in calculus, for example, an online class may allow students to enroll in a challenging class the district could not otherwise provide.

Since state boards are responsible for adopting state learning standards, they should also consider what the data reveal about what students have mastered. It may well be that students were never exposed to some of the standards. That information may be helpful when standards are up for revision. For example, a state board that was considering a reduction in the number of standards in order to increase the depth with which those standards were addressed might reduce the focus on what students already know in order to leave more time for other important topics.

NASBE has long been a strong supporter of expanding access to high-speed internet connectivity for every student.⁶ But states do not always have the best information on where high-speed internet has not been deployed.

Current technology can determine not only when a student is signing on to a class, but where and how a device was used. This information could help crowd source a map of areas that still lack access to high-speed internet. (If students only sign on in the parking lot of the

local public library, that indicates that they lack access to high-speed internet, because it does not reach their home or they cannot afford it.) Even when this technology is deployed, families may need training in its use. In Tennessee, public libraries administer a program known as Training Opportunities for the Public, offering citizens in underserved areas training in how to access and use the internet for everything from helping children with homework to applying for a job.⁷

There is no generation that has been learning online for so long. Plagiarism and students texting answers to each other have never been so prevalent and accessible. Parents are not always able to monitor children to make sure they are actively participating. This reality needs to be addressed, and there are tech companies that can assist in remote proctoring to give educators a greater degree of assurance on exam scores.

State boards should be vocal in their support for efforts to expand security, access, and affordability at the state level.

3. How can technology help teachers personalize learning?

Even before schools closed last year, students in the typical classroom spanned a wide range of grade levels. Those ranges expanded during the pandemic.

While personalized learning is effective, it is also time consuming. Technology exists to make that task easier. Software can automate much of the basic-skills practice and assessment that ordinarily takes up time better spent on designing lessons. Computer programs can identify weaknesses in a child's skills—adding and subtracting fractions, say, or conjugating Spanish verbs. Students can then get practice only in the areas they need, teachers can review outcomes daily, and follow-up lessons can build on what students are learning.

The technology can give teachers a bird's-eye view of how students are solving problems. If a student is missing a critical step—forgetting the order of operations in a math problem, for example—the teacher can focus on that content. Teachers used to have students turn in "exit slips" so they could assess whether students had mastered the day's lesson. Now technology can streamline the process so teachers know

States do not always have the best information on where high-speed internet has not been deployed.

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New platforms would allow principals to tailor professional learning to teachers' needs.

instantly whether their lesson worked or they need to reteach some content on the following day.

Technology also makes it easier for teachers to share the work of developing differentiated lessons. If every teacher is teaching two-digit multiplication, one can develop games for skills practice while another creates word problems, for example.

Technology can improve professional development. Anyone who has ever spent an hour on a silly icebreaker—like folding a newspaper page into a hat—will confirm that too many local efforts are uneven at best. New platforms would allow principals to tailor professional learning to teachers' needs, just as teachers can tailor learning to student needs.

States set general requirements for the number of hours of professional development teachers need. However, state boards could assist local districts in identifying providers who can design and develop individual staff development plans. While professional development for digital learning is not new, some states are using open educational resources (OERs) to share teacher professional development resources. Virginia's #GoOpenVA was an early example. It continues to grow in popularity because educators across the state can contribute, comment, and use content that shares best practices. Teachers determine the content that is most valuable to them. Teachers save valuable time because they can rely on the ratings of a community of educators. Providing all teachers access to high-quality learning also supports equity.

The Utah State Board of Education is pioneering the use of microcredentials for teachers, as are others (see article, page 35). Created by educators and approved by the board, these credentials focus on content with immediate applicability—for example, on effective use of an assessment tool to give students more ways to demonstrate mastery of a new skill. Credentials can be developed quickly in response to an immediate need and earned by teachers in weeks rather than semesters.

4. How can technology keep teachers and students safe when they return to school?

When *Education Week* surveyed teachers last December about returning to in-person

instruction, their number one concern was safety.⁸ But while discussions of school safety used to involve magnetometers and school resource officials, the pressing worries today are physical health and cybersecurity. Data and technology will be critical to addressing both.

Schools do need personal protective equipment and plexiglass barriers for physical safety. Even if every staff member is vaccinated before schools reopen, staff may reasonably worry that students may be asymptomatic spreaders. Parents share that worry. In a 2020 survey of parents, only half said they have at least a "somewhat high" level of trust that their child's school would safeguard their health if in-person instruction were to occur during the pandemic.9

But there are also technology solutions. One is to institute COVID-19 contact tracing for everyone in a school building: teachers, students, staff, and volunteers. Universal testing is part of the guidelines from the Centers for Disease Control and Prevention (CDC) for safely reopening schools. Federal funds, including those from the Federal Emergency Management Agency, can help defray the cost.¹⁰

Some school districts mandated universal testing before the CDC issued recommendations. Hartford, Connecticut, Public Schools, for example, implemented self-reporting tracing applications to manage and monitor COVID cost effectively. Administrators, teachers, and parents are made aware of self-reported cases and can provide alerts to others in proximity. The system recognizes individuals who have received vaccinations as well—all while protecting privacy.

State boards have a responsibility to share accurate, disaggregated information with the public. Although state health agencies will have the primary responsibility for collecting, aggregating, and sharing COVID-19 information, state boards can play a role. They should prioritize helping schools that serve the communities most vulnerable to COVID-19 (box 1).

5. Are students and educators safe in a digital learning environment?

State boards also need to think about cybersecurity in a digital learning environment. This past year, all schools urgently issued devices and worked to ensure internet access to students and

Box 1. Which Schools Should Be Prioritized for COVID Testing?

If state resources for coronavirus testing are limited, the state board should work with health officials to prioritize the best settings for school-based testing. In its "Interim Considerations for Testing for K-12 School Administrators and Public Health Officials," the Centers for Disease Control and Prevention (CDC) offers this guidance:

Schools in communities disproportionately affected or that lack access to test-

ing. Public health officials and school administrators may consider placing a higher priority for testing in schools that serve populations experiencing a disproportionate burden of COVID-19 cases or severe disease. These may include schools with moderate or large proportions of racial and ethnic groups that have experienced higher rates of COVID-19 relative to population size or schools in geographic areas with limited access to testing due to distance or lack of availability of testing.

Schools in communities with moderate, higher, and highest risk of transmission.

The decision to initiate a school-based testing strategy for students, teachers, and staff should be made in consultation with the local health department. CDC recommends taking into consideration the level of community transmission and implementation of mitigation strategies when deciding on school-based testing. Testing in schools located in communities at moderate to high risk may provide the maximum balance of testing efficiency.

Schools with an active outbreak. Classrooms or schools experiencing an active outbreak may temporarily close for in-person learning. The local health department may facilitate testing for students, teachers, and staff in schools with active outbreaks. The health department will also conduct contact tracing in these situations. Schools can assist by providing information to identify close contacts (e.g., class rosters, seating charts, and student emergency contact information). Health departments can use a tiered approach in an outbreak setting to determine which close contacts and other potentially exposed persons could be tested or quarantined.

educators for remote learning, creating a global shortage in the supply chain as educational institutions competed to purchase Chromebooks, laptops, and various forms of mobile Wi-Fi (MiFi) "pucks." One consequence of the rapid shift to remote learning was increased exposure to nefarious attacks.

As Doug Levin, director of the K12 Security Information Exchange and founder of the K-12 Cybersecurity Resource Center, put it, "With more teachers and students online, particularly if they're doing it from less controlled environments outside of the school, the attack surface of the school community is increased."

The data back him up. Over 1,100 incidents involving cyberattacks on U.S. schools and districts have been publicly disclosed in recent years, according to the K-12 Cybersecurity Resource Center.¹³ The number and severity of those incidents increases every year. Microsoft Security Intelligence found that 61 percent of nearly 7.7 million enterprise malware encounters in the past month were reported from the education sector, making it the largest target of any sector.¹⁴

While state education agencies engage in some form of cybersecurity risk management, protecting from threats like ransomware and Protecting from threats like ransomware and phishing is increasingly urgent across K-12 districts.

Many school districts do not have the information security personnel and budget to understand, diagnose, and stay abreast of evolving cyber threats.

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phishing is increasingly urgent across K-12 districts. Key among the practices that districts need to embrace is participation in threat intelligence and sharing of best practices. Instead of trying to conceal a cyberattack, schools need to share information with trusted peers. Immediate outreach is critical to ensuring the mutual defense of schools and students.¹⁵

At a minimum, state boards should require that their departments of education hire a chief information security officer, and they should immediately adopt policies and guidance for local districts to address and minimize their cybersecurity risks. According to Verizon's 2020 Data Breach Investigations Report, "This industry [education] saw phishing attacks in 28% of breaches and hacking via stolen credentials in 23% of breaches. In incident data, Ransomware accounts for approximately 80% of Malware infections in this vertical. Educational Services performed poorly in terms of reporting phishing attacks, thus losing critical response time for the victim organizations." ¹⁶

Where state policy allows, state education agencies can work with other state and local agencies to develop cost-effective ways of strengthening security programs and resources. This is an important problem to address at the state level, as many school districts do not have the information security personnel and budget to understand, diagnose, and stay abreast of evolving cyber threats.

A possible answer might be to explore pursuing statewide contracts with cybersecurity providers who have compliance tools and monitoring services over the leading regulations and policies for IT security compliance in government and commercial markets including the National Institute of Standards and Technology and Department of Defense.

Digital learning is going to be a part of education's future. Now is the time for state boards to imagine—and help create—a better digital future.

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The Greenfield Path to School Improvement

State policymakers can help clear away the rubble that impedes vibrant reform.

One of the many things the pandemic has illuminated is where schools get stuck. For more than a year, millions of children attended school remotely, and yet the quality of that instruction remained hostage to the capacities of geographically determined school districts.

The constraints imposed by the familiar web of rules, contracts, and programs were cast into particularly harsh relief during spring 2020, when rules intended to ensure that schools educate all students frequently seemed, in practice, to strip school systems of the flexibility and agency they sorely needed (which is why some states moved to waive some of these rules in 2020). Meanwhile, Oregon told virtual schools to stop teaching because, as the state's department of education explained, systems "cannot open a brickand-mortar school in Oregon unless it is accessible to every student in their school district. The same rules apply to an online school." In short, since the state's traditional school districts were not ready to educate their students, learning had to stop everywhere.

Such stories were manifold. Too often, rather than ensuring that all kids were well served, the latticework of regulation

led to hesitancy and risk aversion. Education stalled as school systems fretted about bending the rules and awaited assurance that they had permission to educate kids.

For me, this period has brought back thoughts of *Education Unbound*, which I penned more than a decade ago. The book sketched a vision of what I call "greenfield schooling." The premise is simple: Profound educational improvement requires more than fine-tuning systems that have evolved over two centuries; it requires policymakers and educational leaders to revisit organizing assumptions about the grammar of schooling.²

Greenfield schooling borrows a metaphor more frequently employed by builders, who use the term to refer to land that is clear, level, accessible, and free of hazards—in other words, readymade for a build. The idea of greenfield schooling, then, is an education environment that is inviting and hospitable for educators and problem-solvers working to tackle important problems.

The greenfield notion owes much to the thinking of economist Friedrich von Hayek. In his 1974 Nobel acceptance speech, Hayek observed that one can Frederick M. Hess

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Rules, regulations, and routines have grown up and calcified around the complex work of schooling, hobbling sensible adaptations.

approach public policy as either a gardener or an engineer. He was suggesting that policymakers can think like engineers, who construct sophisticated proposals that they try to execute from on high, or like gardeners, who strive to create the conditions that yield a robust harvest. Hayek thought it difficult, if not futile, for policymakers to operate as engineers, because they simply do not have enough control or information to design effective solutions.

Hayek's concerns are all too familiar to those trying to devise solutions for hundreds or thousands of schools across scores of extraordinarily diverse communities. In short, the greenfield approach to school improvement eschews grand solutions in favor of fertilizing the soil so healthy, vibrant reform can shoot up organically.

The possibilities of a greenfield approach are unbounded, and the pandemic ought to have inspired several. Schools could allow high school students to deliver more computer-assisted tutoring. They could use virtual delivery to allow every interested student to enroll in Advanced Placement. They could make it easier for families to take advantage of remote learning options without forcing their children to forfeit other valuable formative experiences (for example, many states restrict athletic or extracurricular participation if a student is not enrolled locally—this should be revisited). They could allow validated competency tests to displace seat-time requirements where appropriate. They could tailor the school week and year to better serve families. They could enable high schoolers to create hybrid schedules as a matter of course. They could give families more opportunities to tell schools what services they need. The possibilities are as endless as the situations of 100,000 schools and 50 million children.

Greenfield vs. Grand Solutions

For those who appreciate how much better U.S. schools need to be and believe that big, sweeping action is the only appropriate response, a greenfield approach likely seems to lack the requisite urgency and scope. But I maintain that greenfield reform is deceptively bold. We spent years and billions on No Child Left Behind accountability systems, which infuriated educators, alienated parents, and fueled intense concerns about narrowed curricula and testing mania. We spent years and billions on teacher evaluation systems that frustrated teachers,

created massive paperwork burdens, and had no impact on actual evaluations.³ We spent years and billions on the federal School Improvement Grant program, which was found to have no significant impact on school performance.⁴ I suggest that a more organic, evolutionary approach might have gotten us further, faster.

The organizing assumptions and grammar of schooling have evolved very little over the past 50 or even 100 years. Limitations in communication, transportation, video technology, data storage, and computing power once required a teacher to be in the room with students in order to effectively teach them. Such constraints no longer hold. Virtual instruction that would have qualified as sci-fi even 20 years ago is wholly possible, and its quality now rests primarily on the caliber of instruction, curricula, and technology.

But rules, regulations, and routines have grown up and calcified around the complex work of schooling, hobbling sensible adaptations.

As a result, school improvement plays out in a brownfield environment—as if builders sought to erect a shiny, eco-friendly skyscraper before clearing away the dilapidated apartment building standing on the same site. Rather than cram good ideas regarding curriculum, instruction, or staffing into schools that are not built to accommodate them, state education leaders might ask how to reimagine schools and systems so they can take full advantage of a changing labor force, evolving societal norms, and emergent tools.

In practice, accumulated policies, political interests, and familiar practices tend to stymie new solutions. It can be hard for even a dynamic school leader to justify the expensive, extensive, and time-consuming work of navigating a bureaucratic labyrinth to cultivate greenfield. Especially when faced with immediate concerns like refining curricula or adding instructional coaches, plowing greenfield can seem like a daunting, exhausting task with little in the way of immediate rewards. Yet improvement is compromised when pursued in brownfield environments.

Greenfield as an Approach to Teacher Quality

In essence, a greenfield approach boils down to asking this question: How might schools and systems make better use of time, tools, people, training, and money if they were free to start from scratch?

Take teacher quality as an example. In recent decades, reforms to boost teacher quality have

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focused on evaluation, tenure, amped-up recruiting, teacher pay, the equitable distribution of "effective" teachers, preparation, and professional development. I think it is fair to say that the fruits of these various efforts have disappointed. The greenfield approach flips this kind of thinking on its head, instead asking how schools might reimagine the teacher's role so it is easier for them to provide more high-quality instruction. Such a reimagining would entail unbundling the teaching job so that each teacher is not asked to excel at so many different things.

Especially in the midst of a pandemic, during which some "great" teachers struggled to teach remotely while "less effective" teachers found their stride, it should be evident that teaching involves lots of skills—and that teachers are not equally skilled at all of them. Figuring out how to let individual teachers do more of what they are already good at is a powerful place to start the improvement process.

When teaching talent was cheap and plentiful and demands on teachers were pretty basic, the notion of the do-everything teacher might have made more sense. Fifty or sixty years ago, highly educated women had few career paths other than teaching. Today, however, the talented women who once led classrooms are found more often in law firms than in schools. The job market, too, has changed. Whereas employees used to remain in the same occupation for most of their working lives, today's professionals are much more mobile. Meanwhile, new tools, such as distance learning and computer-assisted instruction, make it possible to deliver instruction and professional support in ways that used to be unthinkable.

Today's default staffing model is an anachronism, not because the model is "bad" or because anyone has done anything wrong, but because arrangements that made sense in the greenfield of years past have grown brown with neglect. Consequently, education leaders need not look far to find greenfield opportunities to rethink the profession.

It is time to reimagine geographic delivery. Remote learning can make online instruction or tutoring in any subject available whenever and wherever needed (provided there is adequate internet connectivity)—all provided by accomplished teachers and expert tutors from around the globe. Thus education premised on full-time, in-classroom teachers need no longer be the

universal default for all students at all times. Other models become possible, including those that provide curated online offerings alongside in-person options, offer relationships with distant mentors, create cohesive civics classes of geographically disparate students, or simply use remote delivery to provide quality calculus instruction to students in schools or communities where local instructors are not available.

It is time to rethink the organization of teacher work. Teachers perform many tasks in the course of a day. They lecture. They facilitate discussions. They grade quizzes. They fill out forms. They counsel distraught kids. They monitor the cafeteria. And so on. No one believes all these activities are equally valuable. Yet teachers almost unanimously relate to me that they have never been part of a disciplined effort to unpack what they do each day in an effort to increase the energy devoted to the things that matter most. Having an exquisitely trained early literacy teacher watching students eat lunch, filling out forms, or teaching addition—simply because she's a "second grade teacher"—is a bizarre way to leverage scarce talent.

Elsewhere in these same schools, there are powerful examples of different ways to harness staff time and student energy. In their book, *In Search of Deeper Learning*, Harvard's Jal Mehta and High Tech High's Sarah Fine explore how the openness that characterizes extracurricular opportunities has given rise to dynamic, powerful learning experiences that just do not fit the conventional classroom.

It is also time to rethink who can teach. Today, early career transience, professionals routinely working into their late 60s, and the prevalence of mid-career transitions make it increasingly bizarre to see education systems intent on recruiting 22-year-olds and hoping to retain them full-time into the 2050s. This model is ill suited to the realities of professional life in the 2020s.

Meanwhile, balky licensure systems, seniority-based pay, and factory-style pensions create big practical burdens and financial penalties for engineers, auto mechanics, or journalists seeking to enter teaching mid-career. Even aside from those seeking full-time roles, one can imagine a raft of opportunities in 21st century America for senior citizens, grad students, or stay-at-home-parents who may be eager to take on part-time work as tutors or coaches—providing a pool of skilled, flexible labor at

Such a reimagining would entail unbundling the teaching job so that each teacher is not asked to excel at so many different things.

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State officials have a distinctive role to play when it comes to dismantling the impediments that currently make this kind of reimagining impractical.

affordable rates. Unfortunately, existing licensure systems, job descriptions, and system practices make it prohibitive for even a creative superintendent or principal to explore these options.

Role for State Policymakers

The implications of a greenfield approach may be obvious for schools, systems, schools of education, nonprofits, and slick-talking reformers. But state officials also have an opportunity: to champion creative approaches and fund promising pilots. And they have a distinctive role to play when it comes to dismantling the impediments that currently make this kind of reimagining impractical. Greenfield-minded state officials can do the following:

- Revisit preparation, teacher-of-record, and accreditation requirements so as to make it easier for school leaders, district officials, and teacher leaders to rethink teachers' work.
- Encourage, invest in, and assemble the research on new staffing configurations, as such resources can help local educators imagine new possibilities and assuage concerns about unfamiliar approaches.
- It is easy for rethinking to be stifled by convention and also for it to morph into faddism. There is a valuable role for data that captures both outcomes and operations in order to monitor results and flag opportunities for improvement.
- Work with educators to identify and address the rules, regulations, and ambiguities that leave them frustrated and confused.
- Move from "defined benefit" to "defined contribution" pensions, so that teachers have more professional flexibility, the field is more attractive to mid-career job changers, and teachers need not make decisions based on the fear of losing their contributions.
- Design teacher evaluation systems that are less dependent on individual teachers "owning" a set of student results for reading or math to ensure that evaluation is not working at cross-purposes with collaborative teaching or broader efforts to rethink instructional delivery.
- Modify statewide pay scales and licensure to make it easier for districts to create new job

- descriptions and professional opportunities for teachers. States should, for instance, have a framework for 12-month teaching positions, offering a template for accomplished educators to work full-time while taking on tasks like developing curricula or onboarding new staff.
- Authorize school districts and charter schools to operate as recognized teacher training programs so that teachers can be based in schools, work full time as aides, and learn from veteran educators, with schools of education subcontracting to provide expertise as needed.
- Cultivate localized ecosystems to tackle the chicken-and-egg dilemma of new roles and training. Schools cannot start to think about redefining roles until people are trained for those roles, but it makes no sense to train people for roles that do not exist. Escaping this paralysis requires school systems to partner with teacher preparation programs, but doing so requires state policymakers to provide requisite flexibility with regards to licensure, certification, and job descriptions.

Most of the time, education policymaking suffers from a fundamental asymmetry. It is easy to make the case for expansive new rules since the problems they are intended to address can be so visible. Meanwhile, concerns that additional directives will fuel inertia or rigidity come across as callous. But the past year has made it hard to ignore how blunderbuss rules can fuel paralysis among educational leaders. When policies designed to protect America's students cause educational leaders to tell teachers not to educate kids, it is time to rethink how we deliver schooling.

the Widget Effect: Teacher Evaluation Reforms and the Distribution of Teacher Effectiveness," Educational Researcher 46, no. 5 (2017): 234–49, https://doi.org/10.3102/0013189X17718797.

⁴Lisa Dragoset et al., "School Improvement Grants: Implementation and Effectiveness," NCEE 2017-4013 (Washington, DC: National Center for Education Evaluation and Regional Assistance, Institute of Education Sciences, U.S. Department of Education. January 2017).

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¹ Eder Campuzano, "Coronavirus Closure Won't Lead to Online Classes in Oregon Public Schools. This Is Why," *The Oregonian/Oregon Live*, March 19, 2020.

²Frederick M. Hess, *Education Unbound: The Promise and Practice of Greenfield Schooling* (Alexandria, VA: Association for Supervision & Curriculum Development, 2010).

³Matthew A. Kraft and Allison F. Gilmour, "Revisiting the Widget Effect: Teacher Evaluation Reforms and the



Transforming Learning through Competency-Based Education

Teaching and learning are changing drastically in the wake of COVID-19, and once-skeptical K-12 system and school leaders are increasingly responding to students' academic needs with competency-based learning models. State boards of education and other state leaders should examine the rationale and structures that underpin these student-centered solutions and work to transform their systems.

The prevailing one-size-fits-all K-12 model is not meeting—and perhaps never met—the needs of all learners. Today, half of learners reach adulthood without obtaining minimal skills at the secondary level. Fewer than one in five American students follow a clear, uninterrupted path from high school through college to career. The promise of a public education is to prepare all learners to engage in, contribute to, and achieve purpose in the world, both as it is today and as it will be. Tweaking the traditional education system will be insufficient to realize this commitment.

State boards that are serious about preparing students for success in the future economy should embrace wholesystem transformation, realizing that

there can be no truly student-centered systems without significant shifts in policy and practice. An important first step is to create space in state policy for practitioners and educators to redesign learning. Such policies could, for example, provide greater seat-time flexibility, create competency-based education pilots, or establish innovation zones.

What Is Competency-Based Education?

Competency-based education, also called mastery-based or proficiency-based learning, bases student advancement on mastery of skills and academic content rather than age, seat time, or hours on task. A competency-based structure is built upon personalized learning experiences tailored to each student's strengths, needs, and interests and requires student voice and choice in what, how, when, and where they learn. If a student does not demonstrate adequate proficiency to advance, they must be provided with supports and interventions that help them fill the gaps in their knowledge and skills.

The organization I head, the Aurora Institute, published a five-part working definition of competency-based education in 2011. We expanded this definition States are adopting a range of policies to personalize student learning and move away from seat-time rules.

by Susan Patrick

Students should be able to tell you what they are working on, how they will be assessed, how to get extra support if they need it, and what they will learn next.

in 2019 to reflect our conviction that, for all students to achieve mastery, competency-based education had to center on equity and that we had not emphasized student agency, flexible pathways, and equity sufficiently in our first definition. The updated definition has seven elements:

- Students are empowered daily to make important decisions about their learning experiences, how they will create and apply knowledge, and how they will demonstrate their learning.
- Assessment is a meaningful, positive, empowering learning experience for students that yields timely, relevant, actionable evidence.
- Students receive timely, differentiated support based on their individual learning needs.
- Students progress based on evidence of mastery, not seat time.
- Students learn actively using different pathways and varied pacing.
- Strategies to ensure equity for all students are embedded in the culture, structure, and pedagogy of schools and education systems.
- Rigorous, common expectations for learning (knowledge, skills, and dispositions) are explicit, transparent, measurable, and transferable.

Each student gets personalized, competencybased pathways, whether they are inside or outside the school classroom. Moving away from seat-time requirements is critical to competencybased learning. Learning is the constant; time becomes the variable.

Blended or online learning can expand students' access to teachers, but this alone is insufficient. Pedagogy, structures, and culture must shift from the traditional ranking and sorting of students, which leaves many with large gaps in learning. Competency-based education instead relies on empowering students' ownership over goals and learning while ensuring teachers identify needs, pinpoint gaps, use data, and intervene immediately to address student needs.

What Does It Look Like?

In a competency-based system, students know exactly what they are learning and what proficiency looks like. Rubrics are readily available, and there are examples of student exemplary work. There may be posters on the wall for students to indicate where they are on their learning progressions. Students should be able to tell you what they are working on, how they will be assessed, how to get extra support if they need it, and what they will learn next.

As Doug Penn, principal of Whittier School in Alaska's Chugach School District, describes it, "Our community told us they wanted their children to be lifelong learners. We had to ask ourselves, what are we doing in our classrooms to help them be lifelong learners? What structures and supports do our teachers need to help develop lifelong learners? It came down to needing to have an active learning environment. Students need to be able to seek out things they are personally interested in, create a plan, and find the resources. We are always looking for ways to help students learn beyond the classroom."

Pittsfield School District in New Hampshire has created a dynamic extended learning program that enables students to build skills, demonstrate competencies, earn credit from experiences gained outside of the school environment, and partner with higher education institutions to gain college credits. These extended learning opportunities (ELOs) integrate with the competency-based structure by connecting the learning experience to core content areas. Each ELO differs based on student interest and location on their learning progression, but all involve research, reflection, and a presentation or project that links to the state academic standards.²

Questions driving the design of competencybased education systems include the following:

- Should schools advance students to new learning levels before they are ready?
- Should education leaders allow school systems to hold back students who are ready to advance to new learning levels?
- Should educators and leaders of education systems expect all students to learn the same material, in the same way, at the same pace?

Educators want a system that is designed to ensure students reach proficiency and are prepared to be successful at the next level. They seek a system that is student-centered and personalized. It only makes sense because students start with different sets of skills, learn

in different ways, and take different amounts of time and practice to master skills. Educators seek a system that monitors student progress and responds flexibly to student needs.

Learning gaps increase over time if students lack foundational skills in their learning progressions. In competency-based systems, by contrast, students are working at their proximal zone of development on learning targets they need for the next level of study, with frequent feedback and instructional support until they can demonstrate the skills and apply the knowledge. Failure is not an option in such systems, and no one is waiting until the end of a semester to determine whether a student has been successful.

Supportive State Policies

Born out of a hunger of preK-12 educators, school leaders, higher education, and business leaders to see students better prepared for their next steps, states across the country have begun to advance policies aimed at supporting competency-based education pathways (figure 1). States are using a variety of policy levers to do so:

■ Innovation Zones. By creating space in state policy for local educators to design innovative

education models, these zones help district and state policy leaders identify outdated policies and regulations that may be blocking innovation. They allow local districts or schools to request a waiver from policies and state regulations that communities have identified as a barrier to achieving high-quality, student-centered learning outcomes. These are called "districts of innovation" or "schools of innovation" in some states.

■ Competency-Based Education Task Forces. State education decision makers can study competency-based education and the related policies and practices needed to enable it through a statewide task force with diverse stakeholder input. Members of the task force interview experts and educators from competency-based education systems, research and analyze supportive policies and barriers, determine how to improve the capacity of educators to work in a competency-based learning environment,

■ Competency-Based Education Pilots/ Grants. Such pilot programs support the development of new learning models, incubate innovations in teaching and learning,

and set recommendations.

Failure is not an option in such systems, and no one is waiting until the end of a semester to determine whether a student has been successful.

Figure 1. Promising State Policies to Advance Competency-Based Education



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Box 1. Profile of a Virginia Graduate

The Profile of a Virginia Graduate is a powerful driver for Virginia's efforts to transform education. In 2016, HB 895 required the Virginia State Board of Education to create the profile. In 2017, the state board approved revised Standards of Accreditation and updated graduation requirements for the class of 2022. These state board regulations (8VAC20-131-51) go beyond the requirements of HB 895 and require all graduates to "acquire and demonstrate foundational skills in critical thinking, creative thinking, collaboration, communication, and citizenship in accordance with the Profile of a Virginia Graduate." Local divisions are connecting into the Virginia Is for Learners Innovation Network, a statewide initiative building educator capacity for innovation, aligned with the state's new vision of success.^a

^aAlexis Chambers and Natalie Truong, "Profile of a Graduate to Redefine Student Success for the Future," Aurora Institute blog (May 4, 2020), https://aurora-institute.org/blog/profile-of-a-graduate-to-redefine-student-successfor-the-future/; Diane Atkinson, "Virginia Rethinks High School in Its Profile of a Graduate," State Education Standard 17, no. 2 (May 2017).

and offer insights into promising practices that can scale across the state. Typically, pilots are limited to a specified number of districts initially, with the goal to expand. Educators work through planning stages, identify core design elements, and communicate what competency-based education systems look like and how they work. Pilots offer a community of innovative practice statewide, with professional development, to build educator capacity for competency-based pedagogy and structures. This capacity building includes shifts in grading, reporting, and assessing performance tasks as students create evidence of mastery, and it fine-tunes strategies to develop a true mastery-based system through exhibitions of student work. While innovations in schools are taking hold, state policymakers can foster collaboration across pilot sites to spread best practices through regional communities of practice.

■ **Credit Flexibility.** Credit flexibility is often a crucial step toward learner-centered systems. Supportive state policy offers students ways to earn credit through demonstrations of mastery—building knowledge, skills, and competencies—and provides a functional equivalency of seat-time credits. Such policies may redefine traditional Carnegie Units into specific standards and competencies. Proposed in 1906 as a basis for measuring schoolwork as time-based credits, a Carnegie Unit represents a single subject taught for one classroom period for five days a week.³ These

- units measure contact hours in a classroom, not learning, and form the basis of high school graduation transcripts. They do not result in meaningful diplomas that report on student mastery.
- **Profile of a Graduate.** Across the country, states are creating a profile of a graduate to modernize their vision for student learning and achievement. These profiles articulate the knowledge, skills, and dispositions students should have upon graduating high school so they are prepared for college, careers, and civic life. To create these profiles, state leaders have partnered with communities and engaged educators, families, and the business community to determine what is essential for their students to thrive after K-12. The profiles, therefore, represent an important strategy to align K-12 education systems to a more holistic vision of student success. With clear, comprehensive definitions of success, states can begin to transform their education systems in a coherent way, allowing invested stakeholders from across the preK-12 workforce to work together to help students succeed at every level (see box on Virginia's Profile of a Graduate). States looking to modernize their education systems should begin by setting a "north star" in a graduate profile that defines student success upon graduation, then designing backward what it takes to deliver on the promise for every student.
- **■** Competency-Based Pathways Aligned

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across K-12, Higher Education, Career and Technical Education, and Work. The promise of competency-based education is the power to create alignment across K-12, higher education, and the workplace through pathways. Most advanced global education systems are competency based and align across primary, secondary, and tertiary levels. In the United States, the time has come to build competency-based systems to equip all students with meaningful experiences and opportunities for powerful learning at every stage of development. State boards can support multiple pathways to graduation that create opportunities for community-based learning, dual enrollment, paid internships and work-based learning that support student interests as they also gain real-world skills and experiences.

■ Modernized Assessment Systems. There is a rising call for updating assessment models to certify student mastery of knowledge and skills and provide more timely feedback to educators and parents on students' progress in their learning. A growing number of states are examining how to create slimmed-down, more balanced systems of assessment, as well as student-centered and community-responsive accountability models with reciprocity. Such efforts require building local capacity, modernizing and diversifying the educator workforce, and examining root-cause analysis of the inequities inherent in current systems.

■ Initiatives to Build Capacity for Change.

Building local capacity also means connecting districts with research and experts, providing technical assistance, professional development for specialized training, and peer learning networks. We recommend states expand opportunities for professional learning on competency-based education systems, development of leadership, and engagement of diverse stakeholders and community actors around redefining success and examining the purpose of preK-12 education systems.

Competency-based education grows from the ground up, and it is springing up in more districts. The Aurora Institute estimates that 8 to 10 percent of U.S. school districts are piloting or working toward competency-based learning. Seven years ago, far fewer states had policies to support K-12 competency-based education. As can be seen in figure 2, nearly half of all states in 2012 were designated as having no policies to support competency-based education. Today, 49 states are taking steps to create enabling policies to support next-generation, competency-based learning models (figure 3).

Evidence for Moving toward Mastery

A substantial body of evidence supports the effectiveness of individual practices that collectively comprise high-quality, competency-based education. In a national study, AIR found "promising evidence that students' experiences of specific CBE practices are indeed associated with positive changes in learning dispositions, skills, and behaviors."⁴

New Hampshire's Performance Assessment for Competency Education (PACE) program focuses on building educator capacity to pilot assessments that measure student learning in key competencies. In a 2017 evaluation sponsored by the Center for Innovation in Education, researchers found that PACE had a substantial positive impact on both teaching practice and student learning. Researchers found increased student engagement and deepened learning when competency-based performance assessments were implemented as intended.⁵

Other evidence emerges from district initiatives. An evaluation of Alaska's Chugach School District found that student performance on the state achievement test rose over a five-year period from the 28th to the 71st percentile in reading, from the 26th to the 72nd percentile in language arts, and from the 54th to the 78th percentile in math.⁶ Similarly, California's Lindsay Unified School District, which implemented a learner-centered model, reported student proficiency on the state test from the Smarter Balanced Assessment Consortium growing from 26 percent to 47 percent.⁷

Marzano Research Laboratory found that students were more likely to score proficient on state tests if they attended schools using the competency-based approach articulated in the Reinventing Schools Coalition (RISC) framework than if they attended non-RISC schools selected based on comparable demographics within each of three states. Compared with students in eight non-RISC districts, the likelihood of students in seven RISC districts scoring

Eight to 10 percent of U.S. school districts are piloting or working toward competency-based learning.

WA ND мт MN SD ID WY ÍΑ NE UΤ CO KS MO MD TN DC ОК AR NM ΑL MS GA LA TX No Policies in Advanced States **ILN States** Competency Education Those states with clear Since its inception, the innovation policies that are moving States with seat-time and Lab Network (ILN) engaged schools, towards proficiency-based; districts, and state education no competency education more than just an option. agencies working to identify through policies. local efforts new designs for public **Developing States** education that empower each student to thrive as a productive Those states with pilots of learner, worker, and citizen. The competency education, state's responsibility is to establish credit flexibility policies, conditions in which innovation can or advanced next gen flourish and to develop capacity to policies for equivalents to sustain and scale what works through seat-time. policy. The Council of Chief State School Officers (CCSSO) facilitates this network of states to support **Emerging States** programmatic, policy, and structure Those states with design work within each participating waivers, task forces states and across the network

Figure 2. States Advancing Policies to Support K-12 Competency-Based Education, 2012

proficient or above on state tests was 37 percent higher in reading, 54 percent higher in writing, and 55 percent higher in mathematics.⁸

Brodersen and Randel's 2017 study of a competency-based district in Westminster, Colorado, found that 43 to 47 percent of students who were behind their traditional grade levels completed their performance levels in three or fewer quarters, less time than it would take in a traditional education system.9

The Work Ahead

Whether or not COVID-19 proves to be a watershed moment for preK-12 education, teachers and leaders cannot snap back to old models of teaching and learning. It is a time of unprecedented change in the lives of most Americans. Amid the call to finally realize the promise of social justice and equity and a

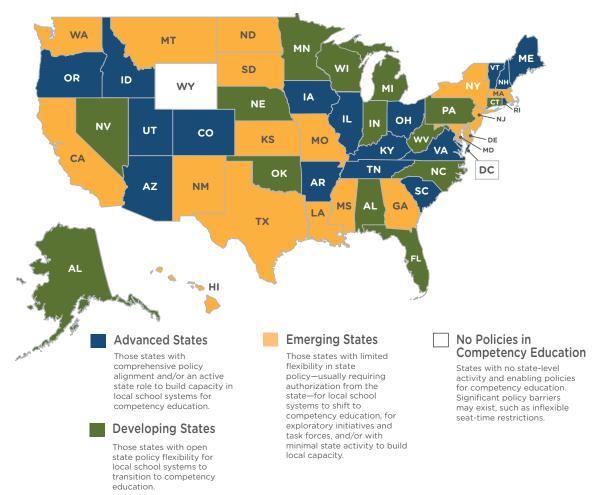
growing awareness of the threat that widening inequality poses for the economic, social, and democratic fabric, education leaders ought to seize the moment to reimagine education.

I have visited schools around the world that are reexamining the purpose and goals of their education systems and came away increasingly concerned that traditional U.S. education systems were not built to support all students' needs at a personalized level. State policy can shift—from language that locks in seat-time policies toward language that defines the knowledge and skills to prepare all students for higher levels of learning, careers, and civic engagement.

If one silver lining comes out of the pandemic, it is the deepened understanding that learning can occur anytime, at different paces, and in different places. It is a clarion call to address the systemic inequities inherent in current systems.

State boards can spark the change. They

Figure 3. States Advancing Policies to Support K-12 Competency-Based Education, 2020



can ensure that educators and administrators develop the knowledge and skills they need to lead the equitable learning designs of tomorrow, and they can ensure school systems access the highest and best thinking about innovations that work. And teachers and leaders who have experienced the promise of competency-based education need to recommit to robust continuous improvement that will create systems in which every student succeeds.

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⁴Erin Haynes et al., "Looking under the Hood of Competency-Based Education: The Relationship between Competency-Based Education Practices and Students' Learning Skills, Behaviors, and Dispositions" (Quincy, MA, and Washington, DC: Nellie Mae Education Foundation and AIR, 2016).

⁵Arthur Thacker and D.E. (Sunny) Becker, "Formative Evaluation of New Hampshire's Performance Assessment of Competency Education (PACE)," Summary Report (Alexandria, VA: Human Resources Research Organization, March 10, 2017), https://a633434a-8c4b-4ae1-91a4-673ee5f3be53.filesusr.com/ugd/10b949_696ca7f8484c44188 25bee921fbc6c5f.pdf.

⁶Richard Delorenzo et al., *Delivering on the Promise: The Education Revolution* (Bloomington, IN: Solution Tree Press, 2009).

⁷Barry Sommer and Abinwi Nchise, "Building Solid Evidence—It's Working at Lindsay Unified," Lindsay Unified School District, https://drive.google.com/file/d/0B6QRjuxlE cioUmUtSVNIQnRaelZ6al8yN1V1eld6R0R5cUc4/view.

⁸Mark W. Haystead, "RISC vs. Non-RISC Schools: A Comparison of Student Proficiencies for Reading, Writing, and Mathematics" (Centennial, CO: Marzano Research, 2010).

⁹R. Marc Brodersen and Bruce Randel, "Measuring Student Progress and Teachers' Assessment of Student Knowledge in a Competency-Based Education System," REL 2017–238 (Washington, DC: U.S. Department of Education, Institute of Education Sciences, National Center for Education Evaluation and Regional Assistance, Regional Educational Laboratory Central), https://ies.ed.gov/ncee/edlabs/regions/central/pdf/REL_2017238.pdf

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Project-based learning tied to students' communities and interests readily makes the leap across modes of instruction.

Monica R. Martinez and Dennis McGrath

Seize the Moment: Double Down on Authentic Learning

During the pandemic, one California teacher used Facetime to connect a fourth-grade aspiring marine biologist and English learner to a shark researcher in Australia, an oceanographer in New York, and a marine biologist in Washington, D.C. Another teacher helped a middle school student interview an older relative and create a website about his Jewish heritage. Yet another helped students create poems and podcasts using digital media.¹

When COVID-19 first disrupted the routines and traditions that constitute

school, many teachers grappled for the first time with online instruction, often with little experience or support. The experience of the past months has demonstrated that those who could transition seamlessly to online or hybrid models were already delivering authentic, project-based learning tied to students' interests or experiences, real problems, and events—and leveraging technology to do it. They provide examples of the way forward post-COVID.

For example, Shelby County Public Schools in Kentucky trained all its

Box 1. Virtual Museum Visits

As educators across the nation have demonstrated, online learning need not be reduced to a passive process where students read static texts, watch videos, complete worksheets, and take multiple quizzes-essentially a form of drill and kill. Instead, teachers can provide their students with interactive learning experiences using authentic resources, many of which are available through museums. For example, Margaret Sullivan, a librarian at Rockwood Summit High School in Fenton, Missouri, integrated online museum exhibitions into her history units, which also include readings, video clips, assignments, discussion board questions, and assessments.^a Students at Dallas's Thomas Jefferson High School virtually visited the Dallas Holocaust and Human Rights Museum and interacted with its senior museum educator.b Teachers and students in Maryland learned about the Underground Railroad through an online collection of interactive activities designed by Maryland Public Television. One study found that the students of teachers who integrated the Pathways to Freedom Electronic Field Trips into their instruction about slavery and the Underground Railroad outperformed those whose teachers delivered the same unit without these materials.c

teachers in project-based learning seven years ago. The instructional approach had taken root in pockets of the district, but district leaders decided they would use the imperative for remote learning to promote the strategy more broadly. In interviews, the district's teachers noted higher student engagement in projects focused on the pandemic.²

In other schools using project-based learning, students designed and completed long-term projects connected to their communities. At the grade 6–9 School for Examining Essential Questions of Sustainability in Honolulu, Hawai'i, students designed and implemented yearlong interdisciplinary explorations of sustainability at home, and many connected their work to the emotional, physical, and economic threats of COVID-19. Projects included building rain catchers and irrigation systems to sustain home gardens, developing a Twitter bot to remind people to wash their hands to prevent infection, creating sidewalk art, and researching and engaging in healthy activities to alleviate stress.

At the UCLA Community School, students investigated the disparate impact of COVID-19 on communities of color as part of a 10-week interdisciplinary project. For each project, students were able to demonstrate what they know and can do through a performancebased assessment. Such assessments—which include research projects, science investigations, mathematical and computer models, and other products—are mapped to the syllabus and content-area standards and are selected for the skills, topics, and concepts they represent. The assessments may take place during a Socratic workshop with students' peers, a mock trial, or a debate, and thus students engage diverse perspectives while exercising higher level analytic skills.

Schools that are using such assessments prepare students better for college and careers.³ With the right teaching supports, students can develop higher order thinking competencies as well as skills for planning, organizing, managing, and improving their own work and becoming more self-directed. And they can do it whether learning is in-person or online.

However, activities in online and hybrid learning need to be much more engaging (see box 1). Interactive technology that enables learners to

As educators across the nation have demonstrated, online learning need not be reduced to a passive process.

^a Margaret Sullivan, "Online Museum Exhibitions as Virtual Learning," Knowledge Quest blog (August 13, 2020), https://knowledgequest.aasl.org/onlinemuseum-exhibitions-as-virtual-learning-resources/.

^b Bill Zeeble, "Virtual Field Trips: How Interactive Learning Has Evolved in the Pandemic Age," KERA News, December 15, 2020.

^cMichael Long and Helene Jennings, *Maryland Public Television's Pathways to Freedom Electronic Field Trip: A Randomized Controlled Trial Study of Effectiveness* (Calverton, MD: Macro International, 2005).

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explore, create, solve problems, and develop ideas in concert with teachers and peers is a more effective online strategy for learning than students learning solely through passive drill and practice activities such as worksheets in online textbooks.

Another sizable barrier arose as schools transitioned to distance learning: A significant number of students were unable to engage in learning opportunities due to lack of devices, Wi-Fi, broadband internet access, and teachers' lack of preparation to leverage technology for authentic learning. Necessity nonetheless led to invention in many districts (box 2).

Lessons Learned

There are significant lessons to be learned from the creative efforts of educators striving to engage their students in authentic learning. Even when schooling was disrupted, they have been connecting lessons to real-world applications, allowing students to explore the world around them, and to demonstrate what they know through projects and presentations that display their work. From EL Education elementary schools to high schools in the New Tech Network, Big Picture Schools, and the

Internationals Network for Public Schools, several networks of public schools have enacted learning strategies grounded in curricula that teach students how to learn through guided inquiry, collaboration, connections to culture and community, and the production of complex papers, projects, and products. As a result, these networks have demonstrated significant gains in student learning.⁴

People learn by building on prior knowledge and experiences, drawing on their cultural and community contexts, and connecting what they are learning to what they already understand.⁵ To make meaning of new ideas, learners need to apply them to new contexts. People's questions and curiosities motivate them to learn, as do opportunities to investigate what things mean and why things happen. These principles, derived from the learning sciences, need to be applied to preK-12 teaching practice more widely so that all students can benefit.

There is no better time to rethink and reinvent educational practices. State and district leaders should resist the temptation, when school resumes in classrooms, to set aside their pandemic-induced technology and authentic work in favor of doubling down on the

Box 2. Games and Simulation

As they transitioned to remote learning when the pandemic hit, schools in Broward County, Florida, first distributed laptops to students who needed them and then explored using Minecraft and Roblox, which many of their students already played.^a Atlanta students also received computers or tablets, and the school district more than doubled its number of licenses for the education version of Minecraft to almost 12,000 over the preceding year.^b

Such districts are doing more than bringing the fun. While it can be difficult to ascribe causality, an analysis of student technology use and performance on the National Assessment of Educational Progress posited that the use of simulations and applications in eighth grade and games in the fourth grade improve test scores, whereas drill and practice at the eighth grade hurt scores. In science, the use of games, word processing, simulations, and data analysis improve test scores. And in eighth grade reading, use of computers for writing activities improved test scores, but use of computers for grammar/punctuation or for reading activities (which usually involve drills or tutorials) had a negative effect.^c

^a Linda Darling-Hammond et al., "Restarting and Reinventing School: Learning in the Time of COVID and Beyond" (Palo Alto, CA: Learning Policy Institute, 2020).

^bOlga Kharif, "Why Minecraft and Roblox Are on the Fall Syllabus," *Bloomberg Businessweek*, August 24, 2020. ^cHarold Wenglinsky, *Using Technology Wisely: The Keys to Success in Schools* (New York: Teachers College Press, 2005), as cited in Mark Warschauer and Tina Matuchniak, "New Technology and Digital Worlds: Analyzing Evidence of Equity in Access, Use, and Outcomes," *Review of Research in Education* 34, no. 1 (2010): 205.

People's questions and curiosities motivate them to learn, as do opportunities to investigate what things mean and why things happen.

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decontextualized learning of traditional transmission teaching. It may seem to some educators the best way to prepare for tests that measure learning in equally decontextualized ways. Drawing on lessons learned in the pandemic, however, state boards of education can address policies to help districts close the digital divide and support teachers in the delivery of authentic learning, thereby improving student outcomes.

Closing the Digital Divide

Closing the digital divide is a precondition for equitable learning. The compounding effects of the digital divide have meant that students without adequate computing devices and internet connectivity also have not had access to these high-quality learning experiences during the crisis. Most often, these students were in less-resourced schools or in communities with limited infrastructure, where giving students and educators access to broadband was almost impossible or very limited. State boards can and must mitigate the digital divide.

In a state-by-state overview of access to broadband, the Pew Charitable Trusts report a Federal Communications Commission estimate that 21 million Americans still lack broadband access. Other sources put this number as high as 162 million.⁶ Because the broadband problem is beyond the scope of an individual district or state, state boards and departments of education must partner with other state and federal agencies, nonprofit organizations, and technology companies to maximize resources and expand the use of the federal E-Rate program.⁷

The Wyoming Classroom Connectivity Initiative, for instance, was created in 2016 as a partnership among Governor Matt Mead's office, the state education agency, the state's Department of Enterprise Technology Services, and the national nonprofit EducationSuperHighway. The initiative brought districts together to collaborate and support each other in solving infrastructure issues within schools and gave technology directors opportunities to learn more about E-Rate and addressing connectivity issues.8 All of Wyoming's students can access the internet at speeds of at least 100 kilobits per second, and many in the sparsely populated rural state are connected at higher speeds.9 Minnesota's K-12 Connect Forward

Initiative likewise was launched in 2016 through a joint partnership between state agencies and a nonprofit in order to ensure students and teachers had high-speed, affordable bandwidth, infrastructure, and access to distance learning.¹⁰

The California Bridging the Digital Divide Fund includes the state board, other state agencies, and a foundation. Funds from this campaign equip school districts with the resources they need to enable distance learning. From March to August 2020, the fund garnered over \$18.3 million and in-kind donations that have enabled procurement of over 64,000 devices and over 100,000 hotspots. More than 300 districts, or approximately 29 percent of all districts in California, received devices, hotspots, or both, with priority given to rural communities.¹¹

Supporting Authentic Learning

Equally important are efforts to enable teachers to fully use digital resources and develop their capacity for delivering authentic teaching and learning. As they do for technology use, states can offer guidance on authentic learning and assessment strategies.

Oregon's guidance for the 2020–21 school year says districts should seek to "support studentcentered project-based educational experiences that ignite student agency, identity, and voice." The guidance calls for clearly stated learning goals and outcomes based on grade-level Oregon state standards, including the integration of quality, culturally sustaining instructional strategies and materials; the design of curricular experiences that use authentic, deeper learning experiences to engage students; opportunities for students to meet standards in nontraditional ways, such as through student-driven projects that honor student identity and context; implementation of opportunities for students to earn credit by proficiency; the use of universal design for learning principles to improve access to learning for all participants; and assessments that are embedded in instructional practices to identify progression toward grade-level content knowledge and skills. The guidance also addresses goals and competencies at the state and district levels that prioritize higher order skills that students need to solve problems and learn to learn, with processes to incorporate these skills

Students without adequate computing devices and internet connectivity also have not had access to these high-quality learning experiences.

The lessons drawn from schools and districts around the country provide a way to rethink and reinvent school.

more fully into curriculum, assessments, and professional development. 12

Virginia provided high school innovation planning grants to develop or implement programs that promote Virginia's 5 C's—critical thinking, creative thinking, collaboration, communication, and citizenship—while preparing students for careers and post-secondary education. The legislature defined the essential elements of high school program innovation as student-centered learning; progress based on proficiency; "real-world" connections aligned with local workforce needs and emphasizing transitions to college or career or both; and varying models for educator supports and staffing.¹³

New Hampshire is the model for how to use performance tasks to measure learning more frequently and authentically. Through the Performance Assessment of Competency Education pilot, teachers design locally developed performance assessment. The assessments are personalized and authentic to enable deeper learning and to be more integrated into students' day-to-day work.¹⁴

Through the federal Innovative Assessment Demonstration Authority program, North Carolina uses an end-of-year assessment that is linked to a student's performance on formative assessments. Called Check-Ins, the assessments provide in-depth actionable data for students who are tested in language arts in grades 4-8 and math for students in grades 3-8. These data provide a reliable estimate of the students' current performance on the selected subset of content standards. ¹⁵

Colorado passed a set of graduation guidelines that allow districts to choose from a menu of options that includes a "district capstone," which is a culminating exhibition of a student's project or experience that demonstrates academic and intellectual learning, and a standards-based performance assessment, in which students display mastery of Essential Skills for Postsecondary and Workforce Readiness through the creation of a complex product or presentation. ¹⁶ Because traditional multiple-choice tests are insufficient for these goals, the law explicitly allows the use of portfolios, projects, or extended-performance tasks as part of the state system.

These practices and policies are rooted in

the science of learning and a commitment to equity. As the nation emerges from the pandemic and establishes new routines for school, the lessons drawn from schools and districts around the country provide a way to rethink and reinvent school.

¹Becki Cohn-Vargas, "What Educators Are Learning during the Pandemic," Edutopia, December 9, 2020.

²Tara García Mathewson, "Project-Based Learning Gets Its Moment during the Coronavirus," *Hechinger Report*, July 1, 2020.

³Linda Darling-Hammond et al., "Restarting and Reinventing School: Learning in the Time of COVID and Beyond" (Palo Alto, CA: Learning Policy Institute, 2020). ⁴Ibid.

5Ibic

°Pew Charitable Trusts, "How States Are Expanding Broadband Access," Report, February 27, 2020.

7Many states earmarked federal CARES Act funds for device purchases. See Adam K. Edgerton and Peter W. Cookson Jr., "Closing the Digital Divide: The Critical Role of the Federal Government," *Learning in the Time of COVID-19* blog (Palo Alto, CA: Learning Policy Institute, November 10, 2020). In March, Congress passed a \$7.2 billion Emergency Connectivity Fund. The FCC will be promulgating rules in May on distribution of the funds to eligible schools and libraries for purchase of relevant equipment and services for use by students, school staff, and library patrons at locations other than a school or library.

⁸Wyoming Department of Education, "Wyoming's Digital Learning Plan," web page, https://edu.wyoming.gov/ educators/technology/digital-learning-plan.

9"2019 State of the States: the Classroom Connectivity Gap Is Closed" (Education Superhighway, 2020), https://stateofthestates.educationsuperhighway. org/?postalCd=WY#state.

¹⁰Minnesota Employment and Economic Development, "Broadband Grant Program," web page, https://mn.gov/ deed/programs-services/broadband/grant-program/.

¹¹GoFundMeCharity, "California Bridging the Digital Divide Fund," web page, https://charity.gofundme.com/o/en/campaign/cdef.

¹²Oregon Department of Education, "Ready Schools, Safe Learners: Guidance for School Year 2020-21," web page, www.oregon.gov/ode/students-and-family/healthsafety/ Pages/Planning-for-the-2020-21-School-Year.aspx.

¹³Darling-Hammond et al., "Restarting and Reinventing School."

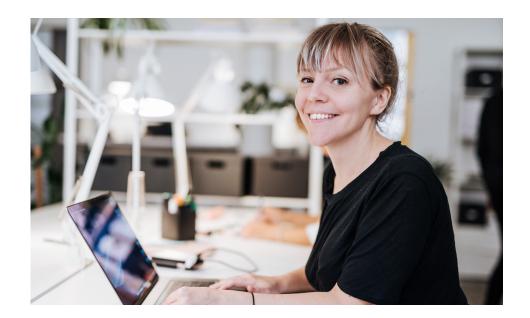
¹⁴Reaching Higher New Hampshire, "PACE," web page, https://reachinghighernh.org/pace/.

¹⁵Kristy Carter, "'Check-Ins' Assess Proficiency, Not Growth," *Sampson Independent*, January 30, 2019.

¹⁶Colorado Department of Education, "Graduation Guidelines," web page, https://www.cde.state.co.us/ postsecondary/graduationguidelines.

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Moving toward Competency-Based Professional Learning

There are few areas where American teachers are as united as they are in their dissatisfaction with their professional learning and advancement opportunities. The lack of meaningful offerings affects states' ability to attract, develop, and retain strong teachers, which in turn impedes schools' ability to help students fulfill their potential. There are evidence-based fixes, but they require major changes to policies and practices that dictate how schools are staffed and changes in expectations and school culture. If carefully harnessed, microcredentials are one tool that can help overcome these challenges.

Individual teachers spend an average of 68 hours annually on professional development (PD) activities funded by schools and local education agencies (LEAs), at a total cost of around \$18 billion. While the quantity of these offerings may seem substantial, their quality is generally low. The Frontline Research and Learning Institute found that at least 80 percent of PD failed to meet four of six criteria that Title II of the Every Student Succeeds Act (ESSA) established for high-quality

PD.² A nationally representative survey of teachers in 2015 found that only 20 percent were satisfied with PD.³ Given finite resources and a perceived minimal return on investment, at least one state decided that PD was not a top priority, defunding it completely.⁴

We believe the debate should not center on whether educators need more or less support but on how to provide better support. Teachers often engage in formal PD to fulfill state-mandated "credit hours," time-based units they must earn to retain or advance their teaching license.5 This compliance orientation flies in the face of research on human motivation and behavior,6 as well as the evidence on best PD practices. The PD most likely to improve teacher practice is content focused, incorporates active learning, supports collaboration, is sustained, uses models of effective practice, provides expert support and feedback, and promotes reflection on data and practices.7 But most PD is not like this. Instead, all teachers in a school, regardless of their subject area or skill set, attend lecturebased trainings on the same topics, with

Microcredentials embedded in effective learning systems can promote teacher growth, advancement, and retention.

Melissa Tooley and Joseph Hood

This lack of support and opportunity contributes to making the American educator workforce a "leaky bucket."

no opportunities to practice skills or work with peers or supervisors in incorporating PD content in the classroom.

The issues with PD are compounded by the dearth of opportunities for professional advancement. The available pathways for teachers to move up in their careers often lead them outside the classroom, into administrative roles or even outside the public education system. And the opportunities that do exist for teachers to gain increased recognition, authority, and compensation while staying in the classroom are often tied to years of experience or degree attainment instead of relevant, demonstrable skills. This lack of support and opportunity contributes to making the American educator workforce a "leaky bucket," characterized by substantial teacher turnover in many schools, particularly in those serving the highest-need students.8

A Role for Microcredentials

Recognizing and rewarding teacher growth can lead to better instruction and increased retention of great teachers, and ultimately lead to improvements in students' educational experiences. But putting evidence about effective PD and advancement into practice has been a challenge for policymakers and practitioners, in part because of a lack of aligned tools to promote and assess teacher competencies. In a recent report on designing and implementing effective teacher development and advancement policies, New America examined the potential of high-quality educator microcredentials to move PD systems toward quality practice and better define in-school teacher advancement. ¹⁰

High-quality microcredentials are a verification of a discrete skill or competency that a teacher has demonstrated by submitting evidence assessed via a validated rubric. In short, a microcredential is a competency-based assessment of a specific "micro" skill. The emphasis on "micro" is a key differentiator of these credentials: For example, an educator could not get a microcredential in classroom management overall, but they could get one in a specific classroom management skill, such as using wait time in the classroom. Over time, they could earn several complementary microcredentials that more comprehensively address core classroom management practices as part of a classroom management microcredential "stack".

To begin the process of earning a high-quality microcredential, an educator identifies an area for growth, selects a corresponding microcredential, and develops and collects the required evidence for demonstrating the given competency. Once the educator submits the requisite evidence, an assessor uses a transparent, validated rubric to determine whether the candidate has met the requirements. If they have, the provider awards the candidate the credential. If not, the candidate gets feedback for improvement so they can improve their practice and resubmit evidence to try and earn the credential.¹¹

Microcredentials and Professional Development

While they focus primarily on the assessment of competency rather than delivery of new information, high-quality microcredentials can significantly improve PD quality, and hence, the quality of instruction. First, by offering a rubric for assessing proficiency in a given evidence-based competency, microcredentials can give educators a clear picture of what successful practice entails.

Additionally, microcredentials can make PD more relevant by targeting areas for teacher growth via a customized, on-demand, self-paced experience. By increasing teacher agency, microcredentials promote authentic engagement and greater satisfaction with professional learning. While teachers perceive these offerings to be more difficult than traditional PD offerings, those who finish one typically express interest in doing more.¹²

Through their evidence collection and assessment processes, microcredentials also model best practices. By encouraging teachers to collect, analyze, and act on data, they promote an inquiry-based, active learning model.

And they provide opportunities for teachers to receive and learn from feedback on their submissions of evidence. Each of these attributes helps promote learning but in combination can provide powerful professional growth.

And while teachers can pursue them individually, schools and LEAs can increase microcredentials' impact by encouraging groups of educators to collaborate to develop targeted skills. In a 2016 report, the Center for Teaching Quality described microcredentials as offering colleagues a "common currency" for articulating and

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documenting knowledge and skills as they learn and work together.¹⁴ Educators in Washington found that microcredential candidates were more satisfied with their experience and more likely to be successful in their submissions when they felt supported by collaborative learning systems rather than working in isolation.¹⁵

The Kentucky Valley Educational Cooperative also embraces a community approach, facilitating in-person and remote collaboration for educators pursuing microcredentials in pursuit of solutions to common school-level problems of practice. The opportunity for remote collaboration has been a particular benefit during the COVID-19 pandemic but can be a real boon for "singleton" teachers who have few or no other colleagues in their school or LEA who are focused on the same content area or "problems of practice," even during more normal times.

Researchers have identified several features critical for successful professional collaboration and coaching, one of which is having teacher leaders trained to use explicit protocols to guide teams through "a process of identifying student learning problems, selecting instructional strategies, analyzing student work for evidence of impact, and honing strategies until they achieved results." The structure of high-quality microcredentials makes them well suited for guiding this work.

Career Advancement

Microcredentials can also provide a competency-based route to advancement. Often, states leave the roles and responsibilities of a teacher leader undefined. Hence these roles vary from LEA to LEA. Many of the state requirements for gaining a teacher-leader license or endorsement are currently related to degree attainment, years of experience, or overall teaching performance. Microcredentials offer one tool for focusing these roles on demonstration of specific, relevant competencies, including ones that may not be easily identifiable in an educator's current role.

According to officials at Harmony Public Schools, a charter school network in Texas, an additional benefit is helping to better define an advanced role's responsibilities. ²⁰ In conjunction with BloomBoard, a for-profit provider, Harmony developed "role cards" for leadership and coaching positions in their schools with associated salary increases. Each role card specifies the competencies needed to perform

a specific teacher-leader job, along with the associated stack of aligned microcredentials that an educator must earn to be eligible for the position. Teaching Matters, a nonprofit PD provider, has used microcredentials to certify teacher leaders for years in conjunction with the New York City Department of Education. ²¹ To earn teacher leadership positions and the additional job responsibilities and union-negotiated salary increase they proffer, candidates must first earn the required microcredentials. Officials then interview successful candidates as the final step to being approved for the role.

At least four states have, or are developing, programs that use microcredentials for teacher career advancement. In Arkansas and Louisiana, state-recognized teacher leadership roles can be earned in this fashion. Oklahoma is developing a similar system, and South Carolina is also experimenting with microcredentials for teacher leadership.²²

Other states let teachers use microcredentials as a pathway to earning advanced licensure, which is meant to recognize superior teaching ability. For example, Kentucky approved a plan by the Kentucky Educational Development Corporation, a consortium of Kentucky LEAs, to use microcredentials in this way.23 The consortium created a three-year, 24-microcredential pathway that balances a set of core pedagogical practices with room for individual "electives." It carefully vetted each microcredential for quality and alignment with the evidence-based competencies it had determined were most critical for advanced educators. If a teacher earns all 24, they receive a Rank 2 license and a base salary increase.

Ongoing Challenges

Microcredentials were created first and foremost as an assessment of competency and hence have focused less on how the individual learns a skill and more on whether they can demonstrate it. Thus, while high-quality microcredentials do provide some recommended resources on the specific competency in question, the depth of these resources is typically shallow. While that approach may work for the most effective or motivated teachers, many—particularly those new to a topic—will need more direct or intensive resources than are typically provided.

To help identify more customized resources, teachers will likely turn to colleagues. While

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Microcredentials can rehabilitate teachers' view of PD from a waste of time into a meaningful experience.

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microcredentials may facilitate peer collaboration and coaching, they do not by themselves guarantee that teachers experience these impactful approaches to developing their practice or have interactions of sufficient quality or quantity. And while providers of high-quality microcredentials offer feedback to teachers who fail to earn them, teachers do not typically seek and receive guidance along the way.²⁴

Two additional issues, particularly for career advancement, are the lack of a clear quality vetting process for microcredential offerings and no commonly agreed-upon value for those earned. Without a consistent process for confirming quality, employers will either be reluctant to bestow rewards and recognition upon earners or will use varying criteria for doing so. Either scenario will lead to confusion and minimal "portability" of microcredentials from one employer to another, ultimately reducing teachers' interest in pursuing them. And a lack of clear, consistent value or incentives for engaging in microcredentials will lead many teachers to continue pursuing less risky and difficult—but less impactful—professional growth opportunities.

Considerations for State Boards

The thoughtful incorporation of microcredentials can move human capital systems for educators away from bureaucratic compliance to demonstrated competencies and rehabilitate teachers' view of PD from a waste of time into a meaningful experience. By New America's count, at least 15 states have developed their own microcredentials to support ongoing professional learning.²⁵

Yet microcredentials are no silver bullet. The issues with traditional PD and professional learning systems are well documented and long-standing. ²⁶ While our research finds that high-quality microcredentials can significantly improve PD, they will not shift professional learning without also shifting culture and mindsets from compliance to ongoing growth.

Success requires systemic change, rather than simply layering microcredentials alongside existing policies and processes. The best strategy for such change incorporates three synergistic components: 1) recognizing and rewarding competency through formal advancement, 2) using license renewal as a tool for ensuring teachers hold key evidence-based competencies,

and 3) personalizing ongoing PD.²⁷

To help make these shifts, state boards of education can do the following:

- Promote alignment between state licensure and certification requirements, professional teaching standards, elements of teacher performance evaluation systems (particularly observation rubrics), and professional development policies and systems, including efforts to incorporate microcredentials into these systems.
- Develop career lattices that allow teachers with varying interests and abilities to continue to advance in the profession as educators, identifying the specific skills, responsibilities, and rewards associated with each role and appropriate pathways for attaining them (including via stacks of microcredentials, where applicable).
- Push to disconnect ongoing PD focused on promoting personalized professional learning from PD activities required for license renewal in order to prevent teacher development efforts that would otherwise be intrinsically motivated from becoming acts of compliance.
- Shift the license renewal process away from a compliance orientation driven by "seat time" to one focused on ensuring that every teacher can demonstrate sufficient competency in high-priority, evidence-based skills for effective teaching, particularly those that have emerged in research more recently and that teachers are unlikely to have encountered as part of their initial preparation (e.g., approaches for developing students' socialemotional learning skills).
- Provide guidance and funding for rethinking educator schedules to ensure there are opportunities to engage in the inquiry cycles required for microcredential success and include structured opportunities to collaborate with peers and receive coaching as part of the professional learning process.
- Create vehicles to virtually connect teachers who are "singletons" in their specialty area to engage in structured, collaborative PD, possibly using microcredentials as a tool.
- Develop a system to rigorously vet the quality of microcredential offerings and associated training, as well as policies that establish appropriate value and incentives for engaging in them, and convey that information to educators and employers.





Kansas Schools Build Resilience amid Redesign

Schools opt to change their approaches to learning and see gains in adaptability.

Since the launch of a school redesign project in 2017, more than 160 Kansas schools have volunteered to reimagine their learning models in a state-led, multiyear process. The pandemic tested the mettle of early adopters, but many say their redesign work prepared them well for the transition to distance and hybrid learning in 2020.

Approved by the Kansas State Board of Education, the project has gathered applications from schools across Kansas, with annual cohorts named for NASA lunar missions. The fourteen schools in seven districts that formed the initial Mercury cohort engaged in intensive planning and professional development a year ahead of the launch of their redesign plans. Gemini and Apollo project cohorts have followed, with opportunities for staff to visit schools in earlier cohorts and for school leaders to engage in a professional learning community.

Weathering a Pandemic

In spring and summer 2020, staff at the Kansas State Department of Education asked teachers and leaders in the redesign cohorts how their schools handled

building closures. They found that these schools made a smooth transition to distance learning. School staff cited the importance of the design thinking process and a growth mind-set, which helped staff and students learn to adapt flexibly. "Making quick and in some cases radical changes based on data and success factors, and implementing those changes immediately, has been a staple of our process," said one principal. It also prepared students to better manage their own learning in remote settings, said Jay Scott, secondary redesign specialist on the department's redesign team.¹

While the pandemic delayed launches of redesign plans in the last group of schools and impeded the intensive staff professional learning and in-person coaching with department staff, the experience of the early cohort during the pandemic impressed schools not formally engaged in redesign, Scott added. In particular, he said, schools outside the cohorts noted redesign schools' ability to implement new strategies within a semester or a year and see rapid improvement.

Scott acknowledged that the pandemic did force some schools to abandon some strategies. "That was really hard for them,"

Valerie Norville

he said, adding, "The strategy may change, but the vision and goals are rock solid." School staff receive intensive professional development in design thinking, which requires changes in strategy as conditions change. This adaptability stood them in good stead during the pandemic. In addition, nearly two-thirds of respondents to a regional service center survey reported that redesign had prepared them to implement competency-based learning, according to Tamra Mitchell, elementary school redesign specialist.

Genesis in Community Conversations

The redesign project emerged from conversations that the Kansas Department of Education led in communities across the state in 2015–16. Department leaders gathered stakeholder input to inform a state vision for public education that included defining the attributes of a successful 24-year-old in Kansas, said Dr. Randy Watson, Kansas's commissioner of education. State leaders also asked participants to imagine the school qualities that would produce those successful adults. Parents and business leaders alike stressed the importance of nonacademic factors such as interpersonal and real-world skills and community service.

The principles and goals that undergird the project are based on those comments. "We're doing exactly what Kansans say they wanted us to do," Watson said.

The backdrop for the listening sessions was compelling workforce projection data for Kansas that said 71 percent of its jobs by 2020 would require postsecondary education, divided evenly between those requiring bachelor's or master's degrees and those requiring associate degrees or certificates.³ Yet the success rate for Kansas students who met those requirements in 2017 was 44 percent.⁴

Data collected during the sessions fueled development of the state's profile of a successful high school graduate—one who has the academic and cognitive preparation, technical skills, employability skills, and civic engagement to be successful in postsecondary education, attain an industry-recognized certification, or gain a marketable skill without need for remediation. State education leaders aim for a 70–75 percent effective rate by 2026.⁵

It became apparent that school systems had to be redesigned if Kansas was going to achieve its vision, Scott said. "The current reality—and how dissatisfying that is—really compelled schools to want to do this work," he said.

Mitchell recognized that the postsecondary effectiveness measures, a key element of the state's vision for education, might seem far removed from elementary schools' work, and so it was important to make the case. "If we have a student in our state education system from preschool through high school and they graduate high school and aren't able to earn a successful living, don't have any postsecondary education, don't have a marketable skill or a certification, then what have they been in our system for?"

Schools Aim for the Moon

Although the redesign team read the research on school transformation and visited redesigned schools, they had no template based on a state-led program elsewhere. Kansas schools or districts volunteer without an expectation of extra resources. "When we tell other states that we have this school redesign project, it's voluntary, there's no extra money, and there's no waivers from state policy, they look at us [and wonder], 'How is anybody signing up?" Scott said.

"We don't want to incentivize and do something that's not sustainable," Watson said. At least during the project's modeling and learning phase, he added, "We want people who want to do the work."

Flipping the script on school improvement is key, according to Mitchell. Previously part of the department's school improvement and monitoring division, she was accustomed to an unenthusiastic reception to compliance-driven school improvement. "The biggest lesson I took away was that when people are forced to change, they don't want to do it," she said.

When redesign was presented as an opportunity for teachers to do what they believe is best for students, the tone of meetings with department staff improved and enthusiasm for redesign rose. "Markers of trust, openness, transparency—those are really hard to measure, but they're really palpable," Mitchell said.

Applying schools secured approval from at least 80 percent of their staff, as well as letters of support from local school boards and chapters of teacher unions. The schools committed to crafting plans that responded to four redesign principles distilled from the community conversations held in 2015–16: personalized learning,

real-world applications for student learning, student success skills, and family, business, and community engagement.

The program is open to all Kansas schools. "We have some schools that want to be on the cutting edge, be really innovative," Scott said. "We also have some schools that really struggle." The goal is to have schools in every Kansas district participating and to learn lessons from the experiences of project cohorts in the early years that can be shared across the system, Watson said.

Approaches to redesign vary across communities, but elementary schools engaged in redesign tend to shift away from traditional separations by grade level and toward content-area integration and collaboration, project-based learning, and prescriptive use of data to inform personalized learning, Mitchell said.

Secondary schools have focused on those things as well but have also devoted more time to social and emotional learning and career development, Scott said. Students may spend the first part of a day on character development or developing required Individual Education Plans or portfolios, for instance. Flexible schedules are a typical part of redesign. "We have several schools that just do away with bells," Scott said.

Community engagement is key to the process. School leaders had to communicate to parents and community leaders, many of whom believed their schools were already stellar, on why they were undertaking the work, and they had to respond quickly to community questions and pushback during implementation, Mitchell said.⁶

Project Outcomes

Mitchell notes mostly qualitative markers of success at this point in the project. "When I used to visit schools as school improvement coordinator, they weren't really happy to see me," she said. But now, "when I go out to redesign schools, they can't wait for us to come...even if we have to have a hard conversation."

She also noted the propensity of elementary students in redesign schools to ask more questions and uncover answers independently. "We're trying to make changes that are hard to measure," she said, but are observable in student engagement. Students in a redesign school visited a more traditional school nearby and commented, "Wow, we thought that schools were like that only in the pioneer times."

"If we're meeting our state goals, specifically our benchmark of 70 to 75 percent students postsecondary ready [by 2026]...that is proof that redesign works," Scott said, adding that they were on track to do so before the pandemic. In the short term, he said, students' belief that their schools know them and are responsive to their needs is a signal that schools are on track. Scott said he hoped to see increased innovation in how high schools are ensuring that students want to be there.

State goals will also figure into the accreditation process, which is required for Kansas schools and updated to align to the Kansans Can strategic plan. "We needed some schools to go out and model what that [new vision] may look like versus trying to force a school accreditation process with those new outcomes and goals on people immediately," Watson said. Regardless of whether Kansas schools engage in formal redesign processes or not, Scott added, "all roads lead to school accreditation."

State Board Role in Redesign

Kansas state board members have actively engaged at each stage of the Kansans Can strategic plan, community engagement, and the redesign project. In addition to formally approving schools' plans, members sit on a project advisory committee and on occasion attend training for school staff. "They're not hands on, but they're very present and encouraging," Mitchell said.

"They add a certain level of accountability at every [state board] meeting," Scott added. "They're always asking the right questions about what's next. Our board has found the right mix of support, accountability, and then compliance in moving toward this vision that they've set."

"The challenge to a 10-year moonshot is that anything worth doing takes time," Watson added, "and our political cycle often doesn't allow for it." He added that Kansas may have an easier time shepherding a long-term vision for education than other states because of its elected state board that has constitutional authority for managing schools and his relative longevity as state commissioner.

Redesign projects in other states will vary based on state needs, Watson said. But he suggested that all states tie their goals closely to stakeholders' input, validated by research. "Go out and conduct enough listening tours, surveys, conversations from your state on what they Students' belief that their schools know them and are responsive to their needs is a signal that schools are on track.

Valerie Norville is NASBE's editorial director.

want from their education system, then go out and design it, and constantly go back and ask if you've gotten it right," Watson advised. "Every state can do this; it's just hard work."

¹Jay Scott, "Redesign Resiliency: Kansas Secondary Redesign Schools Navigating COVID-19," *Educational Considerations* 46, no. 2 (2020).

²Anthony Nguyen, "Kansas Loops Stakeholders in on Conversation about K-12 Policy," *State Innovation* 21, no. 3 (October 2016).

³Anthony Carnevale, Nicole Smith, and Jeff Strohl, "Recovery: Job Growth and Education Requirements through 2020" State Report (Washington, DC: Georgetown University, Center on Education and the Workforce, 2013). ⁴Kansas State Department of Education, "Kansas Report Card 2019–2020: Postsecondary Progress," figure, https://ksreportcard.ksde.org/ccr.aspx?org_no=State&rptType=3. ⁵The department calculates a five-year effective rate by multiplying its four-year adjusted cohort graduation rate by the percentage of students meeting one of four postsecondary success markers.

⁶Tamra Mitchell, "School and Community Relations in the Kansans Can School Redesign Project," *Educational Considerations* 46, no. 2 (2020).

The Kansas state board is statutorily charged with managing accreditation of districts and schools, a process that provides official recognition of a school as having met a defined set of standards. The Kansas Education Systems Accreditation requires districts to document outcomes outlined in Kansas's strategic plan: local measures of social-emotional growth, kindergarten readiness, individual plans of study, high school graduation, and postsecondary success. Some schools saw a pause in the process during the past school year due to the pandemic.

cont'd from page 38...Moving toward Competency-Based Professional Learning

- Ensure high-need LEAs have the supports necessary to adopt and implement microcredentials effectively, so all students and teachers can benefit equitably.
- Collect and review data on initial efforts to redesign PD, license renewal, and advancement systems, including via feedback from educators, in order to understand their influence on teaching quality, teacher retention, and student achievement, and continue to iterate and improve upon those efforts. ■

¹Boston Consulting Group, "Teachers Know Best: Teachers' Views on Professional Development" (Seattle, WA: Bill & Melinda Gates Foundation, 2014).

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⁴Jason Bailey, "Governor's Budget Cuts Education, Eliminates Some Programs," report (Berea, KY: Kentucky Center for Economic Policy, January 17, 2018), https://kypolicy.org/governors-budget-cuts-education-eliminates-programs/.
⁵Stephanie Hirsh, "Choosing between What Matters and What Counts," opinion, *Education Week*, March 4, 2015.
⁶David Burkus, "Extrinsic vs. Intrinsic Motivation at Work,"

Psychology Today, April 11, 2020.

⁷Linda Darling-Hammond, Maria E. Hyler, and Madelyn Gardner, "Effective Teacher Professional Development" (Palo Alto, CA: Learning Policy Institute, June 5, 2017).

⁸Emma Garcia and Elaine Weiss, "U.S. Schools Struggle to Hire and Retain Teachers," report (Washington, DC: Economic Policy Institute, 2019).

⁹Melissa Tooley and Kaylan Connally, "No Panacea: Diagnosing What Ails Teacher Professional Development before Reaching for Remedies" (Washington, DC: New America, 2016), 19–20.

¹⁰Melissa Tooley and Joseph Hood, "Harnessing Microcredentials for Teacher Growth: A National Review of Early Best Practices" (Washington, DC: New America, 2021).

¹¹For a visual representation of the microcredential earning process, see "Understanding Educator Microcredentials," in Tooley and Hood, "Harnessing Microcredentials for Teacher Growth: A National Review of Early Best Practices (Washington, DC: New America, 2021).

¹²Grunwald Associates and Digital Promise, "Making Professional Learning Count."

¹³John Hattie and Helen Timperley, "The Power of Feedback," *Review of Educational Research* 77, no. 1 (2007): 81–112, https://doi.org/10.3102/003465430298487.

¹⁴Center for Teaching Quality and Digital Promise, "Microcredentials: Driving Teacher Learning & Leadership" (Carrboro, NC: Center for Teaching Quality, 2016).

¹⁵State of Washington Professional Educator Standards Board, "The Potential of Microcredentials in Washington State" (Olympia, WA: author, 2019), https://www.pesb. wa.gov/resources-and-reports/reports/the-potential-of-microcredentials-in-washington-state-report/.

¹⁶Melissa Tooley and Sabia Prescott, "Professional Learning in Appalachia," *State Education Standard* 21, no. 1 (2021), 18–24, 37.

¹⁷National Institute for Excellence in Teaching, "Beyond "Job-Embedded: Ensuring That Good Professional Development Gets Results" (Santa Monica, CA: author, 2012).

¹⁸Education Commission of the States, "50-State Comparison: Teacher Leadership and Licensure Advancement, Does the State Define the Role (Prescribe Certain Duties) of the Teacher Leader in Statute or Regulation?" table (Denver: author, October 2018), http://ecs.force.com/mbdata/MBQuest2RTanw?rep=TCL1806.

¹⁹Education Commission of the States, "50-State Comparison: Teacher Leadership and Licensure Advancement, What Tasks and/or Evidence of Effectiveness Are Required for Teachers to Obtain a Teacher Leader License/Endorsement?" table (Denver: author, October 2018), http://ecs.force.com/mbdata/MBQuest2RTanw?rep=TCL1804.

²⁰Authors' interview with Burak Yilmaz and Robert Thornton, Harmony Public Schools, July 27, 2020.

²¹Authors' interview with Evan O'Donnell of Teaching Matters, September 9, 2020.

²²Authors' interview with Lilla Toal-Mandsager and Libby Ortmann, Office of Educator Effectiveness and Leadership Development, South Carolina Department of Education, September 29, 2020.

²³Authors' interview with Latishia Sparks and Charles Rutledge of the Kentucky Educational Development Corporation, November 13, 2020.

²⁴Teaching Matters is one exception. Authors' interview with O'Donnell.

²⁵Tooley and Hood, "Harnessing Microcredentials."

²⁶Tooley and Connally, "No Panacea."

²⁷For more detailed recommendations on designing and implementing more effective teacher development and advancement policies, with microcredentials as a component, see Melissa Tooley and Joseph Hood, Harnessing Microcredentials for Teacher Growth: A Model State Policy Guide (Washington, DC: New America, 2021).

May 2021 • National Association of State Boards of Education

The NASBE Interview

Russlynn Ali is chief executive officer at the XQ Institute, which works with educators, students, and communities to transform high schools. NASBE's Abigail Potts posed questions to her on the role of state boards in reimagining schools.

XQ focuses on transformational high schools. Where does the focus on high school come from, and why is it important?

Everything we do is driven by our belief that transforming high schools makes everything else stronger. High schools are the fulcrum for driving improvement and closing gaps across the education system, from the lower grades to higher ed, and eventually that benefits our workforce, our communities, and our entire country. But are we doing right by all of our high school students? Are we doing everything possible to put them in a position to succeed? High schools aren't making the grade—despite the best efforts of so many educators, parents, advocates, and others. That's for a few reasons.

One, high schools are stuck in the past. We've gone from the Model T to Tesla, from typewriters to touchscreens. But high schools operate the way they did for our grand-parents. Desks in rows. Students in seats. Seven bells and single-subject courses. The world today demands graduates who are highly competent in math, science, and history, who can thrive as both collaborative and independent learners. Yet most schools are still relying on a century-old system that hasn't kept up with a changing world.

Two, high schools are inequitable. To be clear, they aren't working well enough for any student in preparing them for success. But if you are a student of color or from a low-income family, the odds are particularly stacked against you. Just look at the data. Achievement gaps among students of different races and family incomes not only persist but continue to widen. It's a national shame this is still happening in the year 2021.

Three, high schools are overlooked. People have paid a lot of attention to preK, K-6, and college. But, come on, we all know high schools are being ignored. Isn't it time we invest in the potential of teens instead of being cynical about them? The human brain continues to develop significantly during the adolescent years. It's also a time when people experience big changes in how they think for themselves, interact with others, and figure out their place in the world. We can't keep looking away at a time when we can be most impactful. The longer we fail to act, the longer we hurt our young people and our own collective future.

In your work on Super Schools, what state or local conditions do you see as improving or hindering chances for success?

I'm a student of history. One thing that's been proven time and again is that community agency is how you make progress stick. True, sustained change starts when everyone comes together to create a shared vision for the future and works together to achieve it.



Russlynn Ali Chief Executive Officer XQ Institute

National Association of State Boards of Education • May 2021

Transforming a century-old school system can't be done with half measures. Every single day, there needs to be urgency.

We empower communities to dream big and smart, which is what Super Schools are all about. We decided to launch a competition in 2015 that invited communities to rethink and reimagine a new approach to high school. The response was overwhelming. More than 10,000 people in 50 states formed teams. What started as a small group of school winners has grown into a thriving collection of innovative public high schools.

The XQ cohort currently includes 18 schools—16 from the original competition and 2 from our partnership with Rhode Island. We partner with them to bring their different visions to life. In doing so, we have seen some common themes about what needs to happen for these schools to succeed.

First, there needs to be authentic engagement from a diverse group of stakeholders. That's how you fuel movements that last. A lot of efforts get stuck because parents, teachers, and school officials are on different pages. Instead, there needs to be alignment toward a common goal. For example, the idea for Crosstown High School in Memphis, Tennessee, began when a local parent saw an XQ billboard. She sent an email to everyone she thought might be interested, from other parents, teachers, and students to local architects, business owners, and community leaders. All told, around 70 people came together to dream big about what they wanted for their community. And now that vision has been brought to life with a school that focuses on real-world learning in a former Sears distribution center alongside more than 40 businesses, nonprofits, and civic groups.

All our schools align with what we call Learner Goals and Design Principles. Our Learner Goals are the educational outcomes we believe students need to thrive in today's world—like being original thinkers and generous collaborators. And our Design Principles outline what schools need to achieve these outcomes—from having a strong mission and culture, to community partnerships, to lifting up the voice of local youth. Alignment around XQ Learner Goals and Design Principles is so important because change is never linear. Common principles and a shared vision ensure that our efforts stay on course. I want to

emphasize the importance of rigorous learning and superb, well-trained, diverse teachers, especially for those students who need great teaching and learning most.

Second, communities need a proven ability to leverage and connect community assets. For example, Grand Rapids Public Museum School is located in a historic downtown building that connects to the Grand Rapids Public Museum archives. Students use and explore more than 250,000 cultural and historic artifacts and also help museum staff collect, process, and curate new materials in a design lab and help design and update existing exhibits. How amazing is that?

Partnerships like this are just so critical. Schools don't operate in silos. They are impacted by everything around them: the transportation options, the housing, the strength of the local economy, and the civic institutions. All of these assets need to be brought together, and work together, to deliver meaningful progress.

Lastly, there needs to be a strong appetite for change. Transforming a century-old school system can't be done with half measures. Every single day, there needs to be urgency. There has to be ambition, to not just change one school, but to change all the high schools in a state or district within five years. Communities need to be 100% all-in.

What questions can state board members ask to spur action on reinventing schools?

Before anything else, I want to express my deepest gratitude to state board members across the country. It's been such a hard year—I know that all of you have gone above and beyond to help your students and their parents through this unprecedented time.

The last year underscores how important state board members are in addressing needs and driving change. All of us at XQ know how necessary it is to learn from you, and work with you, if we are going to transform our nation's high schools. And that means every community needs to answer some fundamental questions. First, it's important to explore the data. How are we doing on big issues like access to challenging coursework, high school

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completion, college readiness, and student achievement? How are we monitoring along the way to know that students are on the journey to college and career? How do different groups of students compare, and how can we get at all the underlying equity issues? Are high school graduation requirements aligned with the entry requirements for state colleges and universities—including flagship institutions? And look beyond just schools. Look at community data, what jobs are available, what sectors are growing, what are the emerging needs? Over time, are the trends improving or not?

It's also important to talk to students and families. How are they feeling about their experiences? Do they feel the education they're getting is truly preparing them for life after high school?

And get very close to teachers and principals. I mean, they have to practice a growth mindset every day when dealing with huge challenges. What's working, and what's getting in their way? How can they get everyone on board to serve students even better? How can community groups like youth organizations and local faith coalitions get involved?

Getting to the bottom of these kinds of questions is so critical, and there is a real chance for communities to come together to tackle them. Perhaps now more than ever because of the American Rescue Plan. These dollars represent an opportunity to do more than just plug holes in the old system.

XQ is creating tools and guidance for state policymakers to use as they consider how to use their stimulus to prioritize high school transformation. Specifically, we want to help build systems that accelerate student learning and explore transformative, evidence-based learning models that allow for flexibility in time, space, and staffing, and open rigorous academic opportunities to all students.

Imagine your ideal state team to tackle reinventing high school. Who's at the table?

As I said earlier, progress starts at the local level. State teams are so important. I think of XQ's Purdue Polytechnic High School in Indianapolis. It was created because people

noticed that very few public school students from underrepresented backgrounds were going to Purdue University. So partners from the university and across the state came together to create this school to prepare first-generation college students for a STEM career. Because the model is so strong and demand is so great, that high school has already been replicated twice elsewhere in Indiana.

The first thing that any state effort should recognize is that transforming high schools isn't just an education issue. Don't get me wrong: Students, parents, and educators should be central to any team. But everyone has a stake. What we do in these schools impacts young people, families, communities, the economy, the entire country. This means multiple students representing the diversity of that state's high school experience should be there. Parents, representatives from communitybased organizations, and the business community should also be there. And, of course, educators, a cross-functional group of SEA staff, and representatives from local and state institutions of higher education. You're going to need a pretty big table because reimagining schools is a big effort.

But what's just as important as who is at the table is how these efforts are managed. Ultimately, you'll need one owner to drive the project. In Rhode Island, the state commissioner created a position to coordinate the cross-functional work and oversee the transformation of all high schools.

In addition, there has to be urgency at every level. In Rhode Island, the governor and other state officials made clear that this was a priority and not just another initiative, which is helping make sure these conversations ultimately lead to action and results.

How has student voice changed the trajectory of XQ's work?

All our work is anchored in student voice. In fact, as we were developing XQ, Board Chair and Co-Founder Laurene Powell and I had dozens of deep, candid conversations with young people across the country so we could hear directly what they wanted and needed. Our engagement

The first thing that any state effort should recognize is that transforming high schools isn't just an education issue.

Our students meet with us weekly to share insights on their high school experience. They help inform our design ideas. with them has remained central to XQ ever since and in a number of ways.

One, we learn from students by listening all the time. We have a student advisory committee. Our students meet with us weekly to share insights on their high school experience. They help inform our design ideas. In fact, the XQ Super School in Elizabethton, Tennessee, was designed by the students themselves as a project assigned by their teachers.

Two, we empower students. We've created an online community called Rethink Together where high school students, and others, can engage and learn—everything from how to find internships, to bringing art and activism into the classroom, to how to write a letter to their local school board. Students have been part of every school design team, both in the original competition and in our subsequent partnerships with New York City and Rhode Island. In 2020, when we invited students from across New York City to join a citywide advisory group, more than 3,600 responded. It's truly amazing to see how engaged these young people are and what they can do.

Finally, we celebrate students, we applaud their achievements. Last year, we brought the nation together for a multinetwork simulcast called Graduate Together that reached 60 million homes, along with a massive virtual yearbook. More than 23,500 students submitted speeches, poems, videos, ideas, testimonials, and photos. Leaders like President Obama, LeBron James, and many others joined us that evening to let the Class of 2020 know we were proud of them, and to keep going, because our futures depend on them.

Pilots sometimes falter during the scale-up phase. What was an unexpected challenge you did not anticipate when moving to scale in Rhode Island?

Rhode Island was our first state partnership. Together, we're engaging communities to transform every one of their 64 high schools into student-centered institutions. We are partnering on a number of efforts. For example, we did an Educational Opportunity Audit, which gathered data from thousands of student transcripts, surveys of students,

parents and teachers, and focus groups. We looked for hidden patterns and obstacles that were blocking students from being prepared for college or a career. And we delivered our findings back to the schools. In May 2020, we rolled up our school-level findings into our first-ever state-level report and shared it with Rhode Island officials—including state board members—showing them evidence of serious, but addressable, inequities in college eligibility and preparedness. They took it very seriously and began taking action.

One thing that's been reinforced for us throughout this process is the importance of leaders who share our deep conviction that high school transformation is necessary and possible. Even in the thick of the COVID crisis, Chancellor Infante-Green remained steadfast in her determination to bring needed change to the state's high schools. Our partnership remained strong, in part because we had built a framework that proved durable.

We've also started a new initiative to tackle one of the toughest challenges: Algebra 1.
We're creating a truly engaging, project-based curriculum alongside best-in-class experts and educators that's designed to reach every student, even those who are disaffected from math. This is essential, of course, because only 50 percent of students who leave high school unprepared in math finish their remedial math requirements in college—which means they cannot graduate.

So we mean it when we say that we are really trying to be a learning organization. Because when you're doing things that have never been done before, you're always going to need to find new allies, new challenges, new insights, and new learnings. This work isn't easy. But it's necessary. And we look forward to partnering with more and more local leaders across the country to reinvent high schools, give all students the education they deserve, and build a better future for all of us.

We the Media

Laying Down a Baseline on School Health Policies

Por months, the pandemic has not only put students' learning in jeopardy but also left them socially and emotionally fragile. A recent Education Trust–New York poll found that nearly 9 in 10 parents in the state worry that their child's social, emotional, and cognitive development will suffer as a result.

As state policymakers make plans for safely reopening schools, it will be important to enact policies that can better support student and educator well-being during and after the pandemic. They also ought to review current wellness and school safety policies to ensure that what is on the books does not prevent such progress from occurring. Luckily, NASBE's fully redesigned State Policy Database on School Health can help.

First developed in 1998, the database has long been a trusted tool for policymakers, researchers, advocates, and school communities to access state-level school health policy information in one convenient location. NASBE partnered with Child Trends, the Institute for Health Research and Policy at the University of Illinois-Chicago (UIC), and EMT Associates, Inc. to update the database in 2017 so that it comprehensively documented codified state education policies aligned to the U.S. Centers for Disease Control and Prevention's Whole School, Whole Community, Whole Child (WSCC) model.

That update was a vast improvement. But the database was not easy to navigate and was limited to codified law. Our latest update, in February 2021, captures statutes, regulations, and now noncodified policies such as state board or agency guidance related to 200 school climate, health, and safety topics through September 2019. This redesign gives users multiple options for searching and

interacting with the data. For example, a user can quickly scan and tally the number of states requiring, encouraging, or not addressing a particular policy, or indulge further by looking at a policy detail or a state's full policy record across a certain topic. For more precise searches, users can filter by keyword and search across multiple states. As before, the database features an interactive Tableau dashboard to generate state maps.

So, what is trending in the data, you ask? In a companion analysis, Child Trends, UIC, and EMT Associates, Inc. found that the number of states with policies encouraging or requiring schools to provide professional development on trauma-informed care increased from 9 to 30 from September 2017 to September 2019. In addition to professional development for trauma-informed care, policies supporting professional development for mental health and school resource officers saw the biggest change from 2017 to 2019 among the 200 topics examined: 33 states now have policies supporting professional development for mental health (up from 18 in 2017), and 35 states have policies supporting professional development for school resource officers (up from 16 in 2017).

These changes are not in response to the pandemic, of course, but the analysis shows that states have been making important strides toward ensuring that schools are safer, more supportive learning environments for educators and students. It is also a starting point for states plans for safe reopening of schools and prioritizing lasting systemic change that draws schools and communities closer together.

To access NASBE's State Policy Database on School Health, visit https://statepolicies.nasbe.org/. ■



Renée Rybak Lang
Communications Director



Robert Hull President/CEO

from the **President's Pen**

The Starfish and the Ocean

Since the mid-1980s, motivational speakers and writers have adapted and retold the story of the Star Thrower to illustrate the power of personal action to improve others' lives. Author Loren Eiseley, scientist and poet, first published the story of the Star Thrower as part of a 16-page essay by the same name in 1969. The story describes the narrator walking along the beach early one morning in the predawn twilight when he sees a young man picking a starfish off the sand and throwing it into the sea. As the narrator approaches the young man, he asks what he is doing.

The young man looked up and replied, "Throwing starfish into the ocean."

"I guess I should have asked, why are you throwing starfish into the ocean?"

"The sun is up, and the tide is going out. And if I don't throw them in, they'll die."

"But young man, don't you realize that there are miles and miles of beach and starfish all along it. You can't possibly make a difference!"

The young man listened politely, bent down, picked up another starfish, and threw it into the sea, past the breaking waves. "It made a difference for that one!" he replied.

Oftentimes, this story is held up as emblematic of educators' role on the lives of their students—making a personal impact on each one. It is a poignant,

powerful image and can be inspiring for teacher and school leaders. But the real powerful image for policy leaders is not the starfish but rather the ocean into which the starfish is hurled.

Just as starfish need a healthy, robust aquatic ecosystem to thrive, so students need and deserve a healthy, safe, effective environment to learn and grow. It is not the role of the state board of education to focus on each individual student but rather to focus on the learning conditions of the schools in which they learn.

Only by intentionally developing a comprehensive ecosystem of effective policies can a state board guarantee an environment that meets the needs of all students. All policies are thus rightly viewed as part of a greater ecosystem, working in tandem toward the goals of equity and excellence and not as isolated regulations with a singular purpose.

While this is always the goal and work of a state board, it is even more important to reaffirm this role now as we navigate the return to in-person schooling post-pandemic and grapple with the many equity issues at play in our society.

I implore all state boards to recommit to this systemic goal: to purposely look at all policy decisions as a means to create and sustain a healthy, safe, equitable, nurturing environment for all your starfish so they can thrive and grow for decades to come.

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"Above all, we will apply a lens of equity and excellence to everything we do so that our focus and that of our member boards remains fixed on ensuring that all students get the resources they need to succeed."

—"Our Members, Our Mission: A Strategic Plan for the National Association of State Boards of Education" (Fall 2018)

National Association of State Boards of Education

Mission Statement

NASBE develops, supports, and empowers citizen leaders on state boards of education to strengthen public education systems so students of all backgrounds and circumstances are prepared to succeed in school, work, and life.

Core Values

We believe in equity and excellence:

We believe that students of all races, genders, and circumstances deserve the supports they need to thrive in school.

We believe all students can learn at high levels and must have the opportunity to do so through state policies that address their diverse learning needs.

We prioritize state leadership of public education: We believe that state boards of education, in partnership with chief state school officers, governors, and legislatures, are best positioned to craft, promote, and oversee state education policies.

We empower citizen leaders: We build the capacity of state board members to question, convene, and act boldly with and for students, educators, and families.

We elevate evidence in policymaking: We ground our resources, tools, and services in the strongest evidence available and help our members make informed decisions in the best interest of students.

We build community: We facilitate productive dialogue and nonpartisan exchange among members with diverse perspectives, creating lasting channels for the sharing of evidence-based strategies and solutions.

We collaborate: We promote respectful collaboration, both among our members and between our members and the broader education community.

■ DATA ANALYSIS STATE PROFILES

POPULAR FIFTH INDICATOR: CHRONIC ABSENTEEISM

EARLY CARE AND EDUCATION: ON THE RADAR OF STATE BOARDS

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