THE STATE INNOVATOR’S TOOLKIT:

A guide to successfully managing innovation under ESSA

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INTRODUCTION: SEIZING INNOVATION OPPORTUNITIES UNDER ESSA

The latest comprehensive federal education law, the Every Student Succeeds Act (ESSA), ushers in an unprecedented opportunity for states to transform K–12 public education. The law gives states the power to revisit the fundamental goals of their education systems and to potentially break free from constraints that have locked school systems into legacy funding, assessment, and accountability models over the past decades.

Among other things, ESSA gives states new latitude to set goals, determine accountability metrics, and rethink how to intervene in their lowest-performing schools.

Although standardized tests will remain a centerpiece of state accountability systems, states must broaden how they define student success by incorporating new metrics for determining school quality—such as attendance, school climate, students’ social-emotional development, teacher engagement, or access to and success in advanced coursework. The law also restructures grant programs intended to fund school improvement and innovation.

But driving innovation in K–12 schools—both sustaining innovations that improve on existing school models and disruptive innovations that upend traditional approaches—will require more than simply modifying school performance goals or tweaking the tools used to drive school improvement. To pursue both types of innovation, states will need to encourage local school systems to fundamentally understand the processes and priorities that guide their day-to-day decisions. States must take a deliberate approach to innovation under ESSA. They must buck the tendency to merely layer new metrics onto their existing policies and processes, hoping for the best. In other words, leaders will need to examine how current practices drive deeply ingrained processes across their school systems. Not doing so risks allowing the old system to simply cannibalize any new efforts in the ESSA era.

Luckily, innovation theory can help. In this brief, we do not prescribe specific innovations that schools should adopt under ESSA (although we mention a few). Instead, we offer a series of frameworks for thinking about how systems can successfully manage innovation under the new law.

Driving innovation will require more than simply modifying school performance goals or tweaking the tools used to drive school improvement.
New assessment systems, accountability frameworks, school improvement approaches, and grant opportunities could enable states to fundamentally shift how they encourage and monitor innovation. The challenge for states will be figuring out how to encourage innovation without getting stuck in the old ways of managing schools.

More of the same...or worse?

As states seize the opportunities afforded under ESSA to drive school improvement and innovation, they must also be strategic about mitigating some of the potential risks that come with increased flexibility under the updated law. Civil rights groups, noting a long history of state and local decision-making that shortchanges vulnerable students, have voiced serious concerns that states’ increased flexibility leaves little room for federal oversight or intervention when disadvantaged students are left behind. Others suggest that even if things don’t get worse under ESSA, they may not improve. Notably, in a survey in spring of 2016, 62 percent of principals anticipated that ESSA’s impact would be neutral.

Because many of the basic structures under No Child Left Behind (NCLB) remain intact, states could find themselves trying to innovate but stuck firmly in the old ways of doing business. Indeed, as states begin to publish their plans articulating how they will implement the law, it remains unclear how much stands to change. A recent review of 16 ESSA state plans by Bellwether, a nonprofit education consulting organization, noted that “most state plans failed to provide significant details about how their systems would work in practice” and “generally complied with the bare minimum requirements of federal law.” Findings like these suggest that states need to be more proactive about seizing opportunities for change and innovation to ensure that the day-to-day in schools does not end up resembling business as usual under the old law.

But even with these risks of backsliding or standing still, ESSA offers states very real opportunities. New assessment systems, accountability frameworks, school improvement approaches, and grant opportunities could enable states to fundamentally shift how they encourage and monitor innovation. The challenge for states will be figuring out how to encourage innovation without getting stuck in the old ways of managing schools.
KEY PRINCIPLES OF MANAGING INNOVATION

Innovation is risky business and is fraught with challenges. Leaders need to understand that simply buying the latest technology or giving schools freedom to experiment may do little to help leaders consistently improve student outcomes. To make successful innovation happen on a more predictable basis, state leaders need to understand how existing organizational structures favor or hinder certain forms of innovation, what sorts of change management tools best suit which circumstances, and how to organize the people tasked with making innovation happen. The following frameworks elucidate the opportunities and pitfalls along various paths to innovation. Using these tools, state leaders have the potential to foster innovation with more predictable success.

Principle #1: Pursue both sustaining and disruptive innovations

At the most basic level, there are two types of innovation that evolve along different paths and lead to different results. Sustaining innovations are the ongoing improvements that organizations pursue to make their existing products better at serving their existing customers. Automakers design safer and more fuel-efficient cars; cell phone networks broaden their coverage areas and increase data speeds; and schools upgrade their facilities, enhance their curriculum, and expand their course offerings.

Disruptive innovations, on the other hand, don’t necessarily meet the needs of mainstream customers. Instead, they offer a new definition of what’s good—typically they are simpler, more convenient, less expensive, easier to access, or easier to use—and they emerge to serve the needs of people who lack access to mainstream options. Over time, however, as disruptive innovations improve, they begin to pull mainstream consumers in, displacing once-dominant products or services.

A common misunderstanding around the term “disruptive innovation” is the belief that disruptive innovations are good and sustaining innovations are bad. This is false. Sustaining innovations pave the road of continuous improvement that allows organizations to better meet the needs of those they already serve. In contrast, disruptive innovations provide value to society by giving broader segments of the population access to life-improving technologies and by making technology accessible and useful in new circumstances. For example, sustaining improvements in desktop computers turned computers from basic word processing tools into incredible multimedia devices. Meanwhile, the disruptive innovation of mobile computing put computers in our pockets and brought computing capabilities from a wealthy few to the masses.

School systems can benefit from pursuing both sustaining and disruptive innovation strategies. But for these innovation strategies to work, state leaders need to understand how sustaining and disruptive innovations each thrive in different organizational contexts. The following theories and frameworks show where to situate each type of innovation within a school system’s organizational structure.
Principle #2: Understand your RPP—and its limitations

From Fortune 500 companies to small community-based nonprofits, every organization's capabilities and constraints can be broken down into three constituent parts: Resources, Processes, and Priorities (RPP). When school-based organizations accurately understand the opportunities and limitations created by their RPP, they can better manage innovation.

**Resources** are an organization's people, equipment, technology, information, and relationships with partner organizations. In education, resources include administrators, teachers, support staff, school buildings, per pupil funding, and curriculum tools. Most resources are visible and measurable, so people can readily assess their value. They are flexible as well, since most resources can be transported across organizational boundaries.

**Processes** are the patterns of interaction, coordination, communication, and decision-making through which organizations create value. Processes put resources to work. In education, processes are the actions that define the day-to-day work of a school system. They include how administrators, teachers, and staff enroll students in courses, manage daily campus schedules, plan instructional units and lessons, allocate budgets for class materials, assign and report students’ grades, and identify students for targeted intervention.

**Priorities** are the rules by which people in an organization judge whether a new opportunity is attractive or unattractive. Priorities shape how decisions are made, what rises to the top of peoples’ to-do lists, and what the organization rewards. Employees at every level make prioritization decisions, from high-ranking administrators to the people running day-to-day operations. Priorities consist of two drivers: an organization’s value proposition to its customers and a profit formula or, for nonprofits, a revenue formula. Some common school-system priorities include increasing enrollment, improving daily attendance, lowering suspension rates, raising test scores, and improving graduation rates.

In the formative stages of an organization, the available resources determine much of what gets done. But as an organization matures, the people working in the organization gradually come to assume that the processes and priorities they’ve repeatedly used in the past are the right way to do their work. Those processes and priorities become ingrained in an organization’s culture. An organization’s RPP, in turn, spells the fate of which innovations an organization is willing to pursue. Mature organizations naturally pursue sustaining innovations because these align with their time-honored processes and priorities. Meanwhile, disruptive innovations almost always get neglected or ignored in mature organizations because they don’t make sense to the organization’s established RPP.
Figure 1. Elements of an organizational model

**Resources**
People or assets that are required to educate students, such as administrators, teachers, support staff, school buildings, per pupil funding, curriculum tools, and technology.

**Processes**
Ways of working together to address recurrent tasks in a consistent way, such as materials budgeting, campus scheduling, enrollment policies, grading practices, curriculum adoption, professional development, teacher evaluation, lesson planning, and interventions for at-risk students.

**Priorities**
Implicit or explicit rules for evaluating tradeoffs, allocating scarce resources, and rewarding performance, such as increasing enrollment, improving daily attendance, lowering suspension rates, raising test scores, improving graduation rates, and offering electives or extracurriculars.
Principle #3: Deploy Tools of Cooperation

Within an organization, the primary task of management is to get people to work together in a systematic way. Established RPPs generally make management’s task easier: well-worn processes coordinate employees’ efforts and shared priorities streamline decision-making. But established RPPs also become roadblocks to any innovation that doesn’t align with ingrained processes and priorities. A manager’s first step when pushing for any innovation is to assess where the innovation falls along two critical dimensions: (1) alignment with shared priorities, and (2) alignment with time-honored processes. Based on these dimensions, the Tools of Cooperation Theory suggests which management styles may best catalyze successful innovation.

Culture Tools build on existing priorities and processes. These include weekly update meetings, slogans, and consensus-driven decision making. Innovations that align squarely with an organization’s agreed-upon priorities and processes get adopted organically, and often without management oversight. In these cases, culture tools guide people to automatically pursue innovations that fit the processes and priorities that have led to prior success.

Leadership Tools guide organizations to new processes that align with established priorities. These include vision-setting, charisma, and role-modeling. Administrators who pursue these sustaining innovations must move the organization beyond its time-honored processes by showing people how new processes will help them meet their ultimate goals. Leadership tools tend to be results-oriented rather than process-oriented. Charismatic leaders, for example, often do not explain how to get things done. Instead, they motivate and empower people to go out and do.

Management Tools utilize established processes to pursue new priorities. These include standard operating procedures, measurement systems, and incentive programs. For such tools to work, the various members of the organization need to agree on how to go about their work, but not necessarily on which goals the organization should pursue or what they want from their participation. For example, in many companies the reasons unionized manufacturing workers come to work are very different from the reasons senior marketing managers do. But if both groups agree that certain manufacturing procedures will result in products with targeted levels of quality and cost, they will cooperate to follow those procedures.

Power Tools force conformity to new priorities and processes. These include fiat, coercion, and threats. When an administrator tries pursuing innovations that have little alignment with both shared priorities and common processes, the only tools that are likely to elicit cooperation are power tools. The key to making power tools work is having the authority to use them. School leaders can only exercise power tools successfully with full support from their district-level supervisors and their governing boards.
Principle #4: Organize the right teams to pursue innovation

The right leadership style can create the will to move away from established processes and priorities, but leaders also need to understand how to structure the teams and departments of people who make up an organization in order to get innovations off the ground.

Functional and lightweight teams shepherd innovations that fit with established processes and priorities. Most organizations’ natural structure consists of teams organized around discrete functions—such as finance, human resources, IT, front-office staff, grade-level teams, etc. These functional teams develop rules and processes that define what each functional unit should do and how the work of various units fits together. Functional teams help an organization operate efficiently and effectively; but they also calcify an organization’s RPP, making it difficult for individuals to break free from team norms and roles. Lightweight teams are a slight variation on functional teams to help manage the unpredictable interdependences that sometimes emerge with minor sustaining innovations. In a lightweight team, managers shuttle back and forth among functional units to ensure that their work fits together.

Heavyweight teams develop innovations that require new processes. When sustaining innovation requires an organization to develop entirely new processes, complex and unpredictable interdependencies emerge between the various people and teams in the organization. In these circumstances, existing functional teams won’t work because they need to coordinate their work in ways that cannot be clearly anticipated or specified in advance. To address this challenge, heavyweight teams pull people from their various departments or functions into a new team led by a manager who wields significant clout. The heavyweight team then works together to design new processes and collaboratively address the unpredictable interdependences that arise in these new processes.

Autonomous teams drive innovations that require new priorities and new processes. When managers want to pursue an innovation that fits neither the organization’s existing processes nor its priorities, the best approach is to instead create an autonomous spinout entity or organization. Autonomous teams exist independent of the formal structure of the organization. Rather than trying to force all the members of the established organization to come to consensus around new processes or priorities, autonomous units bring together and empower a subset of people who form their own consensus on priorities and develop entirely new processes for pursuing those priorities. Strong support and accountability from top leaders, combined with freedom from the constraints of the main organization’s established RPP, are the keys to autonomous teams’ success.

Figure 3. Deciding which team fits the task

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<thead>
<tr>
<th>If an innovation requires new:</th>
<th>Then use:</th>
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<tbody>
<tr>
<td>Resources</td>
<td>A lightweight team</td>
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<tr>
<td>Processes</td>
<td>A heavyweight team</td>
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<tr>
<td>Priorities</td>
<td>An autonomous business unit</td>
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GUIDING INNOVATION UNDER ESSA: 6 APPROACHES

States trying to encourage local improvement and innovation under the new federal law face the grave risk of falling victim to the hope that well-laid plans can get established schools to radically change course. Given how resistant school systems’ existing RPPs will be to change, states that merely tweak their metrics and goals on the margins under ESSA may see few shifts across local school systems.

To avoid this trap, states need to carefully consider how their policies either deliberately encourage or inadvertently frustrate innovation. Specifically, states need to pursue both disruptive and sustaining innovations. To do so, they will need to understand how various innovations relate to schools’ traditional RPPs. From there, they can strategically encourage districts and schools to use Tools of Cooperation and deploy team structures in ways that take into consideration how various change initiatives square with established RPPs.

The following sections describe six approaches to education innovation for states to consider. The first section considers three key inroads to pursuing disruptive innovations under ESSA. The second section summarizes five promising inroads to supporting sustaining innovations—that is, innovations that help existing schools get better, both through continuous improvement and through deliberate school turnaround efforts.

Fostering disruptive innovation

Disruptive innovations always start off as inferior to mainstream solutions when measured by traditional parameters of performance. For this reason, disruptive innovations cannot start as improvement efforts aimed at traditional classrooms in mainstream schools. Trying to spur disruptive innovation within an established school’s priorities and processes is like trying to fit a square peg into a round hole—by definition, it doesn’t work. Over time, disruptive innovations improve until they become attractive alternatives to mainstream approaches. But they always start outside the mainstream.
To make disruptive innovation possible, state leaders need to create opportunities for new organizations or entities to emerge to address unmet educational needs outside of traditional schools. Team structures make or break the viability of disruptive strategies. Only autonomous teams—free from the traditional priorities and processes of established schools’ RPPs—will be able to successfully pursue a disruptive tack.

True disruptive innovations cannot come from within existing schools’ or systems’ RPPs. Even in scenarios in which visionary school leaders institute massive process and priority overhauls in how their schools operate, they are still on the hook to provide a full-service school and quickly improve student outcomes as measured by the state assessment system. These expectations prevent the school leader from exploring disruptive options. Predictably, in industry after industry, efforts to reinvent products and services fall flat because organizations’ existing RPPs reject new efforts that excel on different performance parameters. Throughout history, disruptive innovations ranging from steam ships, pocket radios, compact cars, personal computers, digital cameras, to discount retailers all started independent of the incumbents in their respective industries.

States can pursue this tack by creating new entities to address a wide array of underserved needs that have for decades plagued education systems. For example, out-of-school learning, credit recovery, and advanced and elective coursework all represent areas where students face limited options because traditional schools often have a tough time offering solutions. These instances of unmet needs—nonconsumption—are by no means uniform and will often vary by region or budgetary constraints. ESSA specifically offers a few highly promising starting points for states to pursue potentially disruptive business models: grants for education innovation and research, direct student services, and teacher and school leader academies.

#1 Use Education Innovation and Research grants to address nonconsumption

The Education Innovation and Research (EIR) grant program (Title IV-F, Sec. 4611) is a competitive grant for funding innovative, evidence-based programs designed to improve attainment and achievement among high-need students. Many schools and districts will be tempted to pursue these grants to improve existing programs in their current system. But states and districts can also deploy funds to foster disruptive educational approaches with entirely new business models.

According to the law, EIR funds will fall into three categories of early, middle, and later stage innovations. States, districts, and nonprofits should seek early-phase grants to fund potential disruptive innovations. These grants should target innovative approaches planting themselves squarely in pockets of nonconsumption—such as access to Pre-K, afterschool programming, tutoring programs, summer school programs, or access to college guidance and support.

Examples of disruptive innovation opportunities under ESSA:

- **Title IV-F, Sec. 4611:** Grants for Education Innovation and Research
- **Title I-A, Sec. 1004:** Direct Student Services
- **Title II-A, Sec. 2002:** Teacher and School Leader Preparation Academies
Although such innovations may get their start offering access, states should structure grants to reward success. Dollars should fund outcomes (not inputs) for innovative programs, while granting leeway with the new processes that innovators may use to reach those outcomes. This would be a tricky proposition in a grant-making process for established schools because their business models are designed for funding based on enrollments, rather than outcomes. But outcomes-based funding is much more palatable when it is an upfront expectation at the launch of a new business model. Furthermore, outcomes-based funding creates powerful alignment between the educational and financial priorities of new autonomous units as their RPPs take shape.

#2 Use Direct Student Services grants to create course access programs

The Direct Student Services (DSS) program (Title I-A, Sec. 1004) is a 3% discretionary state reservation of Title I funding. As a few thought leaders in the field have suggested, states could use these dollars for course access programs, in an effort to ensure that all students have access to high-quality coursework. Course access programs provide public school students with expanded course offerings across learning environments from diverse, accountable providers. Through such programs, students work with counselors and parents to enroll in the classes they need for their individual educations and careers. Regardless of where they live, students have access to a menu of free academic and career/technical courses that have been vetted for quality and are online, in-person, or some combination thereof. The course providers in a course access model can include school systems, nonprofit organizations, individual instructors, and education software providers. To ensure quality, states must hold all course providers accountable for making sure students succeed. Over time, these policies stand to unlock disruptions to the monopoly that traditional districts and monolithic instructional models hold over learning.

Course access is not just a policy to bring courses to more students along traditional dimensions like seat-time and check-the-box course enrollments. Course access is also a chance to fundamentally rethink learning, funding, and accountability from the ground up. Whereas these policies often start with a menu of online courses, over time they might usher in a system in which students can flexibly access all sorts of learning experiences not constrained to the traditional school year or course schedule anchored in credit hours. In other words, such policies could plant the seed for disruptive instructional models system-wide.

To take advantage of this opportunity to pursue a disruptive strategy, course access policies should get their start by directly targeting nonconsumption. Targeting nonconsumption means supplying course experiences that are otherwise not offered to students, such as AP courses, electives, world languages, dual enrollment college courses, or courses for which students often encounter scheduling conflicts. From there, course access policies may allow students to begin to access all sorts of learning experiences through more flexible channels than their traditional school.

At the same time, course access also offers a chance to fundamentally rethink how states allocate funds. A better funding system would reward both schools and edtech providers for successfully driving individual student performance. For example, look at the way the state of New Hampshire funds the Virtual Learning Academy Charter School (VLAC), a statewide source for online learning opportunities. Because New Hampshire is one of the few states to have gone fully competency-based, VLAC’s instructional model and funding model are contingent on students advancing only upon demonstrating mastery. This is just one example of how disruptive strategies open the door to rethinking funding in a manner that emphasizes outcomes over inputs.
In short, new course access programs launched with Direct Student Services funding could allow states to explore fundamentally new funding and accountability models guiding how students access learning under ESSA.

Crucially, disruptive innovations like this need not spell the end of traditional districts. In fact, over time these policies also stand to provide an opening to school districts themselves to rethink how they operate. Given that most course access policies allow districts to act as course providers themselves, these also offer a chance for districts to explore new RPPs.

As districts become hubs and purveyors of online courses, they are beginning to change how they do business. A 2015 Foundation for Excellence in Education report describes the successful efforts of Quakertown Community School District in Pennsylvania, which has built its own online-learning program as an in-house alternative to Pennsylvania’s cyber charters. The district now uses its own teachers to develop and deliver online courses. According to the report, Lisa Andrejko, former superintendent of Quakertown, estimates that in the first four years of its operation, Infinity Cyber Academy helped the district retain over $2.5 million that would have left the district had students moved to or continued with cyber charter schools.

#3 Authorize preparation academies to rethink teacher preparation models

ESSA’s teacher and school leader preparation academies provision offers another promising opening to rethink the existing business model guiding another aspect of the education system: adult learning. States may be able to use Title II funds to encourage programs pursuing new business models for licensing teachers and leaders.

Whereas the “alternative certification” provisions in NCLB resulted mostly in new programs within existing education schools, this provision could give states funding to authorize entirely new “teacher preparation academies” that have very different business models from those of most established education schools. The law could even be construed as encouraging business model innovation. Section 2002(4) of Title II requires states that authorize these academies to eliminate “unnecessary requirements” for state authorization, such as requiring that faculty hold advanced degrees or conduct academic research, that students complete a certain number of credit hours or sequence of coursework for graduation, or that preparation academies receive institutional accreditation from an accrediting body.

Instead, the law specifies that states must ensure that each academy gives its prospective teachers “a significant part of their training through clinical preparation,” awards “a certificate of completion to a teacher only after the teacher demonstrates that the teacher is an effective teacher,” and limits “admission...to prospective teacher...candidates who demonstrate strong potential to improve student academic achievement.” The law also requires that states recognize the certificates from these academies “as at least the equivalent of a master’s degree in education for the purposes of hiring, retention, compensation, and promotion in the State.”

Most established teacher preparation programs operate under business models that actively discourage them from addressing teacher quality challenges. For example, many reformers call for higher admission standards for teacher preparation programs to improve the quality of their outputs. But many prestigious institutions, where selectivity is the norm across all programs, have either limited the scale of their teacher preparation programs to focus on education leadership and academic research, or have eliminated their schools of education altogether. Prestige is their priority.
Meanwhile, many institutions of higher education that offer teacher preparation have business models designed to prioritize traditional inputs—such as coverage of curriculum topics and student teaching hours—rather than prospective teachers’ mastery of essential teaching skills. They earn revenue based on the number of students they enroll and the number of credit hours those students complete, which naturally nudges them to focus on maintaining or growing their enrollment and relegates teacher quality to a second-tier priority status.

To make innovation an even trickier endeavor, many state policies guiding teacher preparation reinforce these established business models and traditional practices. For schools of education to operate legally, issue teaching certificates, and offer their students financial aid, they must demonstrate that they meet the standards set by state departments of education and regional accreditation agencies. Although such standards are all well intentioned, they tend to emphasize inputs (such as governance structures, credit hour requirements, and faculty credentials) rather than the quality of their outputs (effective teachers). This means these schools can inadvertently give secondary priority to efforts to improve teacher quality.

ESSA’s preparation academies provision could easily be executed in a sustaining manner—states could authorize programs that reinforce the business models undergirding traditional teacher preparation. But the provision might instead be used to develop wholly new institutions with entirely different business models. Such models could establish a distinct set of priorities, besides prestige or enrollment volume, to guide their process and resource decisions: practical teaching experience and student outcomes.

States could look to several models that have already taken this approach. For example, Match Teacher Residency, Urban Teachers, Aspire Teacher Residency, and Relay Graduate School of Education are all programs launched in tight alignment to a particular vision of student outcomes and teacher practice.9 New institutions can design their business models with strong incentives to prioritize practices like establishing selective admissions requirements, setting competency-based graduation requirements, aligning their programs with the needs and schedules of local schools, designing high-quality curricula, and supporting graduates during their induction into the profession.

The greatest opportunities for using disruptive innovation to reinvent teacher preparation will come from new teacher preparation academies that address nonconsumption. Such programs could develop along either of two veins: supplying teachers to K–12 schools with hiring challenges caused by teacher shortages; or preparing prospective teachers who lack access to traditional preparation pathways. The challenge for states will be to design policies and regulations for these innovative programs that tie their revenue to the quality of the teachers they graduate. But if the states can get these details right, the innovative programs that result may finally lead to the changes in teacher preparation that reformers, public officials, and education groups from across the political spectrum have sought for decades.

Preparation academies could easily be executed in a sustaining manner—states could authorize programs that reinforce the business models undergirding traditional teacher preparation.

Shepherding sustaining innovation

Education reformers sometimes cast innovation efforts as initiatives that reinvent systems from the ground up. But such a bias for radical, large-scale change frequently ignores an important fact: innovations that can have the most immediate positive impact are often sustaining innovations.
These include improvements such as adopting better curriculum, giving teachers additional professional development on research-based practices, and implementing new tools for communicating with parents. They also include efforts to improve whole schools that are otherwise struggling.

Fortunately, most schools already have a drive for sustaining innovation ingrained in their organizational RPP. District directors of curriculum and instruction lead periodic curriculum review and adoption cycles to find better instructional materials. School administrators and counselors may look for new college and career preparedness programs to help them get more students on track for future success. Principals may seek ways to reduce student behavior incidents and increase graduation rates. And teachers are often on the lookout for better lesson resources, engagement strategies, and classroom management systems. Although these may not look “innovative” on their face, all of these represent sustaining innovation efforts to improve along schools’ existing metrics of success.

### #4 Design better measures of student success

Even with this natural inclination to improve, many schools share a common challenge that dilutes or hinders their sustaining innovation efforts: they lack clear ways to prioritize sustaining improvement efforts and decide whether a given improvement strategy is actually working in service of their goals. For example, district leaders may focus on facilities and technology projects over initiatives to improve teaching and learning because physical infrastructure upgrades are more visible than gains in academic quality. Districts may also evaluate their professional development using engagement surveys and anecdotes because it’s hard to track changes in teaching practices. School leaders sometimes adopt programs that boost credit completion at the expense of learning quality because credits earned are easier to track than knowledge learned. These are all highly rational responses to schools’ traditional priorities and processes, but they often fail to move the needle on higher-order priorities like academic outcomes.

In any organization, accepted performance metrics reinforce and accelerate the types of sustaining innovations the organization is naturally prone to pursue. With this in mind, states should focus and accelerate schools’ continuous improvement efforts by creating new school performance metrics that align with a more holistic definition of school quality and provide schools with frequent, objective feedback.

ESSA gives states several new opportunities to encourage sustaining innovation through improving the feedback they provide to their local school systems. The law encourages and funds states to measure not only student proficiency, but also student growth, and to use computer-adaptive assessments to gauge the academic achievement of students whose current abilities

Examples of sustaining innovation opportunities under ESSA:

- **Title I, Part B:** State Assessment Grants
- **Title I, Part B, Sec. 1204:** Innovative Assessment and Accountability Demonstration Authority
- **Title I, Part A, Sec. 1003:** School Improvement
are well above or below grade level (Title I, Part B). ESSA’s assessment provisions also expand how states define achievement by requiring them to develop multiple measures of student academic success, such as grade-level proficiency, English language proficiency, graduation rates, and at least one state-selected “measure of school quality.”

That said, states should not expect that merely adding one or two additional metrics of school quality alone will transform schools. Beyond the requirements stipulated by law, states should work with districts to incorporate additional priorities and metrics that they value and along which they hope to improve. To encourage ongoing sustaining innovations, states should also design their assessment systems to provide schools with regular, low-stakes feedback throughout the school year—rather than provide annual results that come after the time for improvement has passed.

States should not expect that merely adding one or two additional metrics of school quality alone will transform schools.

Although some such continuous improvement efforts will likely remain separate from accountability systems, over time these expanded metrics may even become part of state and federal accountability regimes. States with robust measures have the option to apply as a pilot state for ESSA’s Innovative Assessment and Accountability Demonstration Authority program (Title I, Part B, Sec. 1204). This program could allow states and districts to use alternative instruments such as competency-based assessments, instructionally embedded assessments, or performance-based assessments in combination with or eventually in lieu of traditional state assessments.

Progress and regress under NCLB

NCLB’s annual assessment requirements marked an important step forward for improving the metrics that guided schools’ sustaining innovation efforts: the assessments shined a bright light on persistent achievement gaps. Many schools across the country responded to this feedback and started making adjustments to their academic programs, and over the life of the law, overall student achievement across the country made slow but steady gains.\textsuperscript{20}

But one of NCLB’s major failures was providing schools with feedback using a very narrow definition of school quality, delivered in a format and on a timing cycle that were not conducive to ongoing improvement. Because NCLB measured school quality primarily using math and language arts test scores, some schools pursued sustaining improvements that were arguably not in the best interests of students: for example, reducing time for science, history, art, and electives in order to double down almost exclusively on math and English language arts (ELA) instruction; and replacing lessons that could foster deeper learning and real-world relevance with lessons focused on test preparation.

Other school communities balked at the narrow definitions of educational quality implied in NCLB’s assessment regimes and went on pursuing their traditional forms of sustaining improvement while giving only minimal heed to NCLB assessment results. Some parents and teachers in these schools even organized efforts to get students’ families to opt out of testing, to preserve a broader swath of priorities. This response illustrates the principle that no change in an organization succeeds without the cooperation of the people that must lead and implement the change. School communities that resisted NCLB’s testing requirements did so because NCLB tried to impose priorities that proved too incongruent with longstanding local priorities.
If states create assessment metrics under ESSA that are holistic enough to gain buy-in from local school communities, such assessments can be powerful catalysts for focusing and accelerating local schools’ sustaining innovation efforts. Better measures of school quality give school leaders better feedback on how they are achieving their priorities, which in turn helps them double down on adjusting and refining their processes.

ESSA provisions supporting school improvement:

1. New assessment systems for measuring school quality
2. Identification of underperforming schools for comprehensive or targeted support and improvement
3. Grants for school support and improvement (funded by 7% of Title I funds)
Rethink school improvement with the right Tools of Cooperation

New metrics and assessments that encourage sustaining innovation are important drivers of continuous improvement across a state’s schools. But when schools repeatedly fail to meet the needs of their students, merely innovating within their existing RPPs is unlikely to work. To move the needle in a meaningful way, states must help these struggling schools draw on other aspects of innovation theory to break past their RPP inertia. The layman’s term for this phenomenon is school turnaround.

ESSA provides three key mechanisms for encouraging low-performing schools to alter their RPPs. First, ESSA requires states to develop school assessment systems as described in the previous section. Second, ESSA’s accountability provisions require states to designate their lowest performing schools for “comprehensive support and improvement,” and designate schools with underperforming student subgroups for “targeted support and improvement.” Districts and charter networks that administer schools with these designations must submit evidence-based improvement plans to the state (Title I, Part A, Sec. 1003). Third, ESSA requires states to set aside 7% of their Title I funds for grants to local educational agencies (LEAs) with schools classified for support and improvement (Title I, Part A, Sec. 1003).

Under NCLB, school improvement became one of the most fraught and contentious efforts to hit states. ESSA provides welcome flexibility as to what improvement efforts might look like, but in order to take advantage of that flexibility, states need a clear understanding of the tools for managing innovation and improvement in struggling schools.

As states nail down their plans for turning around their lowest performing schools, they would be wise to make local school systems the locus of innovation. It can be tempting to think that a state agency can dramatically improve underperforming schools by simply requiring the schools to adopt a specific staffing structure, implement a particular curriculum, or train their teachers in a certain pedagogical framework. But using management tools described in the Tools of Cooperation theory—such as training, standard operating procedures, and measurement systems—are unlikely to prompt struggling schools to innovate.

Management tools work on the assumption that processes for achieving desired outcomes are clearly defined and widely agreed upon, and that success, therefore, hinges merely on training and incentivizing people to follow known processes. But in education, given the individual differences among students, the diversity of pedagogical philosophies, and the continued evolution of the field of learning science, there are few domains in which centralized, state-mandated processes can produce consistent student achievement.

Management tools are insufficient for turning around struggling schools. Thus, in many cases states will need to focus instead on crafting school improvement policies that encourage leaders of struggling schools to exercise either leadership tools or power tools.

NCLB’s serious flaw: attempting to improve schools with management tools

Congress’s lofty goal under NCLB—that every student in the U.S. would be proficient in math and language arts by 2014—rested on a critically false assumption: that schools and teachers already knew how to ensure every student reached proficiency. According to the lawmakers’ logic, if schools and teachers just had the right incentives focusing them on executing educational best practices, then they would easily make a steady march to the 2014 target. But hosts of schools were ultimately deemed failures because there were no widely-known processes that could guarantee universal proficiency.

State policymakers should heed this cautionary tale: policy is ill suited to prescribe processes for universal student achievement. There are still too many unknowns for policymakers to mandate effective processes for operating schools. Addressing the persistent challenges in education, in other words, depends on the expertise and creativity of local teachers and administrators. Solutions will come not from prescription, but from innovation.
Encourage leadership tools and heavyweight teams at low-performing schools with shared priorities

Some school communities have common priorities that give them a shared desire to improve, but they struggle to translate that desire into processes that can produce results. When there are apparent cracks in a school’s processes, but a strong foundation of shared priorities, leadership tools are the best approach for pursuing major sustaining innovations that align with established priorities but depart significantly from well-worn processes.

The dramatic transformation of Lindsay Unified School District in central California illustrates how leadership tools can be powerful catalysts for change. In 2007, Lindsay’s schools were fraught with challenges. Roughly 70 to 80 percent of the district’s students were failing to reach proficiency on the state’s annual assessments year after year. Schools battled challenges like gang involvement and drug use and suffered a more than 50 percent annual turnover rate among teaching staff.

Confronted by these facts, Lindsay’s leaders decided to act. Over the course of eight months, the superintendent and the school board worked with a consultant to develop the rough outlines of a shared vision for transforming their district. They then invited 150 stakeholders to an intensive, two-day community work session to articulate their shared values and goals in the form of a strategic design document that would be their compass for guiding all subsequent decisions.

The district staff then worked with their school leaders to reinforce shared understanding of the strategic design while at the same time giving school leaders both autonomy and support to develop new practices in line with the district’s vision. In the months and years that followed, Lindsay’s approaches to teaching and learning changed drastically. The district abandoned seat-time-based courses and standardized curriculum for a performance-based system in which the culture, learning, pacing, and other aspects of instruction are personalized to meet learner needs.

These dramatic shifts in Lindsay’s RPP have produced noteworthy results. The district has achieved modest but steady gains in its students’ proficiency rates on state tests. Furthermore, the district’s 2014 suspension rates declined 41 percent and gang membership fell from 18 percent to 3 percent when compared to years before the transformation.

Schools can take a valuable note from Lindsay’s example. Innovators who use leadership tools to transform the processes of their organizations tend to be results-oriented rather than process-oriented. Rather than ordering people on how to do their work differently, they invest people in shared goals, and then give managers and frontline employees the support they need to figure out how to accomplish those goals. An administrator’s main task when using leadership tools is to help people see how a new vision of the work to be done is consistent with the system’s existing shared priorities.

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To successfully innovate, leaders must also understand the best team structures to drive new processes forward. To make that vision a reality, school leaders should organize their staff in heavyweight teams. These heavyweight teams pull people out of their typical work context to collaborate on developing creative solutions to problems, free from the constraints of traditional departments, schedules, and processes.

The Milpitas Unified School District in Northern California has employed heavyweight teams to drive changes in some of its schools. A few years ago, then-superintendent Cary Matsuoka asked his teachers and principals one question: If you could design the ideal school, what would it look like? With a set of design parameters and ideas in place from the district leadership,
different teams of teachers and administrators embarked on a three-month design process and then pitched their new models to Matsuoka, his cabinet, and the teachers’ union. The critical challenge was to personalize learning for different student needs, given that over half of the district’s students are immigrants. Proposals at two schools, Randall Elementary and Weller Elementary, to transform the schools into blended-learning environments were chosen, and the schools embarked on significant redesign.

The success of these or any other heavyweight teams resides in the freedom to deploy existing resources against new goals and processes. Team members don’t “represent” the interests of their respective departments, instead they provide expertise to help the group as a whole figure out better ways to knit together ideas and meet the project’s goals.

Common priorities combined with leadership tools and heavyweight teams are powerful catalysts for change. As states review low-performing schools’ improvement plans and grant applications, they should keep an eye out for (1) school communities that can rally around shared priorities, and (2) school leaders that understand how to employ leadership tools and deploy heavyweight teams. If a community demonstrates shared priorities and these two prerequisites are met, state leaders have a ripe opportunity to facilitate a school’s transformation.

Bestow power tools for low-performing schools that lack shared priorities

Unfortunately, shared vision and values are more often the exception than the norm in struggling schools. When a school’s sense of community values is in turmoil, power tools—such as fiat, force, threats, and ultimatums—may offer the best hope for igniting meaningful progress.

Power tools allow a school leader to break through the gridlock of dissent and discord. When a strong-willed principal or superintendent has a clear sense for the changes that need to happen in a school, power tools spark the engine of progress to turn over and rev into action. In effect, the power-tools-wielding principal declares, “This is how we’re going to do things around here, and you need to either get in line or get out of the way.”

The employment of power tools is rarely a particularly pleasant experience for anyone. Teachers, staff, and students’ families may revolt, and some will likely decide to leave. But there is good news: if the new priorities and processes imposed through power tools gain traction and drive the school to newfound success, the people who stick around will often come around to the leader’s newly minted processes and priorities. Power tools are not a long-term strategy, but rather, a means for jumpstarting progress when consensus breaks down. The results of power tools only have staying power if new processes and priorities set a school onto a new track record of success. If the curriculum, programs, and approaches a school leader selects do not work, power tools will ultimately fail. Success, in other words, is the catalyst that builds consensus around a new RPP.

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Education circles are familiar with these approaches. Michelle Rhee is both heralded and hated for her hard-hitting approach to education reform. Soon after her appointment as chancellor of the District of Columbia Public Schools by Mayor Adrian Fenty, she began wielding power tools to break up the district’s “business as usual.” Among many reform initiatives, she doubled down on teacher quality by implementing an unprecedented teacher-evaluation system that rated teachers based in part on their students’ test scores. She then made the highly controversial move of using the evaluations as grounds to fire low-performing teachers.

Rhee’s actions earned her a rough relationship with the teacher’s union, and when Fenty lost his reelection bid—due in part to strong opposition to his appointment of Rhee—she promptly resigned her post. Her story would be just another sensational episode in D.C. politics if it ended there. But interestingly, her reform legacy lived on after her departure. The incoming mayor appointed Kaya Henderson, one of Rhee’s own handpicked deputies, to lead the district, and Henderson continued many of the reforms Rhee
had started. Henderson’s ability to carry on with Rhee’s initial work without getting toppled politically may be due in part to her less-aggressive approach. But some of the staying power of the reforms also came from their success. After Rhee used power tools to put her reform agenda into action, its results gradually started to come through, thereby softening political opposition. Under Rhee and then Henderson, enrollments increased, graduation rates improved, and the district became known as one of the fastest-improving urban districts on the National Assessment for Educational Progress.

As states design their school accountability policies under ESSA, they should reserve the option of power tools for only the state’s most strongly divided school communities. It bears noting that power tools only work if school leaders have the authority to use them. For school leaders to exercise power tools effectively, states need to give them freedom from many of the countervailing influences that shape school governance. Thus, the leaders of these schools need to be free to set their school schedules, select their curriculum, and control their school budgets. They need broad latitude to hire and fire school staff in order to build teams that share their strategic vision and have the skills to execute that vision. This means states may need to give these leaders waivers from policies such as seat-time and class-size requirements.

The teams that a leader organizes while exercising power tools can vary, depending on the nature of the changes the leader is pushing for. If the leader is refashioning the school after a known, existing school model, a top-down restructuring of existing functional or lightweight teams can work. But if the leader is using power tools to pursue innovative school models that are not yet well-defined, she will need to create heavyweight teams that can work from the bottom up to figure out how to manage the unpredictable interdependences inherent in the new model.

Finally, the authority to exercise power tools should also come with increased accountability. By giving a school leader broad latitude over how to manage a school, states should expect the school leader to demonstrate measurable progress on the state’s school accountability metrics. Authority to exercise power tools is not a license to despotism. Rather, it should be a license to do whatever it takes to produce student outcomes.

#6 Identify local circumstances to align schools with the right tools

Leadership tools and power tools can each be effective strategies for school improvement under the right circumstances, respectively. But how can state leaders know when the circumstances are right? How do states determine if a school community has the consensus it needs around shared priorities for leadership tools and heavyweight teams to work?

One option is for states to use a survey instrument as part of the improvement plan or grant application process. The survey could gauge a school community’s level of alignment around shared priorities to determine whether leadership tools or power tools are the best means for restructuring the school’s RPP. If designed well, this option is the most efficient and direct approach to school improvement. But the success of this option hinges on a state’s ability to design an effective survey.

A second option is for states to take a sequenced approach. When the state first identifies that a school is consistently underperforming, state officials can start by supporting the school leader’s use of leadership tools and heavyweight teams to reset processes in the school. Then, after a few years, if this approach does not produce improved student outcomes, the state could escalate its approach, bringing in a new school leader with the authority to exercise power tools. This option gives school communities a chance to rally around a shared vision and shared priorities before being subject to power tools. That said, it also risks allowing students to founder unnecessarily for a few years in a failing school that needs power tools to change course.

A third option is to let local leaders decide on the appropriate tools of cooperation depending on their own understanding of the circumstances hindering their performance. To make this option work well, states would need to provide school leaders with a rubric for assessing the degree of consensus around shared priorities within their school communities and technical assistance on how to employ the appropriate tools and team structures.
CONCLUSION

This brief offers state leaders a set of frameworks and theories to understand how best to manage, encourage, and measure innovation in K–12 education. These theories do not merely provide a universal checklist of programs for states to push under the new federal law. Rather, they help states understand the circumstances and organizational dynamics that affect any school system’s ability to innovate and then offer recommendations tailored to varying circumstances. Armed with the right theories of innovation to match opportunities under ESSA, states will be able to push past mere trial-and-error innovations. Instead, they can find themselves better equipped to set up schools for success with sustaining and disruptive innovations from the start.
NOTES


2. In particular, civil rights groups and other concerned organizations have asked that the Department of Education step in and pay attention to the details of implementation under the new law, such as ensuring that states’ reports on the achievement of specific subgroups will not result in “super subgroups” that mask performance (as this was the case under No Child Left Behind). Civil rights advocates are also concerned that new locally designed assessments may be used as an excuse to provide vulnerable students with lower-quality, less-reliable assessments that in turn might likewise obscure disparities in student outcomes under the guise of innovation. Where local assessments are permitted by law, under the law’s innovative assessment pilot provision, concerned groups are urging states to ensure that these new assessments meet the highest standard of validity, reliability, and comparability (see The Leadership Conference on Civil and Human Rights, “ESSA Comments,” January 21, 2016, http://www.civilrights.org/advocacy/letters/2016/essa-comments.html).


22. State leaders should note that traditional assessment systems may not reflect priorities of local communities. For example, respondents to a recent poll rated teaching interpersonal skills as the most important aspect of school quality and ranked standardized test performance as fifth in terms of indicators of school quality. See “The 49th Annual PDK Poll of the Public’s Attitudes Toward the Public Schools,” PDK International, September 2017, http://pdkpoll.org/assets/downloads/PDKnational_poll_2017.pdf?utm_source=TopSheet&utm_campaign=ddada30944-EMAIL_CAMPAIGN_2017_08_29&utm_medium=email&utm_term=0_d40b014331-ddada30944-176141889. States that aim to create assessment systems that animate local stakeholders’ continuous improvement efforts need to take local priorities into account when designing their assessment systems.


24. State assessment systems, as discussed in an earlier section, can also help create consensus around shared priorities in low-performing schools. Without some form of external evaluation, a school’s success is a matter of subjective opinion—with different members of the school community often holding differing views. In contrast, the objective feedback from state assessment systems can help create consensus among school community members when the status quo needs to change. As noted earlier, a key to making assessment systems useful for supporting innovation is creating assessments that gain public support for reflecting a holistic view of what communities value in their schools. Poorly designed assessments will not galvanize the will to change within a school community if members of the community reject the validity and representativeness of the assessment system.
In contrast, well-designed performance metrics help the people in an organization recognize the need to innovate outside of established priorities and processes.


27. Lindsay Unified School District’s strategic design is available at http://www.lindsay.k12.ca.us/filelibrary/LUSD%20Strategic%20Design%201.pdf.

28. Today, students in Lindsay progress based on their mastery of academic content and receive individualized instruction aligned to their current achievement levels. Teachers’ roles have shifted from deliverers of content to learning facilitators. And administrators, teachers, and parents all have transparent access to students’ real-time academic progress so they can work together to ensure that all students succeed.


32. For ideas on how to design surveys that are useful for in school improvement, see examples from Dallas Independent School district (https://www.dallasisd.org/campusturnaroundplan) and Luling Independent School District (http://www.luling.txed.net/apps/pages/index.jsp?uREC_ID=263225&type=d&pREC_ID=1041462). The survey purposes described in this paper vary from those of the Dallas and Luling school districts, but we think the general approaches used by those districts may still be insightful.

33. ESSA requires states to set exit criteria for schools designated for targeted or comprehensive support and improvement. If schools do not satisfy the criteria within a state-determined number of years (not to exceed four years), ESSA requires states to take more rigorous action “which may include addressing school-level operations.” Our third recommended option—to initially support all low-performing schools with leadership tools and then transition to power tools if leadership tools fail—offers one potential way to satisfy these statutory requirements.
About the Institute

The Clayton Christensen Institute for Disruptive Innovation is a nonprofit, nonpartisan think tank dedicated to improving the world through Disruptive Innovation. Founded on the theories of Harvard professor Clayton M. Christensen, the Institute offers a unique framework for understanding many of society’s most pressing problems. Its mission is ambitious but clear: work to shape and elevate the conversation surrounding these issues through rigorous research and public outreach.

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