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Learning Mindsets and Skills

An Opportunity for Growth with the Every Student Succeeds Act

By Ulrich Boser and Perpetual Baffour June 2017

Center for American Progress



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Introduction

The Every Student Succeeds Act (ESSA), signed into law by President Barack Obama in December 2015, offers state and district leaders several new opportunities to promote student success. Education leaders have increased flexibility to design plans that emphasize a “well-rounded education,”¹ and the new law provides state and local education agencies with ample room to allocate funding toward critical new programs and policies.

Most notably, however, ESSA gives state and district leaders a unique chance to advance learning mindsets and skills through their reform efforts. A growing body of research shows that learning mindsets are malleable, not fixed.² However, learning mindsets significantly depend on the conditions within a student’s learning environment and the messages students receive about their learning ability. When educators nurture positive learning mindsets among their students, students are far better able to view new challenges as a natural part of the learning process. These positive mindsets, in turn, encourage them to develop better habits and skills that ultimately boost their classroom performance.

In the past few years, there has been a steady growth in programs, policies, and practices emphasizing learning mindsets, and there is now a good amount of research showing the impact of these reforms on student achievement and school climate.³ One recent study found that a “growth mindset” program increased the GPA of under-performing high school students. The same study also found that students participating in a “sense-of-purpose” program, which encouraged students to reflect on ways in which their daily classroom activities connected to lifelong goals, also led to academic improvements.⁴

While programs teaching learning mindsets and skills have yet to become an educational norm, some policymakers have shown leadership by promoting policies and programs that help students develop closely related skills. At least

A brief overview of terminology

In this report, the CAP authors rely on the following definitions for “learning mindsets” and “learning skills:”

- **Learning mindsets:** a set of attitudes and beliefs about one’s self in relation to learning and the environment in which one learns; also referred to as “academic mindsets” and “student mindsets”
- **Learning skills:** a set of behaviors, tactics, and strategies that are critical to academic success; appropriate study habits, work habits, metacognitive strategies, and help-seeking behaviors; also referred to as “learning strategies”

eight states, for instance, include concepts such as resilience and perseverance in their definitions of college and career readiness.⁵ Another 14 states include social and emotional skills, including collaboration, social awareness, and responsible decision-making, in their definitions.⁶

Learning mindsets and skills have enjoyed some federal support as well. In 2015, the U.S. Department of Education launched the Skills for Success program, a \$2 million program to support students' social-emotional development and interpersonal skills, particularly in the middle grades. The department also introduced the Mentoring Mindsets Initiative, which equips mentors with evidence-based tools for teaching learning mindsets and skills to their mentees.

In 2013, First Lady Michelle Obama also endorsed a growth mindset with students at Savoy Elementary in Washington: “No one is born smart. No one is born knowing how to read, right? No one is born knowing how to do math, or no one is born knowing how to play the flute. ... The only way you know how to read is that you keep trying.”⁷ The same year, the Obama administration convened a group of policy experts, researchers, and teachers to discuss learning mindsets, habits, skills, and their impact on student achievement.⁸

With the new flexibilities under ESSA, state and local policymakers have the opportunity to begin to translate the research on learning mindsets and skills into effective classroom practice. For example, Title IV, Part A includes the new Student Support and Academic Enrichment Grants, which focus on improving school conditions so that students feel safe and ready to learn. In this regard, the new law has laid the groundwork for state and local education leaders to implement evidence-based programs, practices, and interventions that support positive learning mindsets and effective learning skills.

At the same time, state and district leaders should refrain from advancing these interventions before they have evaluated their readiness. Put differently, there are clear dangers associated with going too far, too fast with a reform. And in education, history shows that there are risks associated with an aggressive push for new policies and interventions that reach beyond what is known to be effective. After the No Child Left Behind Act took effect, for example, the new federal requirements on adequate yearly progress incentivized poor practices in the classroom, such as drill-and-kill teaching to the test. Some schools also reduced access to arts and physical education classes because of the federal requirements, favoring longer periods of math and reading.

Adopting new measures, creating new policies, and implementing promising practices must develop at an appropriate pace—and at high fidelity to the still-emerging research. This report, then, helps guide decision-making by providing policymakers, school leaders, and practitioners with a summary of the current research on students’ learning mindsets.

This report also includes a set of recommendations for state and local education leaders seeking to prioritize students’ learning mindsets, noting the available opportunities and risks within ESSA:

- **Establish research-practice partnerships to pilot, test, develop, and scale promising programs and interventions related to learning mindsets and skills.** Through Title IV’s Education Innovation and Research Program, researchers can directly partner with school districts and charter school networks in testing programs, practices, and interventions that are dedicated to cultivating students’ learning mindsets and skills.
- **Adopt common measures of learning mindsets or related information for formative and diagnostic purposes, and refrain from using measures of learning mindsets in high-stakes accountability systems.** States and districts should find a way to systematically measure data on learning mindsets and skills, monitor trends, and track change over time. At the district and school level, administrators can collect, report, and analyze this data to diagnose student needs and inform daily instruction.
- **Revamp teacher preparation and professional development programs using the new science on learning mindsets and skills.** Title II under ESSA allows state and local educational agencies to allocate funds to train educators to help students develop the “skills essential for learning readiness and academic success.”⁹ States should also use their 3 percent set-aside funds under Title II to revamp teacher and principal training programs with an express commitment to building educators’ knowledge about learning mindsets and skills.
- **Target supports and interventions related to learning mindsets for school improvement purposes.** Under ESSA, states must reserve at least 7 percent of their Title I, Part A funds for school improvement purposes, beginning in fiscal year 2017.¹⁰ Going forward, states and districts should focus on students’ learning mindsets and skills as a lever for increased student achievement.

Background: The current research on learning mindsets and skills

How does someone come to define oneself as a learner? Research gives some insights into this question, showing that learning mindsets are a result of complex interactions between the individual and their experiences in school, home, and community environments.¹¹ As early as age 6, children begin receiving messages about their abilities from family members, peers, and adults.¹² According to Lisa Quay, executive director of the Mindset Scholars Network, “Mindset messages can be delivered explicitly or implicitly, from specific words and actions to larger policies, norms, and societal stereotypes.”¹³

Oftentimes, these messages are rooted in stereotypes. Students can internalize these social expectations or worry about confirming these stereotypes in the classroom. For instance, female, African American, and Latino students can experience a “stereotype threat” when attending a math class due to racialized and gendered beliefs about their ability in these subject areas.¹⁴

Other times, schools themselves can endorse these stereotypes. For instance, across the country, racial gaps persist in access to rigorous coursework.¹⁵ Schools also disproportionately assign students of color to remedial courses and disproportionately advance white students to gifted and talented programs, which sends harmful messages to students of color about their ability.¹⁶

Negative learning mindsets can also arise from traumatic stress, usually due to a history of physical or sexual abuse, exposure to violence, the loss of a loved one, or chronic financial hardship. When students experience multiple traumatic events during their childhood, they become acutely sensitive to messages that threaten their sense of self, belonging, and purpose. The interaction among these environmental, societal, and intrinsic factors then frames a student’s beliefs about learning and about school more broadly.¹⁷

But what are these learning mindsets, and how do they guide a student’s approach to learning? The Mindset Scholars Network classifies learning mindsets in three categories: growth mindset, belonging, and purpose.

Growth mindset

When Stanford psychologist Carol Dweck wrote *Mindset: The New Psychology of Success* in 2006, she began by distinguishing between two types of human mindsets: growth and fixed. A growth mindset is the belief that an individual's intelligence or personality is something he or she can develop, while a fixed mindset is the belief that these components of identity are intrinsic and immutable.¹⁸

The difference in a person's mindset, Dweck says, can determine how he or she approaches challenges, responds to criticism, and perceives his or her self-worth.¹⁹

Dweck goes on to explain the many benefits of possessing a growth mindset, particularly in the presence of adversity. "The passion for stretching yourself and sticking to it, even (or especially) when it's not going well, is the hallmark of the growth mindset," Dweck writes. "This is the mindset that allows people to thrive during some of the most challenging times in their lives."²⁰

Since Dweck published *Mindset*, researchers have been exploring and expanding upon her conception of a growth mindset. Many in the education policy space are drawn to the idea that students' motivational beliefs about their capacities could boost their engagement in the classroom.²¹ Specifically, if teachers can reframe students' beliefs about their ability, then students are less likely to fear or refrain from taking on a challenging task and will instead approach their work with optimism, in spite of its apparent difficulty.

Belonging

Just as important as a student's belief about their learning ability, though, are their beliefs about their learning environment. Does the student identify as a member of the school community or as an outsider? Does the student feel personally targeted by their teachers and peers, or do they feel cared for and respected?

Students' learning mindsets do not simply boil down to beliefs about ability. They are also characterized by external messages about who they are and the differential programs, supports, services, and treatment they receive.

Students who are underrepresented in the school population can feel marginalized due to perceived threats to their identities. And those students with fewer caring relationships with adults are less likely to feel appreciated or welcome at

school.²² When education leaders cultivate positive and inclusive learning environments, however, students are more likely to have a firm sense of belonging.²³ This, in turn, improves their beliefs about their learning ability and enhances their classroom performance.²⁴

Purpose

Similarly, a sense of purpose is central to students' learning mindsets. Students tend to draw connections between the content of their schoolwork and their values, identity, and long-term goals. Students may ask themselves, "Do I care about what I'm learning? How is this relevant to me and people I care about? How will this help me, or someone else, in the future?" These beliefs, in turn, shape a student's motivation to learn and ability to deploy learning skills.²⁵

Learning skills

Learning skills consist of the appropriate behaviors, tactics, and strategies a student must utilize to achieve their academic goals. These skills include time management, self-regulated learning, metacognitive strategies, and goal setting.²⁶ Students with better learning skills will also engage in more self-quizzing and self-explanation to ensure that they truly understand an area of knowledge or specific skill. Learning skills also include the practice of spacing out learning over time, asking metacognitive questions, and looking for relationships within an area of expertise in order to support richer forms of understanding.

Learning mindsets and learning skills go hand in hand. When students see value in their work and believe they can succeed, they have an increased motivation to improve their performance through productive habits such as monitoring their daily use of time and designating an hour at the end of each day to study. Studies also show that students exhibiting a growth mindset are more likely to engage in self-quizzing.²⁷ Positive learning mindsets drive good learning strategies. Conversely, students with negative mindsets may not adopt the best study and work habits.

Although related, it is important to distinguish learning skills from social-emotional skills. The Collaborative for Academic Social and Emotional Learning defines social and emotional learning as developing the core competencies of self-awareness, self-regulation, social awareness, responsible decision-making, and relationship skills.²⁸

There is some overlap between these competencies and learning skills, and both have profound consequences for a student's experiences at school. However, social-emotional skills focus more directly on improving students' emotional development and social interactions. Social and emotional learning teaches students how to better regulate their emotions, empathize, connect, and collaborate with others.

On the other hand, learning skills target students' approach to school and school-work. Students learn how to organize their time, manage their academic responsibilities, and acquire knowledge in specific content areas. Learning skills also provide students with better ways to think about their thinking and find connections across areas of expertise.

Similarly, efforts to improve learning mindsets target students' beliefs about learning. Students acquire positive attitudes about their competencies, see purpose in their work, and feel school is a safe and exciting place to learn.

Strategies for developing learning mindsets and skills

Promisingly, researchers have found that it is possible to orient students toward positive learning mindsets through low-cost interventions, including online programs that teach students about growth mindsets and purpose.²⁹ According to Carol Dweck and her colleagues, "... educational interventions and initiatives that target these psychological factors can have transformative effects on students' experience and achievement in school, improving core academic outcomes such as GPA and test scores months and even years later."³⁰

Research shows the importance of prioritizing learning mindsets and skills for all students.³¹ Encouragingly, though, interventions that support positive school culture, mindsets, and habits have demonstrated the greatest benefit for low-performing students.³² These interventions can revive a sense of purpose among students who have not been performing well in school and promote their self-efficacy.

For instance, one group of researchers asked ninth graders to write about how their weekly science lessons connected to their own lives, and students who previously had low expectations for their achievement in the science course saw a significant boost in their grades, compared with similar students who did not participate in the exercise.³³

These types of school-based interventions can also reduce racial, ethnic, and gender differences in student performance. For instance, schools participating in the Carnegie Foundation's Student Agency Improvement Community, a network of researchers and practitioners applying the science of learning mindsets to daily classroom practice, have seen stronger outcomes among low-income black and Latino students since implementing interventions focused on learning mindsets.³⁴ Equal Opportunity Schools, a national nonprofit organization, has also partnered with school, county, and district leaders to increase the number of black and Latino students enrolled in advanced placement courses and has seen gains in both participation and passage rates as a result.³⁵ In addition, several studies show that learning mindsets interventions can reduce the effects of stereotype threat among female, black, and Latino students in math and science classes.³⁶

But while the research base expands, researchers, practitioners, and policymakers continue to grapple with tough questions: What are the most effective interventions, especially with a multitude of diverse student populations, to support learning mindsets and skills? What kind of training should preparation programs and school districts provide teachers so that they can infuse learning mindsets and skills into their teaching? How can these interventions be accurately assessed to accrue evidence of success? And, last but not least, should schools and teachers be held accountable for students' progress in the development of learning mindsets and skills?

The federal context

The Trump administration has not demonstrated a serious commitment to learning mindsets and skills. In fact, the new pathway provided by ESSA for states, districts, and schools to focus on learning mindsets could be undercut by the Trump administration's proposed budget for the 2018 fiscal year. In fact, Trump's FY 2018 budget would slash many federal funding streams that could advance learning mindsets and skills, and the administration has proposed zeroing out programs such as 21st Century Community Learning Centers; reducing funding for Title IV, Part A Student Support and Academic Enrichment Grants; and eliminating funding for Title II, Part A.

Still, there are federal efforts that continue to support learning mindsets and skills programs. In 2015, for instance, the Skills for Success grant program supported local educational agencies and their partners in developing programs and practices

that promoted positive learning mindsets among middle-grade students.³⁷ The winning entities included Chicago Public Schools, KIPP, Long Beach Unified School District, and Los Angeles Unified School District.³⁸

Programs such as Skills for Success support school districts that seek to implement innovative approaches to developing their students' mindsets and learning skills. For example, Long Beach Unified School District, California's third-largest school district, utilized grant funding to institute Long Beach Scholars 2.0, a middle-school elective course that embeds important competencies such as growth mindset within a "STEM-focused college and career exploration class."³⁹

The Institute of Education Sciences within the Department of Education is also updating its "Organizing Instruction and Study to Improve Learning" report, a 60-page practice guide on effective learning strategies.⁴⁰ The document was first released in 2004, and it offered recommendations for practitioners on how they could help students master evidence-based approaches to learning and studying. The department's National Center on Safe Supportive Learning Environments also recently collaborated with the American Institutes of Research to develop school climate surveys for state and local use.⁴¹

In addition, in October 2016, the Department of Education issued new guidance on the Every Student Succeeds Act describing how funds from Title IV, Part A's Student Support and Academic Enrichment Grants can help state and local educational agencies provide all students with access to a well-rounded education.⁴² According to this guidance, local educational agencies "may use funds for activities in social emotional learning, including interventions that build resilience, self-control, empathy, persistence, and other social and behavioral skills."⁴³

But despite this push at the federal level, too few states, districts, and schools have prioritized the active cultivation of learning mindsets and skills. The next section of this report will provide state and local policymakers with recommendations on how to leverage the opportunities within ESSA for advancing learning mindsets and skills, while noting the related risks.

Recommendations: Levers to support students' learning mindsets and skills

ESSA offers education leaders and policymakers a unique opportunity to support students' learning mindsets and skills. For example, the law replaces references to “core academic subjects,” instead calling for a “well-rounded education” for all students.⁴⁴ Indeed, the term “well-rounded education” appears more than 20 times in the law.⁴⁵

While ESSA does not explicitly mention learning mindsets and skills, state and local policymakers have substantial room to include them in their own definitions of “well-rounded education.” Additionally, ESSA includes multiple funding streams that could be used by state and local policymakers to implement programs, build educator capacity, and support further research into students' learning mindsets and skills and their effect on student achievement.

It is also important to note that many of these approaches and interventions have been bubbling up in classrooms but not in a coordinated way. The issue, then, for policymakers is creating thoughtful policy structures that support effective learning mindsets and skills.

The following recommendations provide more information on how state and local policymakers can leverage ESSA to advance learning mindsets programs, practices, and interventions in a systemic way.

Recommendations for state and district leaders

Establish research-practice partnerships to pilot, test, develop, and scale promising programs and interventions related to learning mindsets and skills

ESSA requires states and districts to adopt evidence-based interventions in efforts to improve their schools. An increasing number of researchers are seeking to identify these effective programs, practices, and interventions in the learning mindsets space, but their knowledge is often insulated from those working on the ground. There should be intentional partnership between the researchers and educators and practitioners who want to implement and improve evidence-based approaches. Under ESSA, states hold greater authority in closing this research-practice gap.

Moreover, researchers are still tackling lingering questions about what works to enhance students' mindsets. The evidence base on learning mindsets programs is not robust enough for policymakers to pursue implementation without first exploring the reliability, validity, and scalability of these findings.

Through Title IV's Education Innovation and Research Program, researchers can directly partner with school districts and charter school networks in testing programs, practices, and interventions that are dedicated to cultivating students' learning mindsets and skills. These research-practice partnerships can involve the design of pilot programs or evaluation of existing solutions. Title I and Title IV, Part A are other possible funding streams for local partnerships with researchers in the interest of learning mindsets.

Given the fiscal priorities of the Trump administration, however, state and local education officials will likely experience decreases in education spending and grant funding at the federal level. Thus, state education agencies and school districts must create opportunities for research partnerships at the state and local levels. In San Francisco, Stanford University and the San Francisco Unified School

District work together to shape and inform education policy in the local area. The partnership—a strong example of a locally formed research practice—involves more than 30 projects on subjects ranging from accountability measures for alternative schools to developing safe and supportive schools.⁴⁶

Another example, the Tennessee Education Research Alliance, was born out of a partnership between the Peabody College of Education and Human Development at Vanderbilt University and the Tennessee Department of Education. Staff members at the Tennessee Education Research Alliance conduct studies and evaluations to guide policy and strategic decision-making at the state agency.⁴⁷ Other states and districts should follow suit and establish research-practice partnerships with a specific emphasis on academic mindsets and learning skills.

It is important to note, though, that public school districts greatly outnumber local institutions of higher education. Thus, local demand for expertise may exceed the supply of locally available researchers. States and districts should set policies in place for a system-wide coordination of these institutions. States and districts should also prioritize placing research teams in schools identified as in need of improvement and in districts with demonstrable need and interest.

Adopt common measures of learning mindsets or related information for formative and diagnostic purposes, and refrain from using measures of learning mindsets in high-stakes accountability systems

States and districts should find a way to systematically measure data on learning mindsets and skills, monitor trends, and track change over time. For instance, states can work with researchers to adopt and develop valid and reliable measures of learning mindsets. State leaders should test these measures to explore their utility in predicting student performance and school quality. At the district and school levels, administrators can collect, report, and analyze this data to diagnose student needs and inform daily instruction.

States can also look to other measures that are currently in use at the state and local levels, such as measures of student engagement or school climate. These measures provide insight into students' learning mindsets and skills, without bearing the additional cost of testing and scaling new indicators.

If states and districts do decide to adopt new measures of learning mindsets and skills, though, they should refrain from applying sanctions or rewards in response to a school's performance. This strategy makes the indicators high-stakes. When high stakes are placed on a measure, they are more susceptible to what is called gaming. For instance, if students realize that their teachers are being evaluated based on their reported answers, they may game the assessment. Teachers may also coach students on selecting the so-called right answers.

In addition, since these assessments are self-report surveys, there is also the issue of response bias—meaning a student's tendency to give answers that they believe are socially acceptable or to consistently answer “yes” or “no” regardless of the question asked.⁴⁸ Since self-report measures tend to be weak in reliability and validity, state and local policymakers should refrain from including measures of learning mindsets and skills in high-stakes accountability systems.

Teachers also do not currently have enough training or support to be evaluated for their promotion of students' mindsets and learning skills.⁴⁹ A better approach for administrators would be to establish data collection systems on student mindsets and then use the data only for formative purposes. These measures would be detached from a punish-and-reward accountability system and instead would be used by schools to inform resource allocation and direct targeted supports. Under ESSA, states can apply for grants to develop these formative assessments, and they can work with research institutions in developing and improving such assessments.⁵⁰ This data can also be collected as part of school-level needs assessments.

Again, research-practice partnerships can assist in this effort. For instance, university researchers at the Stanford University Graduate School of Education's John W. Gardner Center recently partnered with the California CORE districts—which include the Los Angeles Unified, Oakland Unified, Fresno Unified, Long Beach Unified, Santa Ana Unified, Sanger Unified, Garden Grove Unified, and Sacramento City Unified school districts—to design a new local school accountability system that included measures of students' social-emotional learning, growth mindset, self-efficacy, and school climate.⁵¹ Researchers found that these measures were predictive of students' test performance and correlated with other important academic and behavioral outcomes.⁵²

Schools with low ratings on the measurement system were then paired with higher-performing districts to receive support and mentorship. The initiative provides a useful model for how researchers and administrators can work together to design, test, and refine low-stakes measures of student mindsets, using them to provide struggling schools with additional resources instead of sanctions.

Despite the risks associated with using learning mindsets and skills for high-stakes accountability purposes, states are still required to adopt a new indicator in their statewide accountability systems, and this so-called fifth indicator must measure school quality and student success. The authors advise states to look to other important metrics that are relevant to the development of learning mindsets and skills but are less susceptible to gaming.

For instance, measures of school climate and safety can serve as a good proxy for students' sense of belonging. Data on chronic absenteeism—which the Department of Education defines as the percentage of students chronically absent from school for at least 15 days—can inform practitioners and policymakers on questions of student engagement.⁵³ Additionally, school and district leaders could collect data on access to advanced coursework to identify schools in need of more rigorous learning environments. These measures serve as reasonable candidates for a fifth indicator while also being a valuable source of information for policymakers interested in cultivating learning mindsets and skills.

Revamp teacher preparation and professional development programs using the new science on learning mindsets and skills

Research confirms what is often intuitive among educators: A child's beliefs about learning profoundly shape that child's experiences at school and ultimately their life trajectory. In fact, most educators are in agreement about the importance of developing students' developmental competencies, and many practitioners are already doing important work in this area: building supportive and caring relationships with their students, teaching them that their intelligence is malleable, and developing lessons that are personally engaging, culturally relevant, and academically rigorous.⁵⁴

In a 2016 poll conducted by *Education Week's* Research Center, nearly half of K-12 teachers said they were "very familiar" with growth mindset, but 40 percent said they "had no training and want some" professional development in that area,

while 45 percent said they “had some training and want more.”⁵⁵ Some districts are prioritizing this kind of teacher training: The Baltimore City Public School System, for example, is now incorporating growth mindset training into its new teacher induction programs.⁵⁶ However, most states and districts lack a systematic approach to teaching educators about the various forms of learning mindsets and the greater science of learning.

The federal government designates approximately \$2.25 billion annually towards teacher quality and professional development under Title II, some of which could be dedicated to developing teachers’ skill in cultivating learning mindsets and skills.⁵⁷ Title II under ESSA allows state and local educational agencies to allocate funds to train educators to help students develop the “skills essential for learning readiness and academic success.”⁵⁸

Additionally, ESSA offers new funding flexibility in Title II for principal and school leadership development. States can reserve up to 3 percent of their Title II funds for investments in “teacher, principal, or other school leader certification, recertification licensing, or tenure systems or preparation program standards and approval processes to ensure that (i) teachers have the necessary subject-matter knowledge and teaching skills, as demonstrated through measures determined by the State.” States should use their 3 percent set-aside funds to revamp teacher and principal training programs with an express commitment to building educators’ knowledge about learning mindsets and skills. Training on students’ learning mindsets and skills should be a central component of the curricula in these programs. PERTS, a research center at Stanford University, is already paving the way for the development of these materials and resources and provides a good sense of what such materials might look like.⁵⁹

States should also invest in a research and development agenda identifying best practices in instruction that fosters the development of students’ learning mindsets and skills. For instance, states can use research-practice partnerships to bring together researchers and educators, study effective teaching practices in the development of learning mindsets and skills, and pilot programs that instruct on these best practices.⁶⁰

Additionally, Title I allows local educational agencies to provide professional development to teachers, principals, and school personnel who work with at-risk students. Districts can leverage their Title I and Title II funds to train

educators on how they can develop learning mindsets and skills in the classroom. Districts can also support or add new professional learning networks that emphasize learning mindsets and skills.

Target supports and interventions related to learning mindsets for school improvement purposes

State and local policymakers should consider enhancing school improvement efforts through an evidence-based focus on students' learning mindsets and skills. Under ESSA, states must reserve at least 7 percent of their Title I, Part A funds for school improvement purposes, beginning in fiscal year 2017.⁶¹ Going forward, states and districts should focus on students' learning mindsets and skills as a lever for increased student achievement. Since state and local policymakers should prioritize interventions that have a robust evidence base, they should look to the Department of Education's guidance—issued in September 2016—for states, districts, and schools seeking to apply interventions with strong records of success.⁶²

Title I also provides multiple funding opportunities for state and district leaders to promote students' learning mindsets and skills. Title I, Part A funds, for instance, include significant flexibility, and school districts can now dedicate funds to “any activity that supports the needs of students in the school.”⁶³ More than 56,000 public schools currently receive grants through Title I, Part A, but few districts are using these funds to support students' learning mindsets and skills in a targeted, coherent, and systemic way.⁶⁴

Moreover, under Title I, districts must conduct a comprehensive needs assessment of schools identified as in need of improvement. These needs assessments should examine “access to, and opportunities for, a well-rounded education for all students” and “conditions for student learning” that “create a healthy and safe school environment.”⁶⁵ Districts that receive more than \$30,000 under Title IV, Part A—the Student Support and Academic Enrichment Grants—must also conduct a school-level needs assessment, and they must develop their plans in “consultation with stakeholders,” including students.⁶⁶

Districts should use these opportunities to gather formative information from students about their existing learning mindsets, skills, and habits. Districts can also administer surveys that assess students' attitudes toward their schoolwork,

their relationships with peers and teachers, and their sense of safety. This data, in turn, will inform school improvement plans and help districts decide what services and supports to make available for schools.

Local policymakers should also leverage existing grant programs that support students' learning mindsets and skills. For instance, the Student Support and Academic Enrichment Grants help students gain access to more comprehensive curricula, and local policymakers can use these funds to provide instruction on learning mindsets and skills.

Additionally, district leaders should capitalize on other grant programs—such as Skills for Success—to promote their students' learning mindsets and skills. For example, through the Skills for Success Program, the Los Angeles Unified School District received more than \$500,000 to implement Mindset for All, a project that seeks to train parents and teachers on supporting students' development of learning mindsets and skills. The district teaches parents and educators tactics to nurture students' growth mindsets.⁶⁷

Districts can also leverage Title I and Title IV funds to improve family engagement strategies. Conventional wisdom about learning is often detached from what the research says, and a recent Center for American Progress study highlighted this disconnect.⁶⁸ For instance, research by Carol Dweck and others has shown that simply praising students “for being smart” is an inappropriate way to motivate them in the classroom, and it can adversely impact their achievement.⁶⁹ But most Americans believe just the opposite. Similarly, much of the public is skeptical of the value of low-stakes quizzes, although research suggests the opposite. These myths about learning can influence parents' beliefs about their own child's learning and intelligence.

ESSA requires districts to reserve at least 1 percent of their Title I funds for parent and family engagement activities, including for “activities that districts identify as appropriate.”⁷⁰ Districts can use these funds to teach parents about learning mindsets and skills at parent-teacher conferences, home visits, open house and back-to-school nights, and other parental involvement events. Specifically, districts could do more to help parents understand the value of learning mindsets and provide them with training on ways to help their children gain learning skills.

Title IV also provides federal grants for Statewide Family Engagement Centers program, which may “assist parents in participating effectively in their children’s education and helping their children meet state academic standards.”⁷¹ Statewide organizations receiving these funds can develop plans for how they will provide parents information on positive learning mindsets and skills. The centers, for instance, could create a document on how families can better support better learning mindsets or help parents encourage metacognitive questioning. PERTS and other organizations such as Learning Heroes have developed similar toolkits that could serve as good resources for state and local leaders.⁷²

State educational agencies may also dedicate Title IV, Part B funds to local educational agencies, community organizations, nonprofits, and other eligible entities that seek to establish 21st Century Community Learning Centers, which could support students’ learning mindsets and skills and related parent engagement activities. Again, these programs need to be clearly coordinated and made coherent across systems.

Conclusion

In 2014, Sal Khan, director of the Khan Academy, wrote, “I am more convinced than ever that mindsets toward learning could matter more than anything else we teach.”⁷³ Growing research demonstrates the value of focusing on learning mindsets and strategies, and a wealth of studies shows, for instance, that students gain more when they think about their thinking.

Fortunately, policymakers at all levels have clear opportunities under the new law to expand existing research and apply evidence-based interventions in support of students’ learning mindsets and skills, and the Every Student Succeeds Act provides fertile ground for policymakers who seek to prioritize students’ learning mindsets, skills, and habits and promote student success. By including learning mindsets and skills among the components of a high-quality, well-rounded education, policymakers can ensure that students—and schools—are growing to their full potential.

About the authors

Ulrich Boser is a senior fellow at the Center for American Progress.

Perpetual Baffour is a research associate for the Education Policy team at the Center for American Progress.

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