

Innovation in Accountability

Designing Systems to Support School Quality and Student Success

By Samantha Batel, Scott Sargrad, and Laura Jimenez December 2016



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Part of a Series on Implementation of the Every Student Succeeds Act

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Introduction and summary

School accountability in the United States is evolving—and for good reason. Rather than merely labelling failure, accountability should provide information on school progress and inspire a culture of continuous improvement. To accomplish this goal, the concept of accountability must become much broader so that it encompasses a system of data collection and reporting, classification of school performance, direction of supports and implementation of interventions, and assessment of resource allocation.

The Every Student Succeeds Act, or ESSA, is a key lever for this broader vision. The new law requires states and districts to create comprehensive data dashboards; states to design systems that identify schools for improvement using new measures of school quality or student success; and districts to develop improvement plans based on school-level needs assessments. To support this broader vision, states and districts should also use their systems to direct resources to schools that are not identified for improvement but need additional supports.

Although just one component of the greater accountability system, school classification systems are a top priority for states.¹ As states design these systems, much of their attention is focused on which indicators of school quality or student success they will use for a more holistic measure of school performance.² According to ESSA, these new indicators may measure one or more of the following:³

1. Student engagement
2. Educator engagement
3. Student access to and completion of advanced coursework
4. Postsecondary readiness
5. School climate and safety
6. Any other indicator that meaningfully differentiates between schools and is valid, reliable, comparable, and statewide

This approach is an important shift from previous iterations of federal law, which often focused on a single test on a single day. The Improving America's Schools Act—the 1994 reauthorization of the Elementary and Secondary Education Act, or ESEA—cemented accountability as a strictly academic notion.⁴ The No Child Left Behind Act, or NCLB—the 2001 reauthorization of ESEA—strengthened this premise and required districts and schools that failed to make academic progress to take specific improvement actions.⁵ NCLB also required states to hold schools accountable for an academic indicator other than student achievement in reading and math. However, states viewed this as simply another way to potentially miss their yearly targets instead of an opportunity for improvement. As a result, states largely limited measures to graduation rates for high schools and, most commonly, attendance for elementary and middle schools. Some states also began to measure student growth in academic achievement.

The Obama administration's 2011 waivers from particular NCLB provisions, known as ESEA flexibility, marked the beginning of a departure from this limited focus.⁶ By 2015, the U.S. Department of Education had approved 42 states and the District of Columbia for ESEA flexibility, giving them the opportunity to expand accountability measures beyond test scores and graduation rates. Fourteen states with ESEA flexibility, for example, added measures of persistence to their accountability systems, such as the dropout rate. Thirty states incorporated measures of college and career readiness, including performance on advanced coursework exams, the percentage of students earning career readiness certificates, and post-secondary enrollment. In addition, 27 states included other indicators that were either unique to their state, reflected state values, or were designed to incentivize particular school activities.⁷

As the latest reauthorization of ESEA, ESSA builds on this progress by carving out space for new measures of success while maintaining an emphasis on academic outcomes. In doing so, the law recognizes that test scores do not tell the whole story and shines a spotlight on additional indicators of student performance. Many states already use an indicator of college and career readiness at the high school level, and these measures are good candidates for indicators under ESSA. This report explores some newer, less commonly used indicators, including measures of social and emotional learning; school climate and culture; and resource equity, which have recently caught the attention of state policymakers.

Few states—if any at all—currently use a measure of social and emotional learning, school climate and culture, or resource equity to classify schools. For example, only four states include a measure of school climate and culture, such as a climate survey, in their school classification systems. Five states include chronic absenteeism, which can be a useful proxy for a school’s climate, and one state pays particular attention to student and parent engagement. Five states use some measure of resource equity, such as student participation in the arts. And no state uses a measure of social and emotional learning to classify schools.⁸

A group of districts, however, offers insight for states considering some of these new indicators. The California Office to Reform Education, or CORE, districts created a school classification index that includes both social and emotional learning and school climate and culture indicators. This report examines lessons learned from this work.

As states consider these new indicators, they must keep in mind that school classification systems are only one part of a broader vision of accountability. To support continuous improvement, accountability systems should also include indicators that are appropriate to examine at the district or state level, such as measures of resource equity. This report highlights measures of student access to highly effective teachers, access to early learning opportunities, school funding, high-quality curriculum, a well-rounded education, and student health and wellness.

As states take on this work, the Center for American Progress recommends the following:

- **States and districts should use a variety of indicators under a broader system of accountability.** States must first set their vision or goal for accountability and choose indicators that guide the direction of supports, implementation of interventions, and allocation of resources to help all schools reach this goal. Measures that may be leading indicators for early warning systems, such as school climate and culture, and measures of social and emotional learning can provide important information to schools and educators to improve classroom teaching and learning.
- **When considering which indicators to use at the state level to classify schools, states should use valid and reliable indicators, such as rates of chronic absenteeism and measures of college and career readiness, but be cautious about using new indicators.** Policymakers need more research to determine if indicators of social and emotional learning are valid, reliable, and not corruptible in a

high-stakes environment. School climate and culture surveys, on the other hand, have been validated by research. However, states should exert some caution as they consider these data for high-stakes settings.

- **Districts should be key drivers within comprehensive accountability systems by supporting continuous improvement; tracking additional measures of school quality and student success; using these measures to inform local decisions about resources and supports; and serving as laboratories of innovation for the state.** These efforts can inform improvement plans for low-performing schools and highlight needed areas of support in other schools that would benefit from additional resources. District innovation may also be particularly useful to develop measures of social and emotional learning, as exemplified by CORE's approach.
- **States should measure and report on school quality and student success indicators that are actionable for districts—not just schools.** In particular, measures of resource equity have a significant effect on student achievement, but decisions about resource allocation are often made at the district level. To inform interventions using these data, states have several options. For example, states can create or improve district accountability or classification systems. They can encourage or require districts and schools to report these measures, alongside school accountability data, in data dashboards systems that provide a wide array of information about individual indicators. They can also give school improvement funding priority to districts taking particular action based on key data.

States should take the opportunity provided under ESSA to design comprehensive systems of accountability that use multiple indicators to support continuous improvement. Under this broader vision, states should use some indicators to classify schools; others to inform local decisions about resources and supports; and all measures to ultimately support classroom teaching and learning, school quality, and student success.

CORE School Quality Improvement Index

In 2013, a group of districts in California, known as the California Office to Reform Education, received approval from the U.S. Department of Education to design a district-level school classification system separate from the statewide system. CORE's index consists of two domains: an academic domain and a social-emotional and culture-climate domain.⁹

Academic domain

- Proficiency and student growth in English language arts and mathematics
- Four-, five-, and six-year high school graduation rates
- An indicator of high school readiness based on a student meeting the following criteria in eighth grade: a GPA of at least 2.5, an attendance rate of at least 96 percent, no D or F grades in English language arts or mathematics, and no suspensions

Social-emotional and culture-climate domain

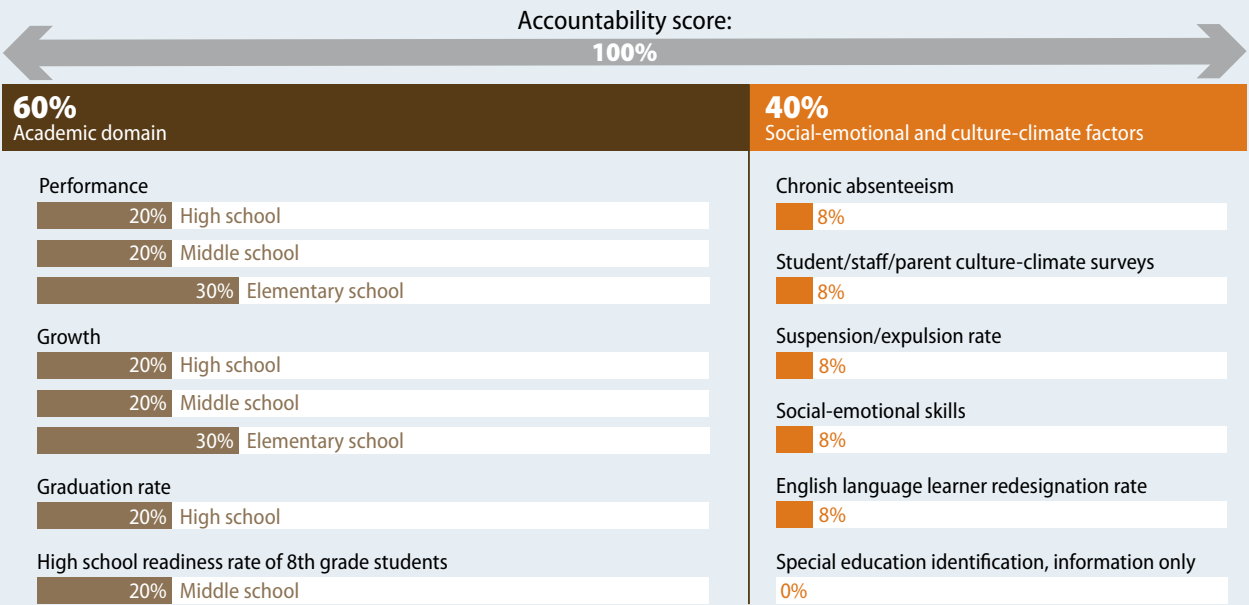
- Chronic absenteeism
- Student, staff, and parent culture-climate surveys
- Suspension and expulsion rates
- Social-emotional skills

- English language learner redesignation rate
- Racial and ethnic disproportionately in special education—for information only

In 2016, CORE requested that California establish the districts as a research pilot so that it may use its system, instead of the statewide school classification system, in order to identify low-performing schools under ESSA.¹⁰ This innovation will have important implications, as the state may decide to scale up measures that the districts determine to be particularly useful. Indeed, California is already considering CORE's culture-climate surveys as an option to assess school climate in its school classification system.¹¹ If approved, the districts will classify schools using the following index. (see Figure 1)

In the meantime, CORE is collaborating with several organizations to learn which of its districts use these data well, particularly in the social-emotional and culture-climate domain, and how schools apply this information to improve teaching and learning. Ideally, CORE would like to develop multiple options to measure students' social-emotional skills, such as performance-based assessments.¹²

FIGURE 1
CORE's School quality improvement index



Source: CORE Districts, "Assessing Social-Emotional Skills: The CORE Story to Date," January 25, 2016. Authors received information through personal communication from Noah Bookman, chief accountability officer, CORE Districts, February 4, 2016.

Social and emotional learning

Students' intelligence alone does not determine their academic success. Other skills matter greatly, and which skills particularly contribute to performance has increasingly become the focus of education research. Attributes referred to by a plethora of terms—including but not limited to noncognitive skills, soft skills, 21st century skills, and personal qualities—can have substantial effects on student achievement.¹³ This report uses the term social and emotional learning, or SEL, to refer to these traits.

The Collaborative for Academic, Social, and Emotional Learning, or CASEL, defines the goals of SEL as the development of five competencies:

1. Self-awareness
2. Self-management
3. Social awareness
4. Relationship skills
5. Responsible decision-making

Together, these competencies address students' ability to recognize and regulate their emotions and behaviors, empathize across differences, maintain healthy relationships, and make respectful choices in social interactions.¹⁴

Social and emotional learning correlates with positive student outcomes

The famous marshmallow test—a classic example of delayed gratification—illustrates the power of the social and emotional skills that CASEL outlines. Psychologists found that preschoolers who were able to delay eating one marshmallow in order to receive two marshmallows were more likely to score higher on the SAT as adolescents. The children's parents were also more likely to rate their child as better able to handle stress and exhibit self-control in high school. Impressively, these results held up for decades. The researchers found that subjects' willpower strength in their 40s correlated with their self-control at the age of four.¹⁵

Honing these competencies, accordingly, can have transformative effects. Indeed, quality SEL programs have been shown to improve academic performance, reduce disruptive behavior and emotional distress, and decrease the likelihood of receiving public assistance. SEL interventions also yield, on average, \$11 for every \$1 invested.¹⁶

For example, a meta-analysis of school-based and afterschool SEL programs found that participation improved elementary and middle school students' test scores by an average of 11 to 17 percentile points, decreased conduct problems, and increased students' problem-solving skills.¹⁷ Similarly, a meta-analysis of school-based SEL programs for students in kindergarten through 12th grade found that participation improved students' academic performance by 11 percentile points, reduced their anxiety and stress, and increased their prosocial behavior.¹⁸ These programs were successful in all geographic locations, including urban, suburban, and rural school environments.¹⁹

Developing SEL standards

In 2003, Illinois became the first state to adopt comprehensive preschool to high school SEL standards, which use grade span benchmarks to create learning targets. For example, early elementary school students in Illinois should be able to understand how emotions relate to behavior and demonstrate impulse control. By late high school, students should be able to evaluate how expressing more positive attitudes affects others.²⁰ In 2007, Illinois funded a cohort of schools to implement the state's SEL standards during a three-year period. The pilot project found that fidelity to the standards paid off. Not only did teachers notice a positive change in student behavior, but compared with schools that were not making adequate yearly academic progress under NCLB, schools that were meeting their annual academic targets also had a greater commitment to SEL.²¹

According to the most recent CASEL analysis, there is increasing momentum to bring SEL into the classroom.²² In addition to Illinois, Kansas and West Virginia also have in place freestanding, or independent, comprehensive SEL standards with developmental benchmarks for preschool through 12th grade.²³ Another eight states have developed freestanding SEL standards for some grade levels, most of which target kindergarten and early elementary school, and all 50 states have SEL standards at the preschool level.²⁴

As of July 2016, eight states—two of which already have some standards in place—are collaborating with CASEL to develop new SEL standards and policies. This partnership was inspired, in part, by CASEL’s earlier collaboration with eight mostly urban school districts.²⁵ A 2014 evaluation of this work concluded that districts successfully implemented SEL standards and programs with high levels of fidelity in their large school systems. And schools with higher levels of implementation decreased discipline rates, improved attendance, and, in many cases, improved academic performance.²⁶

One priority of CASEL’s eight-district collaboration was to align and integrate SEL practices and standards with other district initiatives and standards. For example, nearly all of the districts that successfully aligned SEL standards began to integrate them with the Common Core State Standards.²⁷ The Common Core also contains its own SEL-related standards, such as communication, cooperation skills, and problem-solving.²⁸

Additional SEL opportunities include curriculum such as Tools of the Mind and Promoting Alternative Thinking Strategies, or PATHS, which have been shown to improve student achievement, decrease conduct problems, and improve mental health.²⁹ And, in 2015, the U.S. Department of Education announced the Skills for Success grant competition to integrate SEL skills into the classroom and the Mentoring Mindsets Initiative partnership to prepare mentors to teach students learning mindsets and skills.³⁰

Measuring SEL

Although CASEL and states across the country have considered social and emotional competencies, standards, and curricula, there are no commonly defined measures of SEL. California’s CORE districts have taken this work a step further as the first policymakers to design SEL measures to include in their school classification system. To create these metrics, the CORE districts prioritized skills that are predictive of important student outcomes, can be reliably measured, and are actionable for schools.³¹ Based on these priorities, the districts developed survey questions to identify four main competencies, including growth mindset, or students’ belief that their ability can grow with effort; self-efficacy, or the belief in the ability to reach a goal; self-management, or the ability to regulate one’s emotions; and social awareness, which includes the ability to empathize.³²

In spring 2014, CORE conducted a pilot test of its SEL measures with approximately 9,000 students and more than 300 teachers from all grade levels.³³ The districts found that on average, students’ self-reported survey responses on all four competencies were correlated with GPA and standardized test scores in English language arts and mathematics. Furthermore, teacher reports on students’ social-emotional skills, in combination with student self-reports, were more highly correlated with these academic measures than were student reports alone. However, due to cost and capacity, CORE decided that teacher reports would be optional going forward.³⁴

TABLE 1
Examples of CORE’s social-emotional survey questions

Spring 2016 survey student assessment items

Competency	Questions
Growth mindset	<p>Please indicate how true each of the following statements is for you:</p> <ul style="list-style-type: none"> • My intelligence is something I cannot change very much. • There are some things I am not capable of learning. • If I am not naturally smart in a subject, I will never do well in it.
Self-management	<p>Please answer how often you did the following during the past 30 days:</p> <ul style="list-style-type: none"> • I paid attention even when there were distractions. • I stayed calm even when others bothered or criticized me. • I was polite to adults and peers.
Self-efficacy	<p>How confident are you about the following at school?</p> <ul style="list-style-type: none"> • I can do well on all of my tests, even when they are difficult. • I can master the hardest topics in my classes. • I can meet all the learning goals my teachers set.
Social awareness	<p>Please answer how often you did the following during the past 30 days:</p> <ul style="list-style-type: none"> • How carefully did you listen to other people’s points of view? • How well did you get along with students who are different from you? • To what extent were you able to stand up for yourself without putting others down?

Source: CORE Districts, “Social-Emotional Skills” (2016), available at <https://s3.amazonaws.com/uploads.hipchat.com/392387/2399075/U3GNMBYhpldy9K/SE-CC-Domain-Social-Emotional-Skills-updated-3.29.16.pdf>.

In spring 2015, CORE conducted a systemwide field test of its social-emotional measures with more than 450,000 students from the six participating CORE districts and more than 2,700 teachers from two participating CORE districts. Both student self-reports and teacher reports were found to be significantly predictive of student academic and behavioral outcomes, including GPA, state test scores, suspension rates, and absenteeism. Furthermore, the four individual skills were separately more predictive of student outcomes compared with a composite social-emotional measure. Accordingly, in the 2016-17 school year, CORE will include on its school report cards information on each measure: growth mindset, self-efficacy, self-management, and social awareness.³⁵

Concerns about measuring SEL

Recent research suggests that questionnaires such as CORE's are the primary tools in development to measure students' social-emotional skills.³⁶ As SEL gains popularity in the classroom, however, there is increasing concern about the potential unintended consequences of using survey data to hold schools accountable for these competencies. One main concern is reference bias, or the effect of survey respondents' reference points on their answers.³⁷ Students, for example, attending competitive schools often rate themselves as having less self-control or as less hardworking because of their schools' rigorous expectations.³⁸ Accordingly, some experts caution that using SEL to classify schools could ultimately punish high-performing schools while rewarding low-performing schools.³⁹ Additionally, teachers may misinterpret behavior, erroneously rely on first impressions, or incorrectly equate their opinion of a student with the student's social-emotional skills.⁴⁰

An analysis of CORE's survey data, however, found that the 2015 field test results were not only strongly reliable but also consistent within and between schools.⁴¹ In coming to this conclusion, the study tested for evidence of reference bias. The analysis found that students in higher-performing schools did not rate themselves more critically, which would be expected if social context influenced student responses.⁴² In addition, data from CORE's 2014 pilot test suggest that teachers' responses overlap with students' ratings but also offer distinct perspectives. Surveying teachers, accordingly, may improve the accuracy by which schools identify students' social and emotional skills.⁴³

Despite this promising research, there is little to no research on how using social and emotional learning as an indicator in school classification systems would affect its validity. If CORE receives a research pilot waiver for its school classification system, students' social-emotional skills will make up 8 percent of a school's rating.⁴⁴ This figure may be modest, but it could create real incentives to game the system and motivate students and teachers to fake survey answers in order to inflate scores. Teachers, for example, could adjust their impressions of students' skills or coach students' survey responses, both of which could be difficult to identify. CORE and its partners share these concerns and will continue to monitor students' self-reported social and emotional skills. If scores significantly increase when attached to low stakes, policymakers must re-evaluate this work.⁴⁵

Another way to measure students' social-emotional skills is with performance tasks, which avoid many of the biases that threaten the validity of questionnaires. However, performance tasks also have their share of limitations. For example, practice and familiarity with tasks undermine reliability. Tasks are also extremely sensitive to administration and create random error despite efforts to control the environment. To minimize these drawbacks, schools could conceivably create numerous performance tasks that aggregate into a single score. Such an approach, however, could require an unsavory amount of testing time.⁴⁶ To date, few performance assessments for social and emotional learning have been piloted at scale, and policymakers need more research to determine whether emerging tasks will be valid and reliable measures.⁴⁷

SEL should inform states' broader systems of accountability

States should be cautious about using measures of social and emotional learning to classify schools because of measurement limitations. Additional challenges include the inconsistency of students' attitudes and beliefs over time and their limited ability to perceive their own skills. Many student-level measures of social and emotional skills, for example, naturally trend downward at certain ages, regardless of whether or not students' skills have actually declined.⁴⁸ Research has also found that students are more candid when talking about, or rating, their peers than they are themselves.⁴⁹ As a result, more research is needed to determine if and how states should use these measures to identify schools for improvement.

There is also some state-level opposition to assessing students' social and emotional skills. In 2015, for example, Louisiana passed a law prohibiting state-adopted standards and assessments from including content or questions that measure noncognitive or emotional characteristics.⁵⁰ Nonetheless, information on students' social and emotional learning data may still be important for states to include in a more comprehensive system of accountability. For example, the student questionnaire on the National Assessment of Educational Progress, or NAEP, will gather information on students' social-emotional skills in 2017.⁵¹ Researchers intend to use these data to analyze the relationship between SEL and academic achievement on the NAEP exam.⁵² Districts and schools may find this information particularly useful to inform local interventions and improve student performance and behavior.

School climate and culture

Often used interchangeably, school climate and school culture are overlapping but distinct concepts.⁵³ School climate describes the behaviors and attitudes of students and educators in a school, whereas a school's culture is its norms and values.⁵⁴ Accordingly, in order to change its culture, a school must first change its climate.⁵⁵

For example, a school could overhaul its library to lay the groundwork for a cultural shift. With access to better resources, students' perceptions of their learning environment may improve. These attitudes, along with an improved sense of care, may ultimately affect the school's culture. Similarly, a school could develop a student-teacher mentorship program to improve interpersonal relationships and ultimately foster a greater sense of culture and community.

Researchers have identified four main elements of school climate:

1. Safety
2. Relationships
3. Teaching and learning
4. Environment

Safety includes students' physical and emotional welfare. Relationships include interpersonal interactions between students, teachers, and peers. Teaching and learning encompasses cooperation and collaboration, respect, and trust among and between students and teachers. Finally, environment refers to both a school building's physical structure and school engagement.⁵⁶

School climate correlates with positive student outcomes

Optimizing the main elements of school climate can have a significant impact on behavioral outcomes and achievement. Positive school climate, for example, correlates with decreased substance abuse, student absenteeism, and suspension rates, in addition to improved academic performance.⁵⁷ Indeed, higher-

performing schools have better organizational health. For example, students with stable but adaptable school leadership perform better academically.⁵⁸ The effect of a positive climate on achievement also endures and influences immediate and future student performance.⁵⁹

In addition, recent research suggests that positive school climates improve academic achievement and outcomes for students from low socioeconomic backgrounds. A 2016 meta-analysis of 78 studies published between 2000 and 2015 found that schools with positive climates narrowed income-based achievement gaps and gaps between students with different academic abilities.⁶⁰

Developing school climate programs and surveys

Currently, four states—Illinois, Georgia, Nebraska, and New Mexico—include a measure of school climate and culture in their school classification systems.⁶¹ Georgia, for example, awards additional points to schools that implement programming designed to create a personalized climate, such as the Positive Behavior Interventions and Supports, or PBIS, program.⁶² A schoolwide PBIS creates a three-tiered system of supports—universal, targeted, and individual—to improve school climate.⁶³ A 2016 analysis of 72 schools found that those implementing PBIS with fidelity were more likely to sustain positive school-based practices compared with schools not implementing PBIS with fidelity.⁶⁴

Illinois, on the other hand, uses student and teacher data from the 5Essentials Survey to differentiate schools.⁶⁵ A 10-year Chicago study found that schools that were strong in at least three of the five survey elements—which include effective leaders, collaborative teachers, supportive environment, involved families, and ambitious instruction—were significantly more likely to improve student learning than schools that were weaker in these domains.⁶⁶

Similar to Illinois, CORE administers culture-climate surveys to students, teachers, and parents that gauge school quality through measures of teaching and learning, interpersonal relationships, safety, and school-community engagement.⁶⁷ Results from the 2015 field test show a modest, positive relationship between a school's culture and climate and students' social-emotional skills. This suggests that the measures are related but also capture different aspects of school quality and student success.⁶⁸

TABLE 2
Examples of CORE’s culture-climate survey questions

Spring 2015 field test assessment items

Focus area, surveyed audience	Questions
Teaching and learning: student items	<p>How strongly do you agree or disagree with the following statements about your school?</p> <ul style="list-style-type: none"> • Adults at school encourage me to work hard so I can be successful in college or at the job I choose. • Teachers go out of their way to help students. • Teachers give students a chance to take part in classroom discussions or activities.
Safety: staff items	<p>How much of a problem are these issues at this school?</p> <ul style="list-style-type: none"> • Harassment or bullying among students • Disruptive student behavior • Lack of respect for staff by parents
Interpersonal relationships: parent items	<p>How strongly do you agree or disagree with the following statements about your child’s school?</p> <ul style="list-style-type: none"> • I feel welcome to participate in this school. • School staff treats me with respect. • My child’s background—race, ethnicity, religion, economic status—is valued at this school.

Source: CORE Districts and John W. Gardner Center for Youth and Their Communities, “School Culture-Climate Surveys” (2015), available at <https://s3.amazonaws.com/uploads.hipchat.com/392387/2399075/vhRklpunoi9MI8h/SE-CC-Domain-School-Culture-Climate-Surveys-updated-2.18.15.pdf>.

Relationship between school climate and social and emotional learning

Indeed, school environment closely relates to students’ social and emotional skills. For example, classroom conditions such as teacher expectations, availability of learning supports, and safety affect student self-confidence, mindset, and performance.⁶⁹ Optimal school and classroom settings create safe spaces for social and emotional learning, and in turn, effective SEL programs establish caring learning environments and improve classroom management and teaching. As a result, a positive school climate achieves many of the same goals as SEL, such as improving student behavior, engagement, and performance.⁷⁰

Recent research underscores this point. A 2016 report highlighted the evidence linking social and emotional skills, such as self-control, to school quality.⁷¹ Furthermore, a 2015 study found that students with parents who were highly satisfied with the school environment, including the school’s disciplinary practices, had higher levels of perseverance and better attitudes toward school.⁷² As a result, research-validated culture-climate survey tools may serve as a proxy for students’ social and emotional skills.

What's more, culture-climate tools that do measure SEL may avoid some of the drawbacks associated with direct measures of students' skills by instead measuring students' responses to their teacher or to their environment.⁷³ For example, the Conditions for Learning Survey assesses social and emotional learning by asking students to consider the general behavior of students in their school.⁷⁴ Responses to these types of survey questions reflect how well a school is developing students' social and emotional skills rather than individual student ratings of their SEL skills.⁷⁵

Examples of Conditions for Learning SEL questions for students in fifth through eighth grade

How much do you agree with the following statements about students in your school?

Most students in my school:

- Stop and think before doing anything when they get angry.
- Give up when they cannot solve a problem easily.
- Get into arguments when they disagree with people.
- Do their best, even when their schoolwork is difficult.
- Think it is OK to cheat if other students are cheating.

Source: National Clearinghouse on Supportive School Discipline, "AIR Conditions for Learning Surveys," available at <http://supportive-schooldiscipline.org/resources/air-conditions-learning-surveys> (last accessed November 2016).

In 2008, Cleveland Metropolitan School District in Ohio began administering the Conditions for Learning Survey three times each year to help teachers and principals guide classroom learning. Data collected between 2008 and 2013 show a strong relationship between growth in students' survey responses and performance on state tests.⁷⁶

Climate survey data should inform comprehensive systems of accountability

However, concerns about survey data validity in high-stakes settings, such as the potential to fake or coach answers, suggest that states should be cautious about using these measures to compare schools. Furthermore, the National School Climate Center recommends that policymakers and administrators use its Comprehensive School Climate Inventory for internal needs assessments rather than to compare schools.⁷⁷ Nonetheless, some states are already using survey instruments to classify

schools. New Mexico, for example, uses student results from the Opportunity to Learn survey, which measures the quality of classroom instruction and environment.⁷⁸ In addition, there is growing evidence that surveys of instructional practices may meaningfully differentiate schools. A 2016 study of Tripod Education Partner's student surveys of teaching effectiveness found that scores varied significantly across schools and were a valid measure of school-level achievement.⁷⁹

The U.S. Department of Education also recognizes that school climate data are vital to differentiate school performance.⁸⁰ To support states and districts in this work, the department developed ED School Climate Surveys for students, parents, educators, and noninstructional staff that measure engagement, safety, and school environment.⁸¹ States can add their own items to the survey platform, and New York state is currently piloting the surveys in eight districts.⁸²

States should consider using survey measures of school culture and climate data in their broader systems of accountability by collecting, reporting, and using the data to inform resource allocation and supports, particularly at the local level. They should be cautious when deciding whether to use them in a high-stakes way to identify low-performing schools. Experts have argued that climate instruments are more advanced and accurate than those designed to measure social and emotional learning.⁸³ As noted earlier, student responses to questions about their experiences or themselves may be more accurate than student perceptions of their own skills.

Chronic absenteeism and discipline rates are useful climate indicators

Additional options for measuring school culture and climate include early warning indicators such as chronic absenteeism. A chronically absent student misses at least 10 percent of the school days in an academic year. This can have a significant effect on achievement and is a strong predictor of high school completion. For example, chronically absent kindergarten students struggle academically in first grade. By sixth grade, chronic absence predicts the likelihood of a student dropping out of high school.⁸⁴ In the 2013-14 school year, 14 percent of students in the United States—or 1 in 7 students—were chronically absent, having missed at least 15 days of school.⁸⁵ Chronic absences were particularly prevalent among students from low-income families, students of color, and students with disabilities.⁸⁶ As a result, consistently missing school compounds the challenges that disadvantaged students already face.

To support attendance, schools must first establish a positive and engaging school climate.⁸⁷ To reduce chronic absenteeism, however, schools may need to implement more rigorous interventions.⁸⁸ For example, schools can increase parent engagement to educate guardians on the risks associated with accumulated absences, which they often underestimate.⁸⁹ Schools may also need to address systemic barriers to attendance by providing safe transportation or high-quality afterschool programs.⁹⁰

Just as students who are chronically absent, students who are suspended and expelled are more likely to struggle academically and are less likely to graduate from high school.⁹¹ Students with disabilities and students of color, many of whom are dealing with trauma, are also disproportionately expelled.⁹² Understanding the causes of these disciplinary actions can help schools develop strategies to improve their climate and culture. For example, schools may need to address issues of safety when evaluating how to reduce rates of disciplinary actions.⁹³ Schools should also prioritize funding for positive supports and guidance, including school-based counseling and mental health programs.⁹⁴

Currently, five states—Connecticut, Hawaii, New Hampshire, New Jersey, and Wisconsin—and the CORE districts include chronic absenteeism in their school classification systems. Eighteen states measure attendance rates, but chronic absenteeism can be a better early warning indicator, as it identifies students most at risk of struggling academically rather than the percentage of students who attend school on a given day. CORE’s system is the only one that uses suspension and expulsion rates to classify schools.⁹⁵

Resource equity

Across the country, racial and income-based disparities in access to quality school resources amplify achievement and opportunity gaps.⁹⁶ This section explores resource-related measures that contribute to student success both within and outside of a school's walls, including access to highly effective teachers, high-quality early learning opportunities, adequate school funding, high-quality curriculum, a well-rounded education, and student health and wellness.

Although these measures are important indicators of school quality and student success, they are often not under a school's control. Rather, districts and states play a significant role in ensuring that schools have the capacity to provide equitable access for students. As a result, states should include indicators of resource equity in their broader systems of accountability and exclude from school classification systems measures over which schools do not have control. For example, states should include in a data dashboard school and student-level measures that quantify access to resources, programs, and funding, in addition to measures of health and wellness that affect student performance. States should also identify additional indicators that would best support continuous improvement and local interventions.

Highly effective teachers

Teachers are the most important in-school factor for student achievement.⁹⁷ Indeed, research estimates that teachers have two to three times the effect of any other school factor, such as school services and leadership, on student academic performance.⁹⁸ An oft-cited study underscores the scope of this effect, finding that students with three consecutive high-performing teachers scored approximately 50 percentile points higher than students placed with three consecutive low-performing teachers.⁹⁹

The least experienced, least effective teachers, however, often teach students from disadvantaged backgrounds, yet these students are the first to benefit from improved teacher effectiveness.¹⁰⁰ An analysis commissioned by the U.S. Department of Education, for example, found that, on average, students eligible for a free or reduced-price lunch had less access to effective teaching compared to their more affluent peers. The study concluded that providing equal access to effective teachers for one year would reduce the student achievement gap between disadvantaged and nondisadvantaged students by two percentile points.¹⁰¹

Early learning

High-quality early learning has a significant effect on important student outcomes, especially for low-income children. For example, African American children born in poverty who participated in early childhood education programs had higher graduation rates, higher adult earnings, and fewer arrests than their peers.¹⁰² A similar study found that students who participated in early intervention programs maintained higher high school GPAs, were two times more likely to have attended a four-year college, and were more likely to hold a job than their peers.¹⁰³ Furthermore, research finds that participation in state-funded preschool programs improves children's language, literacy, and mathematical skills.¹⁰⁴

Despite these promising results, nearly 60 percent of 4-year-olds in the United States are not enrolled in publicly funded preschool programs and more than one-third are not enrolled in any preschool program. Children from low-income families are also less likely to participate in preschool than are their peers, and if they are enrolled, they are the most likely to participate in low-quality programs and the least likely to participate in programs of higher quality.¹⁰⁵

Compounding this problem, children from low-income families, on average, begin kindergarten approximately a year behind their peers in preliteracy and language skills.¹⁰⁶ This fluency gap widens as students continue in school and has a significant impact on economic success later in life.¹⁰⁷ As a result, gains from high-quality preschool programs—including improved health, better social-emotional skills, and better cognitive outcomes—are particularly beneficial for children from low-income families.¹⁰⁸

Increasing access to high-quality learning opportunities also has the potential to narrow achievement gaps by race and income. According to a 2016 report by CAP and the National Institute for Early Education Research, a high-quality universal pre-K program—meaning any child of age can enroll—would reduce the math achievement gap at kindergarten entry by 45 percent for African American children and by 78 percent for Hispanic children. The gap in reading for both groups would essentially close altogether. Furthermore, universal access to high-quality pre-K would reduce the gap between low- and higher-income children by an estimated 27 percent in math and an estimated 41 percent in reading.¹⁰⁹

School funding

School funding is a particularly crucial measure of resource equity. Increased spending improves important student outcomes, such as student achievement and graduation rates, and resources are especially valuable for students from disadvantaged backgrounds.¹¹⁰ According to a 2015 study, a 10 percent increase in per-student spending increased adult wages for low-income students by almost 10 percent.¹¹¹ Similarly, a 2016 study found that greater state spending on low-income students dramatically improved student learning in reading and math.¹¹²

However, students in high-poverty schools continue to receive less money than students in wealthier schools. In approximately 1,500 school districts, about 5,700 low-income schools receive an average of \$440,000 less in funding per year than wealthier schools.¹¹³ This inequity also happens across districts: In nearly half of all states, wealthier districts receive more money than high-poverty districts. As a result, high-poverty districts spend on average 15 percent less per student—and this difference can be stark. In Pennsylvania, for example, high-poverty school districts spend 33 percent less per pupil than wealthier districts in the state.¹¹⁴

High-quality curriculum

Inequities in school funding cause significant disparities in educational resources and opportunities. Compared to high-poverty schools and schools with high percentages of students of color, wealthier schools and those with lower percentages of students of color offer more rigorous coursework. For example, these schools are twice as likely to offer a full range of math and science courses, and more affluent schools offer three times as many advanced placement, or AP, classes as their higher poverty peers. In addition, wealthier schools are twice as likely to offer opportunities for dual enrollment in college courses as low-income schools.¹¹⁵

Access to high-quality curricular opportunities better prepares students for college and a career. For example, one study found that students who took at least one AP exam in English, mathematics, science, or social studies—regardless of whether or not they passed—were more likely to graduate college in five years compared with students who did not take any AP courses or exams. This held true after controlling for other student and school characteristics.¹¹⁶ Similarly, a study of dual enrollment programs concluded that participating students were more likely to graduate from high school, enroll in college, have higher college GPAs, and persist in college than their peers. Participation also benefited a wide range of students, especially those from low-income families.¹¹⁷

Well-rounded education

ESSA defines a well-rounded education as one that includes subjects such as arts, music, and physical education.¹¹⁸ Improving access to these enriching experiences yields promising results, particularly for students from low-income families.

Participation in quality art and music programming, for example, can improve academic performance.¹¹⁹ A 2012 report from the National Endowment for the Arts found that students from disadvantaged backgrounds who were engaged in the arts performed better academically and were more likely to attend and finish college than their peers who were less engaged in the arts.¹²⁰ Arts programs also help students develop core social and emotional skills.¹²¹

Similarly, physical education has both short- and long-term effects on student achievement. For example, classroom concentration, attention, and memory immediately increase after physical activity, and student test scores correlate positively with regular participation.¹²² Research has also shown that elementary school students that perform better in reading, mathematics, and science have higher physical fitness test scores.¹²³ In addition, children who perform below grade level academically and participate in a physical activity program are more likely to improve their performance on standardized tests than are their less active peers.¹²⁴

Participation in extracurricular activities such as academic clubs and athletics reduces the likelihood of negative outcomes, such as dropping out of school.¹²⁵ Participation in afterschool sports is also positively associated with student academic achievement and social development, in addition to parent engagement.¹²⁶

Currently, five states include a well-rounded education indicator in their school classification systems, which states may consider so long as they are actionable for schools directly. Connecticut and New Jersey, for example, include student participation in visual and performing arts in their school classification systems, and Georgia schools can earn extra points for students that pass fine arts courses. Connecticut also uses a physical fitness indicator that measures the percentage of students meeting or exceeding health standards on the state's fitness assessment. Virginia schools can gain recognition in the state's system for earning an award from the state's nutrition and physical activity program. Lastly, schools in New Mexico can earn bonus points in the state's classification system for promoting student participation in extracurricular activities.¹²⁷

Student health and wellness

From healthy eating and physical activity to mental health, student health and wellness correlate with student achievement. Skipping breakfast and poor dietary habits are associated with decreased cognitive performance, lower grades, and higher rates of absenteeism.¹²⁸ Students who are physically active, on the other hand, tend to have better grades, attendance rates, and fewer disciplinary problems, as noted earlier.¹²⁹ Still yet, students who have experienced trauma and those with frequent feelings of sadness, anxiety, or depression perform worse academically.¹³⁰

Students from low-income families are frequently at a disadvantage in all three of these areas. These students face food insecurity at higher rates than the national average, are more prone to obesity, and have worse access to health and mental care than their higher income peers.¹³¹ Furthermore, there is a nationwide shortage of school-based mental health programs, including school psychologists and social workers, which disproportionately affects students of color.¹³²

Including resource equity in comprehensive systems of accountability

Measures of resource equity correlate with key student outcomes. Student access to resources that shape their classroom experience—from funding to instructional supports—has a significant effect on everything from achievement and persistence to future earnings. However, these measures are often outside of a school's control. Accordingly, states should consider these indicators for their broader systems of accountability, such as in rich data dashboards, to inform continuous improvement.

Recommendations

ESSA supports a broader vision of accountability to support continuous improvement. The new law also gives states the opportunity to use more holistic measures of school quality and student success to classify schools. As states develop their new systems, they will need to determine if new indicators of interest will be meaningful contributions. Understanding the readiness and appropriateness of data will help states in this effort, signaling which measures they should use to classify schools at the start of implementation; which they should add over time; and which are better suited to inform interventions and supports.

Accordingly, states should also use multiple indicators as part of their broader system of accountability but be cautious about using too many to classify schools. Otherwise, states run the risk of diluting measures and overcomplicating their systems. To accomplish these goals, CAP recommends the following steps.

States and districts should use a variety of indicators under a broader vision of accountability

Before states design their school classification systems, they must first set their vision or goal for accountability. The indicators included in their systems must then guide the direction of supports, implementation of interventions, and allocation of resources to help schools reach this goal.

As states begin this process, they must keep in mind that accountability is a full system of data collection and reporting, classification of school performance, direction of supports and implementation of interventions, and assessment of resource allocation. The measures that states collect should do more than help them identify the lowest-performing schools—they should help states identify areas of need in all schools as well as assist districts and schools in making informed decisions about resources and supports.

In order to support schools in this process, states and districts should collect and report data on a variety of indicators, such as measures that may be leading indicators for early warning systems. Measures of school climate and culture, for example, correlate with student achievement, success, and persistence. Accordingly, states should measure data about school safety; relationships between students, teachers, and peers; classroom cooperation and collaboration; and school environment and engagement to drive interventions in support of the state's vision. States should also consider measuring social and emotional learning, which can provide important information to schools and teachers to improve classroom learning.

States should consider chronic absenteeism and college- and career-readiness measures but be cautious about using measures of social and emotional learning to classify schools

As states consider which measures of school quality or student success to use to identify schools under ESSA, they must keep in mind that some indicators are better suited for use in the broader accountability system—measuring, reporting, and using the data at the local level—rather than use at the state level to classify schools. Indicators that states include in their school classification systems should incentivize school and district actions, correlate with key student outcomes, and meaningfully differentiate school performance.

However, even if an indicator does not meet all of these characteristics, a state may still have compelling reasons to use it to classify schools if it is a valid and reliable measure. For example, an indicator that does not significantly differentiate school performance may have a strong relationship with important student outcomes. As a result, this measure may encourage action at the local level. Furthermore, indicators may represent particular state values and send a worthwhile signal to districts and schools. To maximize value, indicators should share at least two of the three characteristics described above.

To meet these criteria, states should first look at data that schools and districts are already collecting. Chronic absenteeism is a good place to start. For the first time in the 2013-14 school year, the U.S. Department of Education's Civil Rights Data Collection required schools to report the number of students absent 15 or more school days.¹³³ Moreover, not only are data available, but chronic absenteeism is also a valid and reliable measure that incentivizes positive school change. A 2016 report underscores this recommendation, finding that chronic absenteeism meaningfully differentiates schools by grade span.¹³⁴

Similarly, many states are already collecting valid and reliable measures of college and career readiness that incentivize schools to increase access to advanced coursework or certifications, among other important opportunities. Although outside the scope of this report, states should consider which indicators would provide a comprehensive picture of college and career readiness in their communities. For example, some states may determine that in addition to post-secondary enrollment, military enlistment is an important indicator for their school classification systems.

States should then introduce newer measures for use in school classifications once they have collected data that are valid, reliable, and not subject to manipulation in a high-stakes environment. Some measures require more time in development, and states should not use data the first year it is collected. Furthermore, not all indicators can or should be used to classify schools; some may be better suited to inform local interventions or for public reporting.

States must be particularly mindful of these criteria as they consider new types of indicators, such as school climate surveys. Some states are already using climate surveys to classify schools, some are beginning to administer and collect survey data, and others are considering surveys. States with past survey experience should continue to monitor the data's performance in the presence of high-stakes decisions. States that are collecting survey data for the first time should initially use this information for reporting, needs assessments, and intervention planning. They should only use this information to classify schools once they are confident that the data is valid and reliable.

Furthermore, as new measures are developed, states should be careful about using them for school classifications; time may be needed to build their validity and reliability. Nonetheless, states can still use these data in their broader accountability systems to inform improvement efforts or further inform how a school is doing. For example, states, districts, and researchers are doing interesting work to develop measures of social and emotional learning. States should be cautious about using these data to classify schools. Policymakers need more research to determine how best to measure this area and to ensure indicators are valid, reliable, and not corruptible in a high-stakes environment. Nevertheless, states, districts, and schools should consider how to use student self-reports on social-emotional skills to improve classroom teaching and learning.¹³⁵

Districts should be key drivers within comprehensive accountability systems

Under ESSA, districts play a significant role in a comprehensive system of accountability. For example, districts are responsible for developing and implementing school improvement plans based on school-level needs assessments that identify resource inequities and include evidence-based interventions.¹³⁶

To improve the identification of school-level needs and the allocation of supports, districts should develop, measure, report, and use additional measures of school quality and student success that the state may not use for school classifications. These measures can inform improvement plans for low-performing schools and highlight areas of support for schools that the state does not identify for improvement under ESSA but that would also benefit from additional resources.

Doing this work in a consortium is one efficient way to increase resources and reduce costs. The CORE districts, for example, formed a data collaborative that all districts in the state may join. Participants have access to CORE's multimetric school and district data dashboards in addition to their analytical and research partners. Districts will then have the opportunity to report school and district level results and to use the data for research and policy analysis to improve student achievement.¹³⁷

Districts may also include additional indicators in their own local school classification systems alongside statewide school classification systems in order to better support school needs. For example, Oakland, California, adapted CORE's school classification index for its school performance framework. Oakland intends to use the framework, which includes academic, social-emotional, and culture-climate factors to identify schools' strengths and areas for growth.¹³⁸

In addition to their role in comprehensive accountability, districts can innovate locally to inform statewide school classification systems by developing and testing measures in the absence of high-stakes. This process can determine whether states should scale up measures for school classifications or whether states and districts should use them at the local-level to inform continuous improvement.

For example, implementation at the district level may determine that an indicator of interest is valid and reliable but does not differentiate well between schools. A state may still choose to use this measure to classify schools because it incentivizes particular school activities. Alternatively, the state or district may opt to report

this indicator in a data dashboard rather than using it to classify schools. This latter approach may be appealing for indicators that are particularly actionable for schools but for which researchers lack confidence in validity.

This type of district innovation is particularly useful to develop measures of social and emotional learning, similar to CORE's approach. The CORE districts have designed and tested survey measures to collect data on students' social and emotional skills. To use these measures for school classifications, the CORE districts have requested that the California State Board of Education establish their work as a research pilot in the state's ESSA proposal.¹³⁹

This authority would give CORE the opportunity to identify schools for intervention and support using measures of student performance, such as measures of social and emotional learning and an innovative indicator of high school readiness, that are not included in the state's proposed school classification system. The CORE districts—and the state—would then be able compare the schools that each system identifies to understand which indicators better captured the lowest-performing schools. However, both the CORE districts and other districts can continue to innovate locally without state authority by developing, testing, and reporting measures that the state does not use for school classifications.

States should measure and report indicators that are actionable for districts—not just schools

District policies and procedures greatly influence the ability of a school to accomplish its goals.¹⁴⁰ As a result, measures of school quality and student success that are outside the locus of a school's control may be useful to hold districts accountable for student outcomes and to support school improvement. In particular, measures of resource equity have a significant effect on student achievement but are less actionable for schools directly. Accordingly, states should report these measures in data dashboard systems so that information is transparent and easily accessible for district use.

To collect data, states and districts may need to seek local partnerships. For example, state and local education agencies can collaborate with public health organizations to track and report data on student health and well-being and support appropriate interventions.¹⁴¹

Next, states should use these data to inform local strategies. For example, states can create or improve district classification systems. In 2012, Tennessee began classifying districts based on academic achievement, gaps, and growth.¹⁴² The state could build on this system with additional measures that are actionable at the district level and have a significant effect on school and student performance.

Moreover, similar to the considerations for statewide school classification systems, it is important that the indicators the state chooses are under district control. For example, within-district school funding inequities would be an appropriate measure for district classifications or accountability, but cross-district inequities would be a better measure for which the state would hold itself accountable.¹⁴³

States can also encourage or require districts and schools to report measures of resource equity in data dashboards systems alongside school classification data. Increased transparency and accessibility is a necessary step to make improvements based on these indicators. In addition, states could give school improvement funding priority to districts that plan to take particular action based on these data.

Conclusion

States have the opportunity to create a broader vision of accountability that encompasses a system of data collection and reporting, classification of school performance, the direction of supports and implementation of interventions, and assessment of resource allocation. To support this comprehensive vision, states and districts should use multiple indicators that drive a more holistic view of student success with a focus on continuous improvement.

As states select indicators for their school classification systems, which are just one part a comprehensive accountability system, they should include measures that are valid, reliable, and drive behavior at the local level, such as rates of chronic absenteeism and measures of college and career readiness. Districts can support this work by measuring and reporting additional measures of school quality or student success and serving as laboratories of innovation for the state. States should also measure a variety of indicators, including those outside of a school's control, such as measures of resource equity, to better support improvement.

ESSA can help shift thinking in this direction, as it requires states to create both summative school classifications and data dashboards. The new law also gives states the flexibility to improve their systems over time, which should encourage states to expand data collection, reporting, and use.

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Endnotes

- 1 The Every Student Succeeds Act requires states to identify their lowest-performing schools beginning with the 2017-18 school year. The U.S. Department of Education released final accountability regulations in November 2016 that give states an additional year—until 2018-19—to identify their lowest-performing schools. However, it is unclear if the new administration will implement this rule.
- 2 The other indicators that must be included in a state's school classification system are student performance in English language arts, or ELA, and mathematics; a second academic indicator, such as growth in ELA and mathematics; progress in achieving English language proficiency; and high school graduation rates, if applicable. In addition, states are required to disaggregate all indicators, excluding English language proficiency, by individual subgroups of students, including those from low-income families, those from major racial and ethnic groups, those with disabilities, and English language learners.
- 3 *Every Student Succeeds Act*, Public Law 95, 114th Cong., 1st sess. (December 10, 2015).
- 4 *Improving America's Schools Act of 1994*, Public Law 382, 103rd Cong., 2nd sess. (October 20, 1994).
- 5 *No Child Left Behind Act of 2001*, Public Law 110, 107th Cong., 1st sess. (January 8, 2002).
- 6 U.S. Department of Education, *ESEA Flexibility* (2012), available at <http://www2.ed.gov/policy/eseaflex/approved-requests/flexrequest.doc>.
- 7 Carmel Martin, Scott Sargrad, and Samantha Batel, "Making the Grade: A 50-State Analysis of School Accountability Systems" (Washington: Center for American Progress, 2016), available at <https://www.americanprogress.org/issues/education/reports/2016/05/19/137444/making-the-grade/>.
- 8 Ibid.
- 9 U.S. Department of Education, "U.S. Department of Education Approves Waivers of Title I of the ESEA for Six CORE Districts in California," Press release, September 25, 2015, available at <http://www.ed.gov/news/press-releases/us-department-education-approves-waivers-title-i-esea-six-core-districts-california>; California Office to Reform Education, "ESEA Flexibility Request," February 28, 2013, available at <http://coredistricts.org/wp-content/uploads/2013/02/CORE-ESEA-Flexibility-Request.pdf>; California Office to Reform Education, "School Quality Improvement Index – Short Metric Descriptions," February 18, 2015, available at <http://coredistricts.org/wp-content/uploads/2015/02/School-Quality-Improvement-Index-Short-Metric-Descriptions-updated-2.18.15.pdf>; CORE Districts, "Assessing Social-Emotional Skills: The CORE Story to Date," January 25, 2016. Received from Noah Bookman, chief accountability officer, CORE Districts, phone interview with the authors, February 4, 2016; CORE Districts and John W. Gardner Center for Youth and Their Communities, "Disproportionality in Special Education" (2015), available at <https://s3.amazonaws.com/uploads.hipchat.com/392387/2399075/G117qwSdRmjXmt/SE-CC-Domain-Disproportionality-in-Special-Education-updated-2.18.15.pdf>.
- 10 Memo from Michael Hanson, president, CORE Districts Board of Directors to Mike Kirst, president, California State Board of Education, "Item 02: Establishing CORE Districts as a Research Pilot for the State Accountability System," July 7, 2016, available at http://coredistricts.org/wp-content/uploads/2016/07/Memo_CORE-Districts-as-a-State-Accountability-Pilot_v7.pdf.
- 11 Memo from Tom Torlakson, state superintendent of public instruction, to members of the State Board of Education, "Process to Identify Options for School Climate Surveys and a Composite Measure of English Learner Proficiency for the Local, State and Federal Accountability and Continuous Improvement System," June 27, 2016, available at <http://www.cde.ca.gov/be/pn/im/documents/memo-dsib-amard-jun16item02.doc>.
- 12 Noah Bookman, chief accountability officer, CORE Districts, phone interview with the authors, August 16, 2016.
- 13 Angela L. Duckworth and David Scott Yeager, "Measurement Matters: Assessing Personal Qualities Other Than Cognitive Ability for Educational Purposes," *Educational Researcher* 44 (4) (2015): 237–251, available at <http://www.aera.net/Newsroom/Recent-AERA-Research/Measurement-Matters-Assessing-Personal-Qualities-Other-Than-Cognitive-Ability-for-Educational-Purposes>.
- 14 CASEL, "Core SEL Competencies," available at <http://www.casel.org/core-competencies/> (last accessed November 2016).
- 15 American Psychological Association, "Delaying Gratification," available at <https://www.apa.org/helpcenter/willpower-gratification.pdf> (last accessed November 2016).
- 16 CASEL, "SEL Impact," available at <http://www.casel.org/impact/> (last accessed November 2016).
- 17 John Payton and others, "The Positive Impact of Social and Emotional Learning for Kindergarten to Eighth-Grade Students: Executive Summary" (Chicago: Collaborative for Academic, Social, and Emotional Learning, 2008), available at <http://www.indiana.edu/~pbisin/pdf/PosImpact-SELK-8.pdf>.
- 18 Joseph A. Durlak and others, "The Impact of Enhancing Student's Social and Emotional Learning: A Meta-Analysis of School-Based Universal Interventions," *Child Development* 82 (1) (2011): 405–432, available at <http://static.squarespace.com/static/513f79f9e4b05ce7b70e9673/t/52e9d8e6e4b001f5c1f6c27d/1391057126694/meta-analysis-child-development.pdf>.
- 19 Ibid.
- 20 Rachel Gordon and others, "Social and Emotional Learning for Illinois Students: Policy, Practice and Progress" (Chicago: Institute of Government and Public Affairs at the University of Chicago, 2011), available at <http://www.casel.org/wp-content/uploads/2016/06/social-and-emotional-learning-for-illinois-students-policy-practice-and-progress-ilovepdf-compressed.pdf>.
- 21 Ibid.
- 22 Linda Dusenbury and others, "State Standards to Advance Social and Emotional Learning: Findings from CASEL's State Scan of Social and Emotional Learning Standards, Preschool through High School, 2014" (Chicago: Collaborative for Academic, Social, and Emotional Learning, 2014), available at <http://static1.squarespace.com/static/513f79f9e4b05ce7b70e9673/t/52f95691e4b0a41caba778b8/1392072337661/casel-brief-on-state-standards-january-2014.pdf>.
- 23 Pennsylvania has temporarily removed their adopted P-12 SEL standards, which are currently being revised, according to personal communication with Linda Dusenbury, senior research scientist, CASEL, July 11, 2016.

- 24 CASEL, "Identifying K-12 Standards for SEL in all 50 States" (2015), available at <http://static1.squarespace.com/static/513f79f9e4b05ce7b70e9673/t/56718463a976af3e2f3ecb38/1450280035958/state-scorecard-summary-table-for-k-12-12-16-15.pdf>; CASEL, "Identifying Preschool Standards for SEL in all 50 States" (2015), available at <http://static1.squarespace.com/static/513f79f9e4b05ce7b70e9673/t/55df7c05e4b031d82f728c5d/1440709637809/preschool-table-8-27-15.pdf>.
- 25 Evie Blad, "Social-Emotional Learning: States Collaborate to Craft Standards, Policies," *Education Week*, August 1, 2016, available at http://blogs.edweek.org/edweek/rulesforengagement/2016/08/social-emotional_learning_states_collaborate_to_craft_standards_policies.html.
- 26 AIR Evaluation Team, "CASEL/NoVo Collaborative Districts Initiative: 2014 Cross-District Implementation Summary" (Washington: American Institutes for Research, 2014), available at http://blogs.edweek.org/edweek/rulesforengagement/2014%20CDI%20cross-district%20implementation%20report%20updated%202%2028%2015.docx?_ga=1.243451398.260318993.1447192453.
- 27 Ibid.
- 28 Katherine M. Zinsser, Roger P. Weissberg, and Linda Dusenbury, "Aligning Preschool through High School Social and Emotional Learning Standards: A Critical and Doable Next Step" (Chicago: Collaborative for Academic, Social, and Emotional Learning, 2013), available at <http://static1.squarespace.com/static/513f79f9e4b05ce7b70e9673/t/52ac836ce4b0532c165d4f2e/1387037548200/Zinsser+et+al++brief+on+state+standards--20131214.pdf>.
- 29 Blueprints Programs, "Promoting Alternative Thinking Strategies (PATHS)," available at <http://www.blueprint-sprograms.com/factsheet/promoting-alternative-thinking-strategies-paths> (last accessed November, 2016); Clancy Blair and C. Cybele Raver, "Closing the Achievement Gap through Modification of Neurocognitive and Neuroendocrine Function: Results from a Cluster Randomized Controlled Trial of an Innovative Approach to the Education of Children in Kindergarten," *PLOS ONE* 9 (11) (2014): e112393, available at <http://journals.plos.org/plosone/article?id=10.1371/journal.pone.0112393>.
- 30 U.S. Department of Education, "U.S. Department of Education Announces First Ever Skills for Success Grants and Initiative to Support Learning Mindsets and Skills," Press release, October 14, 2015, available at <http://www.ed.gov/news/press-releases/us-department-education-announces-first-ever-skills-success-grants-and-initiative-support-learning-mindsets-and-skills>; Office of Innovation and Improvement, "Launching the Mentoring Mindsets Initiative," October 14, 2015, available at <http://innovation.ed.gov/2015/10/14/launching-the-mentoring-mindsets-initiative/>.
- 31 Noah Bookman, phone interview with authors; Transforming Education, "Measuring MESH: Student and Teacher Surveys Curated for the CORE Districts" (2016), available at <http://www.transformingeducation.org/measuringmesh/>.
- 32 CORE Districts, "Assessing Social-Emotional Skills: The CORE Story to Date."
- 33 Transforming Education, "Measuring MESH."
- 34 CORE Districts, "Assessing Social-Emotional Skills: The CORE Story to Date."
- 35 Ibid.
- 36 Sarah D. Sparks, "Scholars: Better Gauges Needed for 'Mindset,' 'Grit,'" *Education Week*, April 19, 2016, available at <http://www.edweek.org/ew/articles/2016/04/20/scholars-better-gauges-needed-for-mindset-grit.html>.
- 37 Duckworth and Yeager, "Measurement Matters."
- 38 Ibid.; Sparks, "Scholars: Better Gauges Needed for 'Mindset,' 'Grit'."
- 39 Angela Duckworth, "Don't Grade Schools on Grit," *The New York Times*, March 26, 2016, available at http://www.nytimes.com/2016/03/27/opinion/sunday/dont-grade-schools-on-grit.html?_r=0.
- 40 Duckworth and Yeager, "Measurement Matters."
- 41 Martin R. West, "Should non-cognitive skills be included in school accountability systems? Preliminary evidence from California's CORE districts" (Washington: Brookings Institution, 2016), available at <http://www.brookings.edu/research/reports/2016/03/17-non-cognitive-skills-school-accountability-california-core-west>.
- 42 Ibid.; Martin R. West and others, "Promise and Paradox: Measuring Students' Non-cognitive Skills and the Impact of Schooling" (Cambridge, MA: Center for Education Policy Research at Harvard University, 2014), available at <http://cepr.harvard.edu/files/cepr/files/cepr-promise-paradox.pdf>.
- 43 Transforming Education, "Measuring MESH."
- 44 CORE Districts, "School Quality Improvement Index" (2015), available at http://coredistricts.org/wp-content/uploads/2015/12/Slide-Deck_CORE-Districts_CSBA-2015.pdf.
- 45 Transforming Education, "Measuring MESH."
- 46 Duckworth and Yeager, "Measurement Matters."
- 47 Robert LaRocca and Sara Bartolino Krachman, "Expanding the Definition of Student Success under ESSA: Opportunities to Advance Social-Emotional Mindsets, Skills, and Habits for Today's Students" (Boston: Transformation Education, 2016), available at <https://www.transformingeducation.org/essa/>.
- 48 American Youth Policy Forum, "Considerations for ESSA's Non-Academic Indicator: Bridging Research, Practice, and Policy" (2016), available at <http://www.aypf.org/wp-content/uploads/2016/09/Master-Slide-Deck-9.23-PDF-version.pdf>.
- 49 David Osher, vice president and institute fellow, American Institutes for Research, phone interview with authors, October 3, 2016.
- 50 H.B. No. 245, Act No. 384, 2015 Regular Session, Louisiana State Legislature, available at <http://legis.la.gov/legis/BillInfo.aspx?sessionId=15RS&billtype=HB&billno=245>.
- 51 Sarah D. Sparks, "'Nation's Report Card' to Gather Data on Grit, Mindset," *Education Week*, June 2, 2015, available at <http://www.edweek.org/ew/articles/2015/06/03/nations-report-card-to-gather-data-on.html>.
- 52 Kimberly Hefling, "Testing for 'grit,'" *Politico*, July 1, 2016, available at <http://www.politico.com/tipsheets/morning-education/2016/07/testing-for-grit-lower-student-loan-interest-rates-roll-out-campus-gun-laws-go-live-215125>.

- 53 Angus J. Macneil, Doris L. Prater, and Steve Busch, "The effects of school culture and climate on student achievement," *International Journal of Leadership in Education* 12 (1) (2009): 73–84, available at <http://donnieholland.wiki.westga.edu/file/view/school+culture+climate+%26+achievement.pdf>.
- 54 Ibid.; Steve Gruenert, "School Culture, School Climate: They Are Not the Same Thing" (Alexandria, VA: National Association of Elementary School Principals, 2008), available at <http://www.naesp.org/resources/2/Principal/2008/M-Ap56.pdf>.
- 55 Gruenert, "School Culture, School Climate."
- 56 Jonathan Cohen, "Transforming School Climate: Educational and Psychoanalytic Perspectives: Introduction," *Schools: Studies in Education* 6 (1) (2009): 99–103, available at http://www.jstor.org/stable/pdf/10.1086/597659.pdf?_1469033806527; Amrit Thapa and others, "School Climate Research Summary: August 2012" (New York: National School Climate Center, 2012), available at <http://www.schoolclimate.org/climate/documents/policy/sc-brief-v3.pdf>.
- 57 Ibid.
- 58 Macneil, Prater, and Busch, "The effects of school culture and climate on student achievement."
- 59 Wayne K. Hoy, John Hannum, and Megan Tschannen-Moran, "Organizational Climate and Student Achievement: A Parsimonious and Longitudinal View," *Journal of School Leadership* (8) (1998): 336–359, available at http://wmpeople.wm.edu/asset/index/mxtsch/_23.
- 60 American Educational Research Association, "Comprehensive Research Review Confirms Positive School Climates Can Narrow Achievement Gaps," Press release, November 1, 2016, available at <http://www.aera.net/Newsroom/Comprehensive-Review-of-Research-Confirms-Positive-School-Climates-Can-Narrow-Achievement-Gaps>.
- 61 Martin, Sargrad, and Batel, "Making the Grade."
- 62 Georgia Department of Education, "2016 CCRPI Indicators" (2015), available at <http://www.gadoe.org/Curriculum-Instruction-and-Assessment/Accountability/Documents/Indicators%20and%20Targets/2016%20Indicators.pdf>.
- 63 Positive Behavioral Interventions and Supports, "School," available at <https://www.pbis.org/school> (last accessed November 2016).
- 64 Paul M. Meng and others, "Does Implementation of SW-PBIS Enhance Sustainability of Specific Programs, such as Playworks?" (Office of Special Education Programs Technical Assistance Center on Positive Behavioral Interventions and Supports, 2016), available at <https://www.pbis.org/Common/Cms/files/pbisresources/Does%20Implementation%20of%20SWPBIS%20Enhance%20Sustainability%20of%20Specific%20Programs.pdf>.
- 65 Illinois State Board of Education, "Fact Sheet: Illinois 5Essentials Survey," available at <http://www.isbe.net/5essentials/pdf/2014-15/fact-sheet1408.pdf> (last accessed November 2016).
- 66 The University of Chicago, "Background, Predictive Validity, and Reliability: 5Essentials," available at <http://uchicagoimpact.org/5essentials/background> (last accessed July 2016).
- 67 CORE Districts and John W. Gardner Center for Youth and Their Communities, "School Culture-Climate Surveys" (2015), available at <https://s3.amazonaws.com/uploads.hipchat.com/392387/2399075/vhRKI-punoi9MI8h/SE-CC-Domain-School-Culture-Climate-Surveys-updated-2.18.15.pdf>.
- 68 CORE Districts, "Assessing Social-Emotional Skills: The CORE Story to Date."
- 69 Camille A. Farrington and others, "Teaching Adolescents To Become Learners: The Role of Noncognitive Factors in Shaping School Performance: A Critical Literature Review" (Chicago: The University of Chicago Consortium on Chicago School Research, 2012), available at <http://ccsr.uchicago.edu/sites/default/files/publications/Noncognitive%20Report.pdf>.
- 70 Ibid.
- 71 Emma Garcia and Elaine Weiss, "Making whole-child education the norm: How research and policy initiatives can make social and emotional skills a focal point of children's education" (Washington: Economic Policy Institute, 2016), available at <http://www.epi.org/publication/making-whole-child-education-the-norm/>.
- 72 Ibid.
- 73 American Youth Policy Forum, "Considerations for ESSA's Non-Academic Indicator: Bridging Research, Practice, and Policy."
- 74 National Clearinghouse on Supportive School Discipline, "AIR Conditions for Learning Surveys," available at <http://supportiveschooldiscipline.org/resources/air-conditions-learning-surveys> (last accessed November 2016).
- 75 David Osher, phone interview with authors.
- 76 Evie Blad, "Urban Districts Embrace Social-Emotional Learning," *Education Week*, June 9, 2015, available at <http://www.edweek.org/ew/articles/2015/06/10/urban-districts-embrace-social-emotional-learning.html>.
- 77 National School Climate Center, "What is the CSCI?," available at <http://www.schoolclimate.org/climate/csci.php> (last accessed July 2016).
- 78 Martin, Sargrad, and Batel, "Making the Grade"; Hanna Skandera, "Opportunity to Learn Survey Item Released" (Santa Fe, NM: State of New Mexico Public Education Department, 2012), available at <http://www.ped.state.nm.us/AssessmentAccountability/AssessmentEvaluation/dl12/OPPORTUNITYTOLEARNSURVEYITEMSRELEASED001.pdf>.
- 79 Sarah F. Phillips, Ronald F. Ferguson, and Jacob F.S. Rowley, "Evaluating the 7Cs Composite as an Alternative Measure of School Quality" (Tripod Education Partners, Inc., July 2016 unpublished draft).
- 80 National Center on Safe Supportive Learning Environments, "School Climate Measurement," available at <https://safesupportivelearning.ed.gov/topic-research/school-climate-measurement> (last accessed September 2016).
- 81 Ibid.; National Center on Safe Supporting Learning Environments, "ED School Climate Surveys (EDSCLS)," available at <https://safesupportivelearning.ed.gov/edscls/measures> (last accessed September 2016).
- 82 David Osher, phone interview with authors.
- 83 Ibid.; American Youth Policy Forum, "Considerations for ESSA's Non-Academic Indicator: Bridging Research, Practice, and Policy."
- 84 Attendance Works, "What is Chronic Absence?," available at <http://www.attendanceworks.org/wordpress/wp-content/uploads/2011/06/What-is-Chronic-Absence.pdf> (last accessed November 2016).

- 85 U.S. Department of Education, *Every Student, Every Day: A National Initiative to Address and Eliminate Chronic Absenteeism* (2016), available at <http://www2.ed.gov/about/initiatives/chronicabsenteeism/index.html>; U.S. Department of Education, *Chronic Absenteeism in the Nation's Schools* (2016), available at <https://www2.ed.gov/datastory/chronicabsenteeism.html#one>.
- 86 U.S. Department of Education, "Every Student, Every Day: A National Initiative to Address and Eliminate Chronic Absenteeism."
- 87 Attendance Works, "Strategies to Reduce Chronic Absence: A Multi-Tiered Approach" (2015), available at www.attendanceworks.org/wordpress/wp-content/uploads/2015/07/Strategies-for-Reducing-Chronic-Absence-Alabama-2015-Final.pdf.
- 88 Ibid.
- 89 Attendance Works, "Engage Students and Parents," available at <http://www.attendanceworks.org/what-works/engage-students-and-parents/> (last accessed November 2016); U.S. Department of Education, "New Research Shows Nearly Half of American Parents Underestimate the Harm of School Absences," Press release, August 23, 2016, available at http://www.ed.gov/news/press-releases/new-research-shows-nearly-half-american-parents-underestimate-harm-school-absences?utm_content=&utm_medium=email&utm_name=&utm_source=govdelivery&utm_term.
- 90 Attendance Works, "Understanding the Factors Contributing to Chronic Absence in Your School" (2010), available at <http://www.attendanceworks.org/wordpress/wp-content/uploads/2010/05/ID-Cont-Factors-DEC-2010-.pdf>.
- 91 Emily Morgan and others, "The School Discipline Consensus Report: Strategies from the Field to Keep Students Engaged in School and Out of the Juvenile Justice System" (New York: The Council of State Governments Justice Center, 2014), available at https://csgjusticecenter.org/wp-content/uploads/2014/06/The_School_Discipline_Consensus_Report.pdf.
- 92 Ibid.; Perpetual Baffour, "Counsel or Criminalize? Why Students of Color Need Supports, Not Suspensions" (Washington: Center for American Progress, 2016), available at <https://www.americanprogress.org/issues/education/reports/2016/09/22/144636/counsel-or-criminalize/>.
- 93 Morgan and others, "The School Discipline Consensus Report."
- 94 Baffour, "Counsel or Criminalize?"
- 95 Martin, Sargrad, and Batel, "Making the Grade."
- 96 Office for Civil Rights, *Dear Colleague Letter from the Assistant Secretary* (U.S. Department of Education, 2014), available at <http://www2.ed.gov/about/offices/list/ocr/letters/colleague-resourcecomp-201410.pdf>.
- 97 Eric A. Hanushek, John F. Kain, and Steven G. Rivkin, "Teachers, Schools, and Academic Achievement." Working Paper 6691 (National Bureau of Economic Research, 1998), available at http://www.cgp.upenn.edu/pdf/Hanushek_NBER.PDF.
- 98 RAND Education, "Teachers Matter: Understanding Teachers' Impact on Student Achievement," available at <http://www.rand.org/education/projects/measuring-teacher-effectiveness/teachers-matter.html> (last accessed November 2016).
- 99 William L. Sanders and June C. Rivers, "Cumulative and Residual Effects Of Teachers on Future Student Academic Achievement" (Knoxville, TN: University of Tennessee Value-Added Research and Assessment Center, 1996), available at http://www.cgp.upenn.edu/pdf/Sanders_Rivers-TVASS_teacher%20effects.pdf.
- 100 See, for example, Carrie Hahnel and Orville Jackson, "Learning Denied: The Case for Equitable Access to Effective Teaching in California's Largest School District" (Oakland, CA: The Education Trust—West, 2012), available at <http://edtrust.org/resource/learning-denied-the-case-for-equitable-access-to-effective-teaching-in-californias-largest-school-district>; The Education Trust, "Their Fair Share: How Texas-Sized Gaps in Teacher Quality Shortchange Low-Income and Minority Students" (2008), available at <https://edtrust.org/resource/their-fair-share-how-texas-sized-gaps-in-teacher-quality-shortchange-poor-and-minority-students>; Sanders and Rivers, "Cumulative and Residual Effects of Teachers on Future Student Academic Achievement."
- 101 Eric Isenberg and others, "Access to Effective Teaching for Disadvantaged Students" (Washington: Institute of Education Sciences, 2013), available at <https://ies.ed.gov/ncee/pubs/20144001/pdf/20144001.pdf>.
- 102 Lawrence J. Shweinhart, "Benefits, Costs, and Explanation of the High/Scope Perry Preschool Program" (Tampa, FL: High/Scope Educational Research Foundation, 2003), available at http://www.highscope.org/file/Research/PerryProject/Perry-SRCD_2003.pdf.
- 103 The Carolina Abecedarian Project, "Groundbreaking Follow-Up Studies," available at <http://abc.fpg.unc.edu/groundbreaking-follow-studies> (last accessed November 2016).
- 104 W. Stevens Barnett, Cynthia Lamy, and Kwanghee Jung, "The Effect of State Prekindergarten Programs on Young Children's School Readiness in Five States" (New Brunswick, NJ: The National Institute for Early Education Research at Rutgers University, 2005), available at http://www.pewtrusts.org/~media/legacy/uploadedfiles/wwwpewtrustsorg/reports/pre-k_education/finaloverallmultistatereportpdf.pdf.
- 105 U.S. Department of Education, "New Report Shows Greater Need for Access to High-Quality Preschool for America's Children," Press release, April 7, 2015, available at <http://www.ed.gov/news/press-releases/new-report-shows-greater-need-access-high-quality-preschool-america%E2%80%99s-children>; National Center for Education Statistics, "Preschool and Kindergarten Enrollment" (2016), available at http://nces.ed.gov/programs/coe/indicator_cfa.asp.
- 106 U.S. Department of Education, *A Matter of Equity: Preschool in America* (2015), available at <http://www2.ed.gov/documents/early-learning/matter-equity-preschool-america.pdf>.
- 107 Leila Fiester, "Early Warning Confirmed: A Research Update on Third-Grade Reading" (Baltimore, MD: The Annie E. Casey Foundation, 2013), available at <http://www.aecf.org/m/resource/doc/AECF-EarlyWarningConfirmed-2013.pdf>.
- 108 U.S. Department of Education, "New Report Shows Greater Need for Access to High-Quality Preschool for America's Children"; U.S. Department of Education, *A Matter of Equity*.

- 109 Allison Friedman-Krauss, W. Steven Barnett, and Milagros Nores, "How Much Can High Quality Universal Pre-K Reduce Achievement Gaps?" (Washington: New Brunswick, NJ: Center for American Progress; National Institute for Early Education Research, 2016), available at <https://www.americanprogress.org/issues/education/reports/2016/04/05/132750/how-much-can-high-quality-universal-pre-k-reduce-achievement-gaps/>.
- 110 Bruce D. Baker, "Does Money Matter in Education?" (Washington: Albert Shanker Institute, 2016), available at http://www.shankerinstitute.org/sites/shanker/files/moneymatters_edition2.pdf.
- 111 C. Kirabo Jackson, Rucker C. Johnson, and Claudio Persico, "The Effects of School Spending on Educational and Economic Outcomes: Evidence from School Finance Reforms," *The Quarterly Journal of Economics* 131 (1) (2016): 157–218, available at http://socrates.berkeley.edu/~ruckerj/QJE_resubmit_final_version.pdf.
- 112 Julien Lafortune, Jesse Rothstein and Diane Whitmore Schazensbach, "School Finance Reform and the Distribution of Student Achievement." Working Paper 22011 (The National Bureau of Economic Research, 2016), available at <http://www.nber.org/papers/w22011>.
- 113 Scott Sargrad, "Federal Regulations Should Drive More Money to Poor Schools," Testimony before the U.S. House of Representatives Subcommittee on Early Childhood, Elementary, and Secondary Education, "Hearing on Supplanting the Law and Local Education Authority Through Regulatory Fiat," September 26, 2016, available at <https://www.americanprogress.org/issues/education/report/2016/10/03/145214/federal-regulations-should-drive-more-money-to-poor-schools/>; U.S. Department of Education, "Fact Sheet: Supplement-non-Supplant under Title I of the Every Student Succeeds Act" (2016), available at <http://www.ed.gov/news/press-releases/fact-sheet-supplement-not-supplant-under-title-i-every-student-succeeds-act>.
- 114 Emma Brown, "In 23 states, richer school districts get more local funding than poorer districts," *The Washington Post*, March 12, 2015, available at <https://www.washingtonpost.com/news/local/wp/2015/03/12/in-23-states-richer-school-districts-get-more-local-funding-than-poorer-districts/>.
- 115 U.S. Department of Education, "Fact Sheet: Supplement-non-Supplant under Title I of the Every Student Succeeds Act."
- 116 Chrys Dougherty, Lynn Mellor, and Shuling Jian, "The Relationship between Advanced Placement and College Graduation" (Austin, TX: National Center for Educational Accountability, 2006), available at <http://files.eric.ed.gov/fulltext/ED519365.pdf>.
- 117 Melinda Mechur Karp and others, "The Postsecondary Achievement of Participants in Dual Enrollment: An Analysis of Student Outcomes in Two States" (Atlanta: National Research Center for Career and Technical Education, 2007), available at <http://www.nrccte.org/resources/publications/postsecondary-achievement-participants-dual-enrollment-analysis-student>.
- 118 Scott D. James and Emily Workman, "ESSA's Well-Rounded Education" (Denver: Education Commission of the States, 2016), available at <http://www.ecs.org/ec-content/uploads/ESSAs-Well-Rounded-Education-1.pdf>.
- 119 U.S. Department of Education Office for Civil Rights, *Dear Colleague Letter from the Assistant Secretary*; Wilona M. Sloan, "Making Content Connections Through Arts Integration," *Education Update* 51 (3) (2009), available at <http://www.ascd.org/publications/newsletters/education-update/mar09/vol51/num03/Making-Content-Connections-Through-Arts-Integration.aspx>.
- 120 James S. Catterall, Susan A. Dumais, and Gillian Hampden-Thompson, "The Arts and Achievement in At-Risk Youth: Findings From Four Longitudinal Studies" (Washington: National Endowment for the Arts, 2012), available at <https://www.arts.gov/sites/default/files/Arts-At-Risk-Youth.pdf>.
- 121 R. Larson and J. Brown, "Emotional development in adolescence: What can be learned from a high school theater program?" *Child Development* 78 (4) (2007): 1083–1099, available at <http://www.artsedsearch.org/summaries/emotional-development-in-adolescence-what-can-be-learned-from-a-high-school-theater-program>; K. Demoss and T. Morris, "How arts integration supports student learning: Students shed light on the connections" (Chicago: Chicago Arts Partnerships in Education, 2002), available at <http://www.artsedsearch.org/summaries/how-arts-integration-supports-student-learning-students-shed-light-on-the-connections>.
- 122 Darla M. Castelli and others, "Active Education: Growing Evidence on Physical Activity and Academic Performance" (San Diego: Active Living Research, 2015), available at http://activelivingresearch.org/sites/default/files/ALR_Brief_ActiveEducation_Jan2015.pdf.
- 123 Sangeeta Singh and Shari McMahan, "An Evaluation of the Relationship between Academic Performance and Physical Fitness Measures in California Schools," *California Journal of Health Promotion* 4 (2) (2006): 207–214, available at http://www.cjhp.org/Volume4_2006/Issue2/207-214-singh.pdf.
- 124 Castelli and others, "Active Education."
- 125 John H. Holloway, "Extracurricular Activities: The Path to Academic Success?" *Educational Leadership* 57 (4) (1999/2000): 87–88, available at <http://www.ascd.org/publications/educational-leadership/dec99/vol57/num04/Extracurricular-Activities@The-Path-to-Academic-Success%C2%A2.aspx>.
- 126 Beckett A. Broh, "Linking Extracurricular Programming to Academic Achievement: Who Benefits and Why?" *Sociology of Education* 75 (1) (2002): 69–95.
- 127 Martin, Sargrad, and Batel, "Making the Grade."
- 128 National Center for Chronic Disease Prevention and Health Promotion, "Health and Academic Achievement" (2014), available at http://www.cdc.gov/healthyyouth/health_and_academics/pdf/health-academic-achievement.pdf.
- 129 Ibid.
- 130 Jeffrey L. Charvat, "Research on the Relationship Between Mental Health and Academic Achievement" (Bethesda, MD: National Association of School Psychologists, 2012), available at <https://www.nasponline.org/Documents/Research%20and%20Policy/Research%20Center/Academic-MentalHealthLinks.pdf>; Baffour, "Counsel or Criminalize?"
- 131 Children's Defense Fund, "The State of America's Children" (2014), available at http://www.childrens-defense.org/library/state-of-americas-children/2014-soac.pdf?utm_source=2014-SOAC-PDF&utm_medium=link&utm_campaign=2014-SOAC.
- 132 Baffour, "Counsel or Criminalize?"
- 133 U.S. Department of Education, "New Data Show Chronic Absenteeism is Widespread and Prevalent Among All Student Groups," Press release, June 10, 2016, available at <http://www.ed.gov/news/press-releases/new-data-show-chronic-absenteeism-widespread-and-prevalent-among-all-student-groups>.

- 134 Diane Whitmore Schanzenbach, Lauren Bauer, and Megan Mumford, "Lessons for Broadening School Accountability under the Every Student Succeeds Act" (Washington: The Hamilton Project at Brookings Institution, 2016), available at https://www.brookings.edu/wp-content/uploads/2016/10/es_20161027_chronic_absenteeism.pdf.
- 135 David Osher and others, "A Call to Action for Inspiring and Motivating Our Children and Teachers to Learn and Grow in Social, Emotional, and Cognitive Arenas" (2016), available at http://www.cfchildren.org/Portals/1/Advcy/advcy_doc/2016/essa-consensus-letter-secretary-king.pdf.
- 136 *Every Student Succeeds Act*.
- 137 CORE Districts, "The CORE Data Collaborative" (2016) available at http://coredistricts.org/wp-content/uploads/2016/08/Data-Collaborative_Overview-with-data-use-points-3.pdf.
- 138 Oakland Unified School District, "School Performance Framework," available at <http://qualitycommunityschools.weebly.com/school-performance-framework.html> (last accessed November 2016).
- 139 Memo from Michael Hanson, President, CORE Districts Board of Directors to Mike Kirst, President, California State Board of Education, "Item 02: Establishing CORE Districts as a Research Pilot for the State Accountability System."
- 140 Scott Sargrad and others, "7 Tenets for Sustainable School Turnaround: How States Can Improve Their Lowest-Performing Schools Under ESSA" (Washington: Center for American Progress, 2016), available at <https://www.americanprogress.org/issues/education/reports/2016/09/13/143922/7-tenets-for-sustainable-school-turnaround/>.
- 141 Health Impact Project, *Comments on Title I, §200.21(c) School-Level Needs Assessment; Proposed Rule*, August 1, 2016, available at <http://www.pewtrusts.org/~media/assets/2016/10/health-impact-project-comments-20021c/hip-comments-20021c.pdf>.
- 142 Sargrad and others, "7 Tenets for Sustainable School Turnaround."
- 143 Chad Aldeman, "Grading Schools: How States Should Define 'School Quality' Under the Every Student Succeeds Act" (Washington: Bellwether Education Partners, 2016), available at http://bellwethereducation.org/sites/default/files/Bellwether_GradingSchools_FINAL.pdf.

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