



HEALTH **IMPACT**
PROJECT


Robert Wood Johnson
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The Every Student Succeeds Act Creates Opportunities to Improve Health and Education at Low-Performing Schools

How needs assessments can help states and districts identify ways to boost outcomes for children

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Overview

The performance of public schools and the achievement of their students influence many important outcomes beyond the classroom, including one that may seem surprising: health. Studies consistently show a strong correlation between educational level and health over a lifetime, even after controlling for demographic characteristics such as income.¹ Those with more education live longer and have a lower risk of chronic diseases, such as diabetes.

However, about 1 in 6 U.S. public schools—more than 16,000—did not meet state standards for student achievement in the 2014-15 school year, the most recent for which data are available. This poor performance was reflected, for example, in on-time graduation rates: At 12 percent of public high schools, at least a third of students did not graduate within four years.² Further, although graduation rates are on the rise nationwide, nearly 10 percent of adults ages 25-34 have not earned a high school diploma or GED.³

Most students attending low-performing schools are children of color and come from low-income families. Disparities in academic achievement (including graduation rates) persist between these students and white children and those from higher-income families. In addition, compared with their white and more well-to-do peers, students of color and those from low-income families experience higher rates of lifelong health problems, such as asthma, obesity, and stress, many of which are correlated with lower educational attainment. (See Figure 1.)

In 2015, in an effort to improve the nation's public schools and close achievement gaps among students of different racial, ethnic, and socio-economic backgrounds, Congress passed the Every Student Succeeds Act (ESSA), modifying the nation's 50-year-old public education policy. The law requires states to identify every three years which schools are low-performing. It also mandates that local educational agencies (LEAs), which include school districts, conduct needs assessments for those schools to identify areas of underperformance and determine what steps should be taken to raise achievement. LEAs must then create plans for the schools to reach the stated goals. Importantly, ESSA outlines the basic steps that LEAs need to take to meet these requirements, but it does not explicitly say what issues should be assessed.

Research shows that academic achievement can be affected not only by issues that fall within LEAs' typical purview (including teacher quality, curricula, and testing) but also by factors such as housing instability, food insecurity, and health problems—known in the educational field as “root causes.” A strong body of evidence demonstrates that these outside-the-classroom challenges can inhibit children from reaching their full academic potential, which can have cascading effects on their lifelong health. However, although LEAs generally acknowledge the importance of root causes to educational outcomes, they have tended to limit their focus to traditional academic issues when conducting needs assessments and developing school improvement plans. Despite LEAs' strong efforts, many schools face persistent gaps in student achievement and continued low ratings on state evaluations. As a result, LEAs may need to take a broader approach that considers the full range of factors affecting student outcomes.

To determine whether LEAs and low-performing schools could leverage ESSA requirements to address root causes among their students, the Health Impact Project, a collaboration of the Robert Wood Johnson Foundation and The Pew Charitable Trusts, conducted a health impact assessment (HIA) of how needs assessments and improvement plan strategies, including expanded family and community involvement, might affect achievement and related health outcomes across diverse student populations. HIAs bring together research, health expertise, and stakeholder input to identify the potential and often-overlooked health effects of proposed laws, regulations,

projects, policies, and programs. For this assessment, the HIA team conducted a literature review, stakeholder interviews, and an examination of efforts in nine states and localities to illustrate a number of innovative approaches to needs assessment and school improvement strategies.

The HIA found that of the more than 9 million children and teens enrolled in low-performing schools in 2013-14, nearly 70 percent were students of color and nearly three-quarters were eligible for free or reduced-price lunches, a common proxy for low family income. Research suggests that these students disproportionately encounter circumstances that can hurt their academic performance, including school disciplinary policies and housing instability.

The literature, interviews, and state and local examples suggest that LEAs could more effectively improve schools if they examined factors outside the classroom that affect academic achievement and if they established partnerships with social service agencies, public health departments, hospitals, and other community organizations to address identified problems. Notably, examining the costs of such efforts was beyond the scope of the HIA, but the U.S. Department of Education, states, and public health institutions could support LEAs with dedicated funds, staff, training, and technical assistance. Taking these steps could not only help schools meet higher performance standards but also lead to better educational and health outcomes for students. Some schools and LEAs are making efforts to address root causes, but needs assessments required under ESSA provide an opportunity for more of them to do so.

States have flexibility in implementing the needs assessment requirement for low-performing schools and can encourage LEAs and schools to consider the broader range of factors that affect student performance. The appropriate strategy for any school depends on its local context, but this HIA includes state and local examples that illustrate a number of innovative approaches and promising outcomes, such as reduced absenteeism.

Conducting a more robust needs assessment, and developing a community-based strategy to address those needs, may strain limited school resources. However, many community assets can support needs assessment and school improvement efforts. For example, data related to housing stability and food security can be accessed if LEAs and schools are given tools and resources or if they partner with agencies that address these issues. The Department of Education and state educational agencies can give schools and LEAs guidance on how best to leverage organizations' resources and develop strong partnerships.

The research reviewed by the HIA team suggests that the following steps could be taken to improve needs assessments in low-performing schools:

1. State educational agencies could:
 - a. Partner with other agencies within their states to develop or enhance tools and systems that can help districts and schools examine data on a broad range of social, economic, and environmental factors. Public health departments, for example, could provide data that could be linked to accountability metrics, such as how chronic illness might affect absenteeism.
 - b. Give districts guidance and a template for conducting school needs assessments that examine root causes and their connection to required academic indicators.
 - c. Help school districts engage more fully with stakeholders, including students, and demonstrate the importance of such partnerships by working with a broad set of groups when developing their state plans.
 - d. Ensure that improvement plans for schools identified as low-performing are responsive to the issues found through the needs assessment process.

2. Local educational agencies could facilitate partnerships between schools and organizations that address factors affecting education and health—such as housing, transportation, and mental health—to identify and address students’ needs. Potential tactics include writing memorandums of understanding, creating districtwide coalitions and local wellness policies, supporting school health teams, and developing staff positions with responsibility for connecting schools with available community resources and programs to address identified student needs.
3. Schools could work with their LEAs to involve a broad range of stakeholders in collecting and analyzing data for their assessments and developing strategies to address identified needs. At a minimum, they should include students, instructional support personnel such as social workers and school nurses, families, and key community organizations and local agency partners.
4. To support state and local efforts to strengthen needs assessments in low-performing schools, the U.S. Department of Education could encourage state educational agencies to:
 - a. Emphasize the importance of examining root causes affecting student performance, such as neighborhood conditions, as well as in-school health factors like physical activity and healthy eating, and include them when designing school needs assessments. When possible, such factors should be aligned with existing state and district indicators and accountability metrics.
 - b. Address identified social, economic, and health needs of students and their families by leveraging the work of health and human services departments and other relevant agencies.

This document provides a detailed discussion of ESSA and state and local strategies for school evaluation and improvement and examines the HIA findings in depth. Although the HIA focused on needs assessments for schools already identified as low-performing, its findings can be used by any school, district, or state. Education advocates could also develop detailed guidance, tools, and other resources to help states and local districts conduct needs assessments and carry out improvement plans that address root causes.⁴

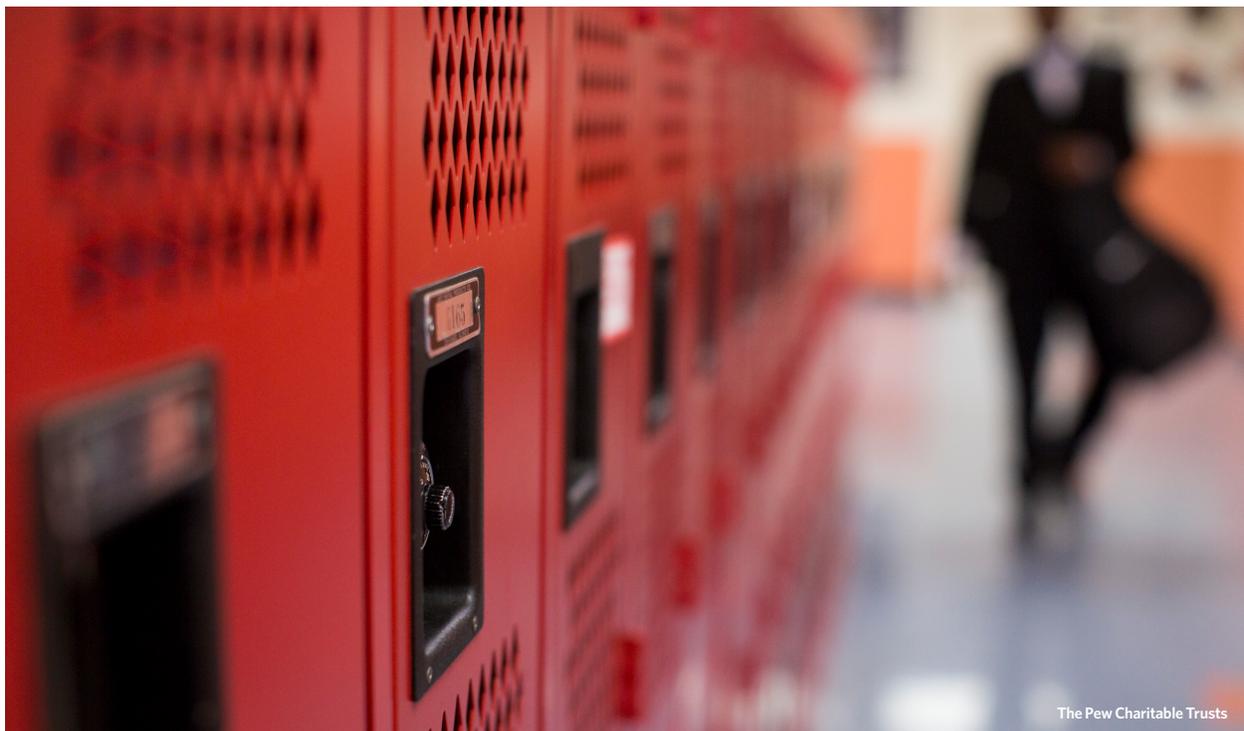


Figure 1
Education Is a Strong Predictor of Health
How schooling affects health over a lifetime



School environment

Because children spend most of their day in school, ensuring that the building is clean, maintained, and free of contaminants can help protect their health. Schools can also promote student health by providing opportunities for physical activity, nutritious food, and access to health services. Students' mental health can also be affected by their school's climate, curriculum, and discipline policies.

Employment and income

People with higher levels of education are more likely to have a stable job and make a living wage, which improves their ability to meet basic needs, afford resources to promote their health, and access health insurance and retirement benefits. All of these can affect health outcomes, including life expectancy, stress and mental well-being, and chronic diseases such as diabetes and heart disease.

Health knowledge and skills

Individuals who have at least a college degree are more likely to learn about health-promoting behaviors and gain skills that help them advocate for themselves within care settings. These skills can improve health in many ways. People are better able to manage diseases, follow recommended treatments, and use preventive care services.

Community resources

People with higher levels of education are more likely to afford homes in neighborhoods with easy access to public transportation, parks and recreation, quality schools, good jobs, healthy foods, and medical care. These resources can improve mental health, lower the risk of injury or chronic disease, and lead to longer lives.

Generational impacts

A person's educational level affects not only his or her health, but also the health of future generations. Children whose parents have higher levels of education are less likely to be exposed to violence and housing instability, and face health outcomes associated with poverty. These children are also more likely to earn a college degree, which benefits their health over their lifetime.

Sources: Virginia Commonwealth University Center on Society and Health, "Why Education Matters to Health: Exploring the Causes," accessed Nov. 16, 2016, <http://societyhealth.vcu.edu/work/the-projects/why-education-matters-to-health-exploring-the-causes.html#>; Robert Wood Johnson Foundation, "Why Does Education Matter So Much to Health?" (March 2013), <http://www.rwjf.org/en/library/research/2012/12/why-does-education-matter-so-much-to-health-.html>.

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Policy background and context

History of ESSA

The bipartisan Every Student Succeeds Act, signed into law in December 2015, reauthorized the nation's foundational education legislation: the 52-year-old Elementary and Secondary Education Act (ESEA). ESEA originally emerged from President Lyndon B. Johnson's War on Poverty and reflected the relationship between student achievement and income.⁵ It aimed to use federal grants to address funding disparities and raise the quality of education in low-income school districts.⁶ Title I of the law, which has been in place since the original act, focuses on improving basic programs operated by state and local educational agencies and provides financial assistance to schools and local educational agencies with high numbers or percentages of students from low-income families.

In the years since ESEA's passage, Congress has expanded the law's reach to provide resources targeted to certain subgroups of students, such as migrant and "neglected or delinquent" youth.⁷ When President Jimmy Carter reauthorized ESEA in 1978, the law's Title I included a notable change to allow any school with a student poverty rate of at least 75 percent to spend Title I funds on all students—as opposed to only those from low-income families.⁸ In the next two decades, the emphasis of federal legislation shifted to academic accountability and standards. Almost 25 years later, the 2002 reauthorization law, No Child Left Behind, required schools to significantly expand testing, assess and make yearly progress in reading and math, and implement school choice as well as free tutoring and other academic support services. In 2011, President Barack Obama offered states federal waivers to ease the mandates set under the 2002 law. In 2015, ESSA amended the No Child Left Behind legislation. It retained the law's focus on accountability but provides more flexibility and control to the states than did its predecessor.

At the core of ESSA is the goal to improve every student's education by giving teachers, schools, and states the resources and support they need and placing more emphasis on addressing racial and socio-economic achievement gaps instead of on standardized testing.⁹ ESSA gives states more power to make decisions on education, particularly over how Title I funds are spent, as well as those provided through Title IV of the law, which outlines various grant programs to enhance instructional programs and support technology and other school upgrades. States are to set their own goals, design and implement plans and accountability systems, and develop structures to support school improvement efforts.¹⁰

ESSA also emphasizes funding for the lowest-performing schools and is more focused on how well subgroups of students, such as low-income or Hispanic youth, perform.¹¹ In developing plans and accountability systems, states need to determine performance goals for students who fall into any of these categories: those who are English learners, receive special education, are racial and ethnic minorities, or who live in poverty.¹² ESSA promotes engaging principals, teachers, families, business groups, and others affected by and involved in education planning to design the best possible educational systems for students and increase public buy-in as new plans are designed and put in place.¹³

For more detailed definitions of ESSA, No Child Left Behind, and other important terms used in this document, see Appendix A.

Needs assessments for low-performing schools

Title I of ESSA requires states to identify schools in need of “comprehensive support and improvement” based on their performance compared with other public schools in the state.¹⁴ The identified schools include the lowest-performing 5 percent of elementary, middle, and high schools receiving Title I funding; any public high school with a graduation rate of 67 percent or less; and any school with one or more chronically underperforming subgroups of students.¹⁵ For each identified school, LEAs must conduct, in partnership with stakeholders such as principals and families, a comprehensive needs assessment. This assessment is to be used as the basis for a school’s improvement plan.

ESSA authorized increases in Title I funding from about \$14.4 billion in 2014 to \$15 billion in 2017 and \$16.2 billion by 2020.¹⁶ Several provisions in Title I are designed to close the achievement gap by providing funding and resources to students considered most academically at risk. Title I funds are distributed to districts via a formula that prioritizes resources to the highest-poverty districts and schools in each state.¹⁷ Seven percent of the money that states receive through LEA Grants (Title I, Part A) must be used to improve schools.¹⁸ And states may reserve up to an additional 3 percent of other Title I funds to help districts provide direct student services, such as technical education coursework or tutoring.¹⁹ ESSA did not authorize funding specifically for school needs assessments.

Although this HIA focused on the needs assessments for low-performing schools required under Title I of the law, the assessments are also required by other components of ESSA. For example, district needs assessments are a core component of Student Support and Academic Enrichment Grants under Title IV of the law, and LEAs and schools must complete assessments before they can use their Title I funding for schoolwide programs.²⁰ The findings and recommended actions from this HIA could be used more broadly to inform other needs assessments and school improvement efforts under ESSA.

ESSA also requires states to identify schools in need of “targeted support and improvement.” These include schools with one or more consistently underperforming subgroups of students and those in which one or more subgroups of students is performing at or below the level of the state’s lowest-performing schools. Although these schools must develop and implement a plan for improvement, they are not required to conduct a needs assessment as part of this process and therefore were not the focus of this HIA, but they could still benefit from its findings and recommended actions.

Regulations for school-level needs assessments

ESSA does not specify required components of or a process for conducting needs assessments of schools identified as needing comprehensive support and improvement. On May 31, 2016, the Department of Education published a draft rule to amend regulations for implementing public school programs under Title I, among other changes, and issued a request for public comments.²¹ This HIA was produced in response to that appeal and focused exclusively on section 200.21(c) of the draft, which covers needs assessments for schools identified for comprehensive support and improvement and would have required that those assessments include:²²

- Academic achievement data on specific state standardized tests required by ESSA, such as reading or mathematics, for all students in the school, including English learners, students with disabilities, students who are economically disadvantaged, and those from each major racial and ethnic group.
- The school’s performance on long-term goals and measurements of interim progress described in its state’s accountability system. This includes at least one indicator of school quality or student success, such as student or educator engagement, postsecondary readiness, or school climate and safety.

- The reason(s) the school was identified for comprehensive support and improvement.
- At the LEA's discretion, the school's performance on additional, locally selected indicators that are not included in the state's accountability system.²³

The proposed regulations also would have required LEAs to partner with, at a minimum, principals and other school leaders, teachers, and parents when they conduct an assessment.

On Nov. 29, 2016, after completion but before release of this HIA, the department issued the final regulations on accountability and state plans under Title I.²⁴ In March 2017, Congress voted to repeal the final regulations for accountability and state plans under Title I of the Every Student Succeeds Act, including the component that was the focus of this HIA. However, the repeal does not remove the requirement to conduct needs assessments for low-performing schools under the law. Without the directives provided in the rule, states have flexibility in implementation and might benefit from additional guidance. Accordingly, the findings and recommended actions from this HIA are still relevant, and this document focuses on the opportunities that remain as part of implementation of needs assessments and improvement plans.

School-level needs assessment and school improvement

The needs assessments are a new Title I school improvement requirement for low-performing schools, though many schools and LEAs have conducted such assessments, either voluntarily or under state requirements, before ESSA. By comparison, under No Child Left Behind, each local educational agency had to identify Title I schools that did not make adequate yearly progress, which is the improvement expected to enable children in low-performing schools to meet high-performance levels.²⁵ For most states, this was measured predominantly by academic indicators such as graduation rate and standardized test scores. LEAs had to identify whether schools fell into one of three groups based on the number of years (one to five) they did not hit this mark, and schools had to take corresponding actions for improvement.²⁶

Under ESSA, states are required every three years to identify schools that need improvement, after which LEAs must create and carry out plans for these schools to boost student outcomes. These plans must be based on the school's needs assessment, be developed with stakeholders, be approved and monitored by states, and include evidence-based strategies. The plans must also review resource inequities between the identified school and others in the district, including per-pupil spending and access to effective and experienced teachers. They must also review resource inequities among subgroups of students at the identified school.²⁷ In developing the plans, districts must:

- Notify parents that their students attend an identified school and describe how they can engage in developing the plans.
- Make the plans publicly available.
- Describe how stakeholder input was received and integrated.²⁸

States are required to direct school improvement funds, either by formula or competitively, to districts with schools determined to be most in need of support. Districts must receive a minimum of \$500,000 for each school identified as needing comprehensive support and improvement, unless the state determines that a smaller amount is sufficient.²⁹ States are also required to give districts technical assistance and to monitor how funds were spent.³⁰

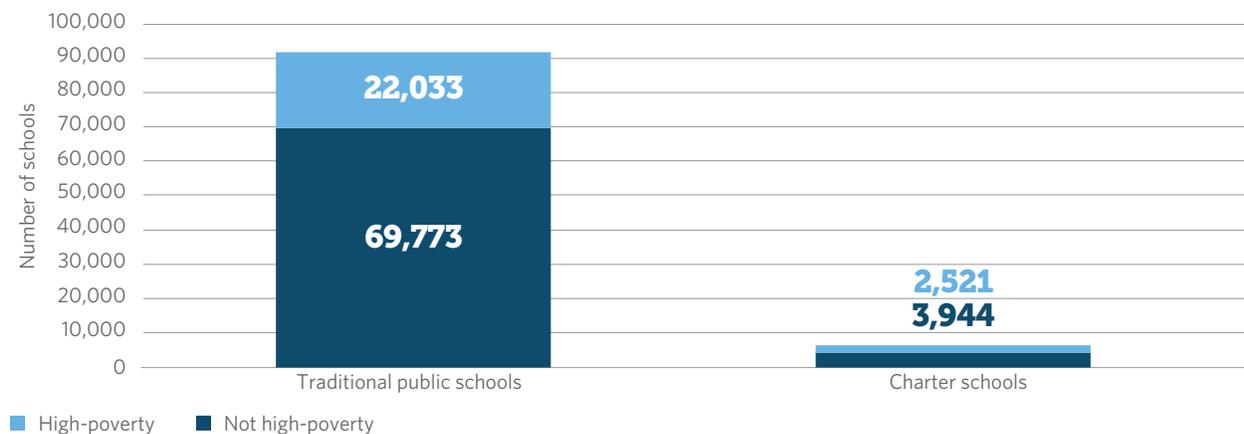
Socio-economic characteristics and prevalent health risks of students in low-performing schools

Most of the students attending low-performing schools are children of color and come from low-income families. According to the most recent data available from the National Center for Education Statistics at the time of this health impact assessment, there were 98,271 public elementary and secondary schools in the United States in the 2013-14 school year, including 91,806 traditional public schools and 6,465 charter schools.³¹ These schools serve nearly 50 million students, about half of whom are white, a quarter Hispanic, 16 percent black, 5 percent Asian or Pacific Islander, 1 percent American Indian or Alaska Native, and 3 percent of two or more races.³² About 24 percent of traditional public schools and 39 percent of charter schools are considered high-poverty, meaning that more than three-quarters of the students qualify for free or reduced-price lunch because their families have incomes at or below 185 percent of the poverty level.³³ Higher percentages of black, Hispanic, and American Indian or Alaska Native students attend high-poverty public schools compared with other races.³⁴ Students living in urban areas are more likely to attend these schools than students in rural or suburban areas.³⁵

Federal data analyzed for this HIA found 16,113 schools—enrolling more than 9 million students—that were identified as needing improvement in 2013-14 based on their failure to meet adequate yearly progress, as defined by the state, for at least two consecutive years under No Child Left Behind.³⁶ These or similar schools are likely to be identified as needing comprehensive support and improvement under ESSA. On average, 69 percent of the students in these schools were students of color, and nearly three-quarters were eligible for free or reduced-price lunch, a common proxy for the income levels of students' families.³⁷ Forty-four percent of these schools were in cities, 27 percent in suburbs, 17 percent in rural areas, and 13 percent in towns.

Figure 2

24% of Traditional Public Schools, 39% of Charters Considered High-Poverty School year 2013-14



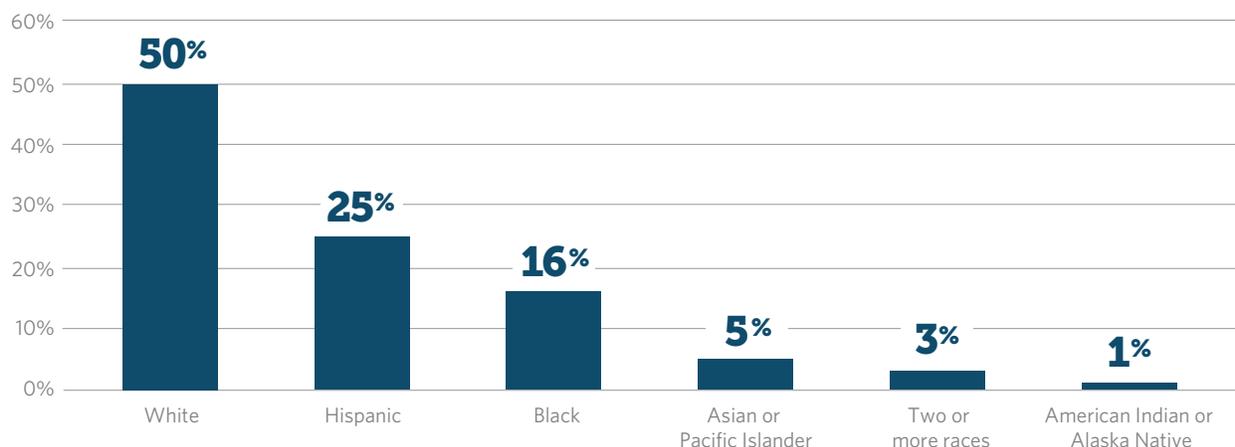
Sources: National Center for Education Statistics, "Table 216.20. Number and Enrollment of Public Elementary and Secondary Schools, by School Level, Type, and Charter and Magnet Status: Selected Years, 1990-91 through 2013-14," accessed July 13, 2016, https://nces.ed.gov/programs/digest/d15/tables/dt15_216.20.asp; National Center for Education Statistics, "Characteristics of Traditional Public and Public Charter Schools," http://nces.ed.gov/programs/coe/indicator_cla.asp; National Center for Education Statistics, "Concentration of Public School Students Eligible for Free and Reduced-Price Lunch," accessed July 13, 2016, http://nces.ed.gov/programs/coe/indicator_clb.asp

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Figure 3

Nearly 50 Million Students Attend Public Elementary, Secondary Schools

Race and ethnicity of U.S. students, 2013-14



Sources: National Center for Education Statistics, “Table 216.20. Number and Enrollment of Public Elementary and Secondary Schools, by School Level, Type, and Charter and Magnet Status: Selected Years, 1990-91 through 2013-14,” accessed July 13, 2016, http://nces.ed.gov/programs/digest/d15/tables/dt15_216.20.asp; National Center for Education Statistics, “Table 203.50. Enrollment and Percentage Distribution of Enrollment in Public Elementary and Secondary Schools, by Race/Ethnicity and Regions: Selected Years, Fall 1995 Through Fall 2015,” accessed July 13, 2016, http://nces.ed.gov/programs/digest/d15/tables/dt15_203.50.asp

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Students in schools that are identified as needing improvement are also more likely to face health disparities than are students in high-performing schools. For example, low-income children and children from racial and ethnic minority groups are more likely to live in substandard housing and be exposed to poor air quality and pesticides, contributing to greater asthma rates and other health conditions.³⁸ Those same populations often have less access to affordable, healthy foods and have higher rates of diabetes and premature mortality than do their white and more affluent counterparts.³⁹ Latino and black children are most likely to be overweight or obese, as are children from families with incomes under 200 percent of the federal poverty level.⁴⁰

Graduation rates offer another indicator of school performance and are also strongly linked to a child’s earning potential and health outcomes, including premature death. Schools in which a third or more of students do not graduate are to be identified as low-performing under ESSA. A study examining 2013-14 data found that for every four U.S. high schools with a graduation rate at or above 85 percent, there is one with a graduation rate of 67 percent or less, and that schools with low graduation rates are predominantly in urban areas.⁴¹ Although only a quarter of public high schools are in cities, they represent more than half of those with low graduation rates. And while high schools with low graduation rates are found nationwide, some states have a greater proportion than others. For example, they represent 20 to 40 percent of all public high schools in 10 states—Arizona, Colorado, Delaware, Florida, Georgia, Idaho, Nevada, New York, Oregon, and Washington. In two states, Alaska and New Mexico, they make up 40 percent or more.⁴² Half of low-graduation-rate schools are alternative, charter, and virtual schools, where all instruction is carried out online.⁴³ However, many of these schools target students that face barriers to graduation, so their performance figures may reflect those challenges rather than school quality.⁴⁴

Methods Summary

HIAs bring together scientific data, health expertise, and stakeholder input to identify the potential and often-overlooked positive and negative effects on public health of proposed laws, regulations, projects, policies, and programs.⁴⁵ These assessments can provide pragmatic, evidence-informed recommendations about how to modify the proposed action to reduce risks and promote benefits, as well as recommendations for how to monitor health effects after the decision is implemented.⁴⁶ These assessments have been used to inform decision-making in a range of sectors, including agriculture, criminal justice, economic policy, education, housing, and transportation.

To be responsive to the timeline and context of the federal regulatory process, the study team used an approach known in the field as “rapid HIA,” which enabled the team to conduct the majority of its research and submit preliminary findings to the Department of Education within six weeks. Rapid HIAs can be completed in weeks or months and allow for consideration of health in decision-making—while retaining an emphasis on stakeholder engagement and equity—in cases of compressed timelines, limited resources, or a smaller scope of analysis. As with all types of HIAs, they examine social, economic, and environmental influences and a range of outcomes related to physical, mental, and social well-being.

The research methods for this HIA included a literature review, stakeholder interviews, and an examination of efforts in nine states and localities to illustrate a number of innovative approaches to needs assessment and school improvement strategies. The HIA also examined whether and to what extent these approaches could reduce disparities and improve health equity—the concept that every person should have the same opportunity to be healthy—across diverse student populations. The team conducted an examination of peer-reviewed literature and searched for relevant reports and publications outside of academic journals and in subject-specific sources, such as the National Center for Education Statistics. It studied about 100 peer-reviewed articles and reports, as well as fact sheets and policy briefs.

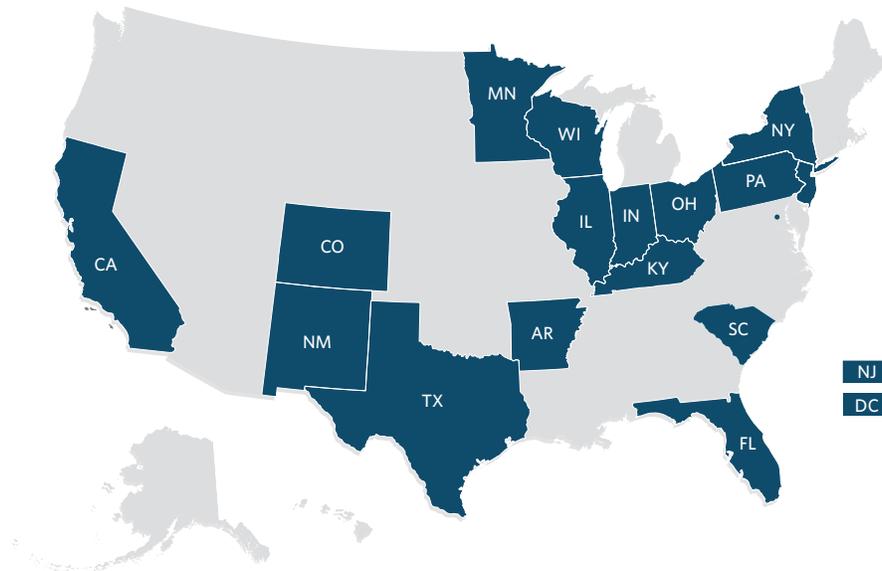
The HIA team conducted semi-structured interviews with 35 people to capture perspectives from key stakeholder groups, including local and state educational agency staff, school and district leaders, public health and school health professionals, teachers and staff, parents, and national and local policy experts. The term “families” is used where possible instead of “parents” in this HIA to reflect the diversity of family types and adults responsible for students. Finally, the team examined nine state and local examples that were selected to identify innovative approaches that could be applied in other schools, districts, and states when they implement needs assessments.

Based on the HIA findings, the team made suggestions for five stakeholder groups: SEAs, LEAs, schools, the U.S. Department of Education, and public health and health care professionals. The team then consulted with its advisory group to refine and prioritize the recommended actions. For a detailed summary of the methods, please see Appendix D.

Figure 4

Stakeholders Nationwide Provided Input on This HIA

Distribution of interviews and state and local examples



| States | Local & state educational agency staff | National & local policy experts | Parents & parent organizations | Teachers & school staff | Community health professionals | Principals & school leaders | State & local examples |
|------------------|--|---------------------------------|--------------------------------|-------------------------|--------------------------------|-----------------------------|------------------------|
| Arkansas | ✓ | | | | | | ✓ |
| California | | ✓ | | | | | |
| Colorado | ✓ | | | | | ✓ | ✓ |
| Florida | | | | | ✓ | | |
| Illinois | ✓ | | | ✓ | | | ✓ |
| Indiana | | | ✓ | | | | |
| Kentucky | ✓ | | | | | | |
| Minnesota | | | | ✓ | | | |
| New Jersey | | | | | | | ✓ |
| New Mexico | | | | ✓ | | | |
| New York | | | | | ✓ | | ✓ |
| Ohio | ✓ | | ✓ | | | | |
| Pennsylvania | | | | ✓ | | | |
| South Carolina | | | | ✓ | | | |
| Texas | | | | | | | ✓ |
| Washington, D.C. | | | | | ✓ | | ✓ |
| Wisconsin | | | | | ✓ | | ✓ |
| National* | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |

* Stakeholders working at or representing these perspectives at the national level.

Needs assessment and health: Educational outcomes

Issues affecting achievement and school performance: How do they relate to health and equity?

Many well-documented issues inside and outside of school affect students' academic achievement—and often their health and well-being.⁴⁷ Research shows that many of these disproportionately affect children who are living in poverty, are from various racial and ethnic backgrounds, are English learners, and/or have disabilities.⁴⁸

Within schools, they include:

- **Instructional factors:** Learning time (length of the school day or number of instruction days in a year); class size; and teacher experience, preparedness, and turnover are important to student achievement and have been a focus of school improvement efforts.⁴⁹
- **Funding:** Higher per-pupil spending improves student outcomes, both in the amount and in the way the money is spent.⁵⁰ A school's funding can also affect whether it has sufficient specialized instructional support personnel, including social workers, school nurses, counselors, psychologists, and others, who can help meet student needs and support educators.
- **School-based physical activity and nutrition:** Schools can play an important role in promoting physical activity and healthy eating, which affect health and student achievement. Recess, physical education classes, and sports help not only to control weight, but also to enhance students' focus and concentration, improve academic performance, and support social and emotional development.⁵¹
- **School climate and culture:** The feelings, attitudes, and experiences elicited by a school environment can affect student achievement through their impact on students' social and emotional learning and mental and physical health.⁵² A positive school climate—defined by norms, values, and expectations that help students to feel safe, respected, and engaged—is associated with greater self-esteem and lower drug use among middle school students. For high school students, such a climate is also linked to fewer self-reports of psychiatric issues and, for both middle and high school students, to decreased absenteeism and healthy social and emotional development.⁵³ Administrators and staff play an important role in influencing school climate.⁵⁴
- **Quality of school facilities:** The physical condition of school facilities contributes to the academic performance, attitude, and behavior of students and teachers.⁵⁵ For example, one study found that students in run-down buildings attend fewer days of school and have lower test scores than students in newer, high-quality buildings.⁵⁶ Buildings and facilities also have direct impacts on the health of students and adults using them through, for example, air quality, noise, and lighting.⁵⁷
- **Parent and family involvement:** Parent and family involvement is a critical element of student and school performance.⁵⁸ This includes parents having positive relationships with teachers and other staff and being engaged in the school's functioning and governance.
- **School leadership:** Principals and other leaders can play a key role in educational outcomes. For example, research has found that positive leadership behaviors by the school administration—including knowledge of and involvement in the curriculum, visibility, flexibility, and strong communication—enhance student achievement. Similarly, a national survey found that students' math scores rise when their teachers have more trust in the principal.⁵⁹

In interviews for this HIA, many respondents described the challenges that low-performing schools face regarding instructional and institutional factors such as teacher turnover and recruitment, leadership, and funding inequities across states and districts. When asked to describe the characteristics of schools likely to be identified as needing comprehensive support and improvement, one interviewee said:

“ These schools are historically underfunded. They are denied all the supports you would need. ... The problems they face are largely outside of their control, so their inability to hire the best teachers [and] implement the most effective interventions are largely a result of the underinvestment and lack of support from the districts and the states. From that perspective, we take the highest-needs students, we concentrate them in schools with the least power, and then we look at them and say, ‘[Come on,] schools, get your act together.’”

Although they are not issues that schools can address alone, root causes include challenges in students’ households and communities that can affect educational outcomes and ultimately school performance, such as:

- **Neighborhood and household characteristics:** Neighborhoods with high crime and unemployment rates are associated with poor academic achievement.⁶⁰ Poverty significantly affects the financial, emotional, social, and physical resources available to children, as well as family and community expectations of achievement.⁶¹ Other neighborhood risk factors that affect academic achievement include housing quality, residential crowding, and neighborhood deterioration.⁶² Limited access to neighborhood resources such as affordable public transportation can also be a barrier to student attendance and parent involvement in school activities.⁶³
- **Housing instability and homelessness:** Homeless children and those who are “doubled up” with relatives or friends because their families cannot afford separate housing experience physical, developmental, and mental health issues and educational problems that affect academic achievement at much greater rates than children in stable housing.⁶⁴ Homelessness and housing instability are also associated with barriers to accessing school, such as commuting and enrolling, which results in more absences and less learning time.⁶⁵
- **Food insecurity:** Children living in food-insecure households are more at risk of being overweight or obese compared with those living in food-secure households.⁶⁶ These children also face limited availability of nutritionally adequate foods and balanced meals, and they often skip breakfast—a meal that is critical for children’s cognitive functioning and is especially important for students whose nutritional status is compromised.⁶⁷ School breakfast programs are beneficial to children’s academic performance by improving their capacity to learn and encouraging school attendance.⁶⁸ However, many students who are eligible for a school breakfast program and have access to one do not participate because they are not aware of the program, or because of timing and scheduling challenges, enrollment and administrative requirements, and stigma.⁶⁹
- **Community violence:** In HIA interviews, several respondents said that students in schools identified as needing improvement are likely to face more violence in their neighborhoods and that simply walking to school can be unsafe. Research shows that adolescents who are exposed to violence have a greater risk of developing

post-traumatic stress disorder symptoms and not performing well in school than are peers who are not.⁷⁰

- **Parent and family involvement:** The active engagement of a parent or adult with a child outside of the school day, in an activity that centers on enhancing academic performance, has a positive and significant effect on children's overall academic performance and reading achievement.⁷¹ Factors such as parental expectations, parenting style, home environment, discipline, and parents' educational attainment also affect children's academic achievement.⁷² In interviews for this HIA, respondents described the impact of low parental literacy on children's school readiness, as measured by language development. Time and resource constraints can serve as a barrier to parent and family engagement, particularly in low-income families.⁷³
- **Physical and behavioral health:** Health status can affect a child's attendance and academic achievement. The connections between asthma and absenteeism are well-documented, and a range of health issues—including psychological, emotional, and behavioral problems—are associated with a greater risk of dropping out of school.⁷⁴
- **Adverse childhood experiences:** Eviction and living in unsafe neighborhoods may cause children to live in a state of fear and have been shown to increase the risk of disruptive behaviors, unhealthy coping strategies such as drug use, and poor mental health outcomes, which can affect performance in school.⁷⁵

Evidence shows that disparities in academic achievement for students from various racial and ethnic backgrounds are strongly influenced by family poverty, inequitable school funding and resources, and teacher experience.⁷⁶ It is also well-documented that black, Latino, and American Indian students face more disciplinary actions in school, including suspension and expulsion.⁷⁷ A recent review of education literature found that suspensions may lead to a higher risk of academic underperformance for students of color.⁷⁸ Many interviewees also said that enforcing disproportionate disciplinary policies hurts these students' achievement. This is because it does not address root causes of behavior, such as learning disabilities, and contributes to chronic absenteeism through out-of-school suspension, seclusion, and restraint tactics. English learners often face challenges that can affect their academic performance, such as adjusting to new instructional techniques and school environments, and transferring between schools more frequently than other students.⁷⁹ Evidence also shows that students with disabilities and LGBTQ youth disproportionately experience negative school climates and bullying, which can affect academic performance and health.⁸⁰

Poverty and instability in families and communities influence educational and health outcomes. For example, students who live in poor-quality or unsafe housing are at greater risk of having asthma and other respiratory conditions, as well as increased stress and other mental health problems.⁸¹ Because students attending identified schools are disproportionately from low-income households, research suggests that these students are more likely to face dynamics at school and in their homes and communities that limit their ability to reach their full potential.

Figure 5

Student Academic Performance Is Affected by Issues Inside and Outside School

Factors influencing achievement



School characteristics

Many school characteristics affect students' academic achievement, including the physical condition of facilities; access to programs and services to meet student needs; the time students spend learning; and whether students feel safe, respected, and engaged.

People

The people involved in students' academic experiences, including teachers, school leaders, families, and specialized personnel such as social workers and counselors, play a critical role in supporting educational outcomes. For example, access to experienced and prepared teachers and family involvement in students' educational experiences support academic achievement.

Root causes

Several household, community, and societal factors—including housing instability, food insecurity, community violence, and household and neighborhood poverty—can be important drivers of educational outcomes. These root causes disproportionately affect low-income students, students of color, and English learners.

Student health

A student's health status can directly affect his or her attendance and academic achievement. For example, asthma is linked with chronic absenteeism, and a range of health issues are associated with a bigger risk of dropping out of school.

Funding

High levels of per-pupil spending are linked with better educational outcomes. Greater funding allows for smaller classes, more programming, higher teacher compensation, and other resources. Funding inequities across districts and states can lead to more teacher turnover and recruitment problems, which hurt student achievement.

Source: Miami-Dade County Public Schools, "Out-of-School Factors Affecting Academic Achievement," *Information Capsule 1004* (September 2010), <http://files.eric.ed.gov/fulltext/ED536510.pdf>

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How Root Causes Affect Achievement: Chronic Absenteeism

Students who are chronically absent—missing at least 15 days of school in a year—are at serious risk of falling behind. For example, they may not reach early learning milestones and are at greater risk of dropping out than peers with better attendance.

In the 2013-14 school year, more than 6 million students at public schools—14 percent—were chronically absent.⁸² Disparities exist among students based on race and disability status. American Indian and Pacific Islander, black, and Hispanic students are over 65 percent, 36 percent, and 11 percent more likely, respectively, to lose three weeks or more of school than their white peers.⁸³ Students with disabilities are almost 1.5 times more likely to be chronically absent than students without disabilities.⁸⁴

The data also show that chronic absenteeism is most common in high school, although there is evidence that children in elementary school also experience chronic absenteeism, suggesting a need for early intervention.⁸⁵ There are many reasons for chronic absenteeism, but poor health, limited transportation, and a lack of community safety stand out. These challenges disproportionately affect students living in low-income communities. In 2016, the Department of Education for the first time released these data from nearly every public school in the country, illuminating the magnitude and impact of chronic absenteeism.

Opportunities to identify and address root causes through needs assessments

The stronger a person's educational and academic record, the more opportunities he or she will have for a better-paying job and, in turn, access to safe and decent housing, nutritious food, and good medical care.⁸⁶ Adults who lack these things have poorer health overall, reflected in higher rates of injury, asthma, obesity, diabetes, and mental health conditions. Therefore, needs assessments and the resulting improvement plans are likely to improve public health if they boost the achievement of students attending low-performing schools.

However, the law does not specify the metrics that LEAs must examine as part of the needs assessment and does not require or encourage LEAs to examine root causes that influence student learning and academic indicators. School needs assessments typically include traditional academic data such as test scores and attendance, and focus on some aspects of the school and learning environment that can affect student performance, such as school leadership, the number of instruction days in a year, class size, and teacher preparedness.

To test the hypothesis that improvement plans achieve their objectives if they address root causes, the HIA process included a review of literature on factors that contribute to failed attempts to get underperforming schools back on track. The HIA identified this as a research gap in the field.⁸⁷ However, the evidence base makes clear the strong link between root causes and education, leading the HIA team to predict that a more systematic examination of these factors could bolster school improvement efforts.

In interviews for this HIA, respondents said many of the schools likely to be identified under ESSA have been struggling for years, despite improvement efforts, suggesting that traditional methods of assessing student and school needs may be falling short. Indeed, a recent evaluation of the School Improvement Grants program, which targeted \$7 billion to low-performing schools between 2010 and 2015, found that these improvement activities had no significant impact on academic performance, high school graduation rates, or college enrollment.⁸⁸ The program focused primarily on academic factors such as curriculum and instructional reform, increasing teacher and principal effectiveness, and increasing learning time.⁸⁹ It also allowed schools to use funds to address social, economic, and health factors affecting their students, but it is unclear the extent to which that has occurred. In some cases, it required or encouraged them to change the school's strategies regarding parent and community engagement, discipline, safe school environments, and nonacademic services such as counseling or mental health support. Researchers have observed that traditional methods to improve schools by concentrating on academic indicators have resulted in schools taking surface-level actions to make the problem less visible and then "implement[ing] a patchwork of ad hoc solutions they hope will prevent recurrence."⁹⁰ In most cases, the problems recur, and the schools that were identified as struggling remain on the list. Given the strong connection between root causes and educational outcomes, addressing issues contributing to poor results—the social, economic, and health factors that influence academic achievement—may prevent schools' being identified again as low-performing and lead to sustainable school improvement.⁹¹ However, estimating the costs of such efforts was beyond the scope of this HIA.

The Jennings School District in St. Louis County, Missouri, is an example of reaching this goal by addressing challenges that students face, in particular those resulting from poverty. Its superintendent took a holistic approach rather than focusing just on traditional turnaround interventions. Among other school improvement activities, she opened a food pantry, a shelter for homeless students, and a health clinic to address key issues affecting students. Donations from local businesses supplemented public dollars for these efforts. In 2012, the district had nearly lost its accreditation after receiving a score of 57 percent on state educational standards. Within two years, it improved to 78 percent. In 2015-16, the score rose again, to 81 percent. It now also has a 92 percent four-year graduation rate, and a 100 percent college and career-placement rate. While more work remains for academic improvement, the superintendent continues to harness the strengths of the district, its schools, and its community.⁹²

Improvement plans are only as good as the needs assessments that inform them. The assessments can provide useful information that school districts can act on, both immediately by themselves but also longer term in partnerships that leverage additional resources for children and youth. In a study of 45 North Carolina public elementary, middle, and high schools that completed needs assessments, 71 percent incorporated at least three-quarters of the resulting recommendations in their school improvement plans.⁹³

Because the law does not require that root causes be addressed in needs assessments and resulting improvement plans, LEAs are unlikely to incorporate them as indicators. This could ultimately limit the effectiveness of efforts to improve these schools. As one interviewee said: "It starts with the assessment piece. If you don't have an assessment that asks these questions, you won't end up with a plan that addresses these issues." Several participants also said that for the needs assessment to examine root causes affecting students, the data systems and templates provided by districts and states need to provide more guidance and flexibility. For example, several interviewees noted that the school improvement planning process in some states has given schools preset categories of goals and strategies, making it difficult to incorporate goals related to root causes and health and wellness.

Innovative approach

Colorado: Using Data to Improve Health and Educational Outcomes

The Center Consolidated School District, a small, rural district in south-central Colorado that serves a high proportion of English learners, is incorporating public health, education, and school policy data into district and school improvement planning. The district relies heavily on Healthy Kids Colorado Survey data that are collected every two years. Through a partnership with the University of Colorado, it also conducts a school climate survey every two years in grades four through 12 to identify needs and assess progress toward goals. After analyzing data on behavioral and mental health, student grades, and school performance, the district's health and wellness coordinator works with schools to set goals for their annual improvement plans, which are required for all Colorado schools and districts, and identifies strategies to achieve those goals. This initiative has been funded by grants from state agencies and nonprofit and philanthropic organizations. The inclusion of health data in this plan has important implications because the plan drives funding and resource allocation and guides programming decisions.

The district's use of data to propel decision-making is paying off. The community had been aware for years that it had a high teen pregnancy rate compared with surrounding counties. In 2007, the school district combined education and public health data sources and confirmed that not only was teen pregnancy prevalent, it was hurting academic performance and graduation rates. This data analysis also revealed high numbers of sexually active students who were not using birth control. The district engaged students, who offered insights on factors affecting their behavior, such as low parental support and depression. Students then worked with officials to develop a program to help parents build skills to better support their children, among other initiatives. The district also used the Colorado Comprehensive Health standards to implement an evidence-based curriculum for K-12 students to build life skills and knowledge about relationships and sex education.

In the years since, the teen pregnancy rate has been cut nearly in half. Although the national teen pregnancy rate has also fallen, district staff reported that its county experienced a greater drop than the state as a whole and several other counties in the area. The district's health and wellness efforts have yielded other tangible results: higher attendance rates, fewer students using substances and dropping out, and more students continuing to college. One district staff member said: "I know for our school district, even though I can't really directly say, that there is a definite correlation. We have had some of the highest growth within Colorado in academic performance, and I know that wouldn't have happened without the health and wellness work we are doing."

This case also highlights some of the challenges with collecting and applying comprehensive data on student education and health. Schools, students, and families pushed back when the district first conducted the surveys because of concerns about privacy and the time required. The district won their support by making clear the value of devoting time to data collection and how the results could be a useful tool to guide decisions that would improve academic outcomes. It also created systems to monitor compliance with local wellness policies. Schools may need coaching and support on how to analyze such public health data and address the findings.

In interviews for this HIA, stakeholders highlighted several examples of districts and states, such as Colorado and Arkansas, that are collecting data on a wide range of indicators that go beyond minimal requirements. However, several respondents predicted that high-capacity districts that are already examining root causes as core parts of school improvement efforts will continue to do so, while smaller districts with more limited capacity will not without federal or state support. Many expressed concern that because it was optional under the Department of Education's initial proposal to include locally selected indicators, districts will probably not include them, given competing requirements and limited resources. As one interviewee said, "Unfortunately, if you put the word 'voluntary,' things won't get done because so many things are report-driven. That is not a negative reflection on people; it is part of the system."

A few cautioned that examining root causes of academic performance will improve students' academic performance and health only if schools have the resources or partnerships in place to address identified needs. They cited school budget challenges, noting that when weighed against other priorities, health-focused efforts often don't rise to the top. Indeed, recent data show that K-12 public education funding has struggled to bounce back from the Great Recession. Nearly two-thirds of states provided less state funding per student in 2013-14 than they did in 2007-08, before the economic decline.⁹⁴ One interviewee expressed concern that when schools try to take on too much and expand beyond their core educational mission, student academic achievement can suffer, and so can health. Three participants captured these perspectives:

"[We] don't want to pile more onto schools' plates, but it is an opportunity for schools to think about how to help kids achieve at high levels and be career ready. It is not necessary that a school has to be responsible for fixing everything [that is] identified—but it can help them identify better, more effective strategies for addressing education."

"If a district goes through a process, and they identify a problem, but there aren't resources to address that, then what do they do?"

"We have schools that are doing such a terrible [job] of getting the school part of school right that to hand them more of children's lives is a terrible idea. But at the same time, kids need dental care, and a school is as good a place as any to provide [it]. They need access to mental health supports and laundry and family counseling. I'm hoping it doesn't become either/or, that either schools are about raising academic achievement or we meet the other obvious, critical, high needs of families."

One way for schools to address the potential burden but not stray from their primary mission of education is to partner with other agencies, nonprofits, or service providers. Schools cannot, and should not, address root causes alone. However, they can serve as a critical partner and convener given their important role in children's lives and in the community. The needs assessment process can be an important starting point for engaging partners and identifying community assets that can be leveraged to support school improvement efforts. From a long-term cost perspective, if students and schools are supported more comprehensively and therefore able to improve educational outcomes, communities are likely to have fewer costs associated with the use of social services and incarceration.⁹⁵ For example, students who drop out of high school are more likely to face unemployment, poverty, poor health, and incarceration and rely on social services than are their peers who graduate.

Innovative approach

Wisconsin: Hospital Addresses Roots of Health, Education Through Partnerships

In 2010, Children’s Hospital of Wisconsin began reaching out to low-income communities through its “partner neighborhood” initiative to improve children’s health. The hospital identified these neighborhoods by examining demographics and rates of health disparities and the resources available for this goal and broader community empowerment. In the years since, Children’s has partnered with nine elementary schools in three low-income neighborhoods in the Milwaukee school district. The hospital is helping them align available school, clinical, and community resources to promote and support student and school health.

Milwaukee Public Schools is the largest district in Wisconsin. Each of its schools completes a needs assessment and school improvement plan guided by the state’s Framework for Comprehensive School Health Programs. To help its partner schools meet health goals, a coordinator from Children’s has trained school staff in the Whole School, Whole Community, Whole Child model, which promotes coordinated efforts across school staff and programs, and keeps students’ needs at the center. Each school has designated a health champion to continue this work.

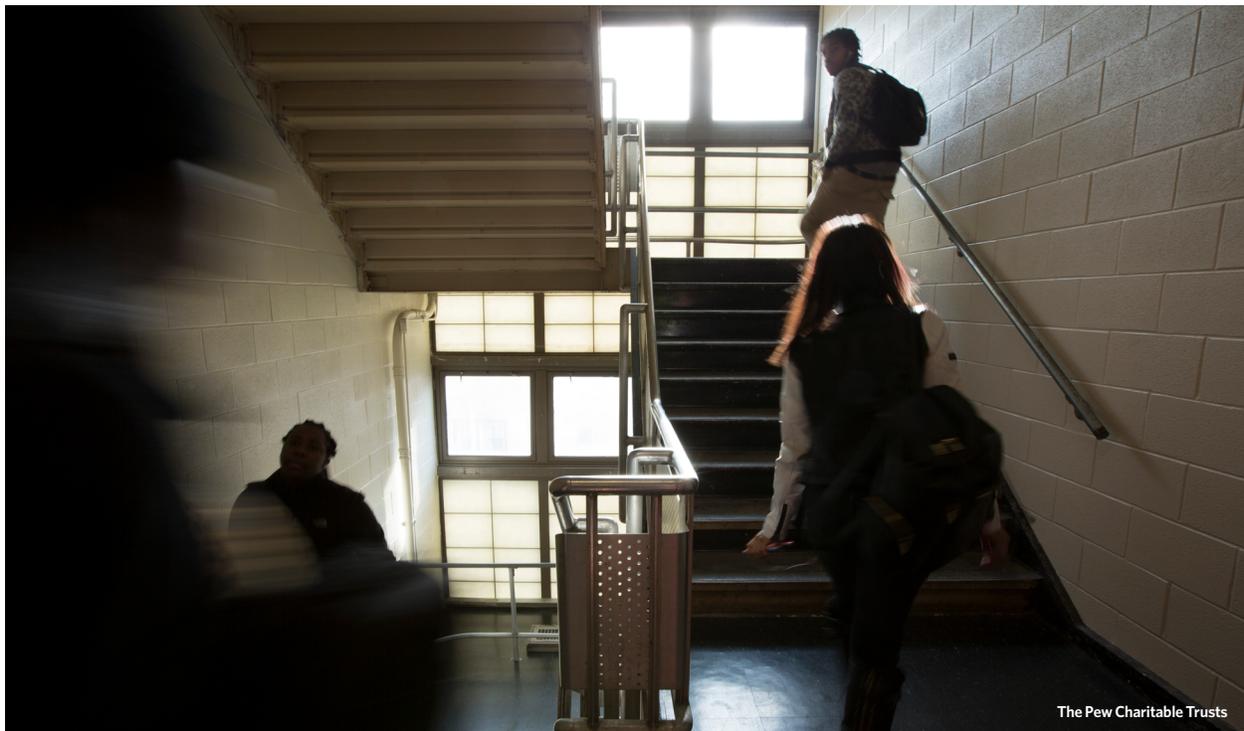
The hospital works with community partners to reach out to families and link them to resources to help them improve community safety and meet basic needs, including safe and decent housing and enough food. These partners—called community health navigators—work with school nurses, school health coordinators, social workers, foster care workers, and primary care providers to ensure that care for students is cohesive and successful. For example, a school nurse may alert a community health navigator if he or she is concerned that a child might be at risk for diabetes. Through conversation with the family, they may discover that a relative needs help with dental care, electricity bills, or job training. These relationships offer children and families comprehensive services that meet their needs. Through the combination of education and interaction with students, schools, and caregivers, Children’s has helped align resources to better meet student needs. At schools in this district, more children are filling their asthma medication prescriptions and students spend less time with school nurses and more in the classroom.

Schools’ ability to implement and fund health-related programs required by the district can be difficult. Children’s is helping them comply with requirements to have a school health advisory board or wellness team that meets regularly; design action plans around health, physical activity, and nutrition; and work with school nurses and health navigators to ensure that students are ready to learn.

Leveraging data and needs assessment findings to improve schools

In addition to examining important academic indicators, many schools are beginning to analyze student health issues as part of their improvement plans. For example, the Centers for Disease Control and Prevention’s 2014 50-state analysis of improvement planning efforts found that a median of 54.8 percent of high schools reviewed data related to health and safety, such as students’ physical activity and whether schools offered social services and a healthy school environment.⁹⁶

Although these data are important examples of nonacademic indicators, they do not fully capture the range of root causes that can affect student performance. Schools can build on this work by examining external factors—such as poverty—that affect their students. Interview respondents indicated that most schools complete their needs assessments using a combination of data from the state, the district, and the school itself. One respondent said school information is the most useful because other data sets have geographic boundaries, such as county or census areas, that do not line up consistently with the school population or cannot be used at small enough scales to draw meaningful conclusions. One interviewee said health indicators should be clearly linked to academic metrics to be useful. For example, gathering data on an acute illness when it keeps the student from attending school can inform academic planning and intervention. Regardless of what additional information is collected, determining appropriate data and learning how to collect and analyze it—and having enough staff to do so—remain a challenge. And applicable data are often limited. Similarly, interviewees said privacy concerns of students and families may limit schools’ ability to collect information related to physical and mental health. Some states have responded to that challenge by committing resources to developing and expanding more secure statewide data collection efforts. (See Innovative approach on Page 22.)



Innovative approach

Colorado: State Systems to Identify School Needs, Ease Data Collection

Colorado is among a handful of states working to improve student health and academic achievement by helping schools and districts examine the needs and tailor programs to best meet them. The Colorado Department of Education (CDE) requires all districts and schools to submit improvement plans and provides a standardized process and uniform templates for them. CDE then helps the districts and schools meet performance goals with technical assistance and training. All improvement plans are published online to promote transparency and encourage public participation.

Colorado requires that student health be included in academic accountability and improvement planning and has made funding and technical assistance available to help schools carry out this mandate. CDE's Office of Health and Wellness spearheaded efforts in 2013 to collect relevant health and wellness data—reducing the burden on schools. Before then, schools were inundated with academic and health assessments and could not accomplish all they wanted with the data available. Colorado committed funds to expand a survey that the CDC asks states to conduct on youth and adolescents. The Healthy Kids Colorado Survey collects health information biennially from Colorado public school students. The survey allows for both state and regional estimates and is used to inform research, programming, and resource allocation. For example, school districts have used the data to select and implement evidence-based programs to address identified student needs, develop local wellness policies, and secure grant funding for new programs. And local public health departments and community coalitions have used them to shape prevention programs to address student health issues identified through the survey.⁹⁷

These data have also been used to identify issues that some subpopulations of students face at disproportionate rates. For example, CDE added questions about sexual orientation to the survey and found that LGBTQ students were much more likely to report that they did not feel valued or respected at school and to use alcohol and drugs. This is one example of how more holistic data have helped staff and administrators uncover challenges and address them.

About the same time, the Office of Health and Wellness launched Colorado Healthy Schools Smart Source, a tool that helps public schools inventory their health efforts. It helps administrators and others understand school health policy and practice, and can be used in conjunction with the Healthy Kids survey to explore the effect of policies and interventions on health outcomes. Smart Source is aligned with both the Whole School, Whole Community, Whole Child model and the Coordinated School Health model, and assesses school health efforts across nine issues: general health policies and practices; nutrition; physical education and activity; health education; health services; counseling, psychological, and social services; healthy and safe school environments; family, community, and student involvement; and staff health promotion.

Continued on next page

The Healthy Kids Colorado Survey and Smart Source are intended for use in district and school improvement plans. The data captured in these surveys can be used by schools, state and local agencies, and community partners to identify needs and design appropriate strategies to address them. It can also help students, parents, teachers and staff, administrators, and community partners learn how to support better health and educational achievement. This example illustrates how a state's decision to collect data can facilitate LEAs' use of root cause information in needs assessments.

Several respondents described challenges regarding data privacy in collecting and analyzing health-related indicators to inform school improvement planning. These problems have implications for collecting data on root causes. For instance, important data about poverty, food insecurity, and health insurance may be most useful for schools and LEAs when measured at a neighborhood level—as opposed to aggregated across a district or county—which can present challenges for maintaining confidentiality. The Department of Education has helped to address these concerns by releasing a toolkit that highlights strategies for overcoming confidentiality and data-sharing challenges.⁹⁸ The department should continue to expand this toolkit to guide data sharing on root causes.

Through partnerships with public health and other organizations, schools can access data to help document student health problems and their relationship to educational outcomes. Schools and LEAs can leverage a number of resources and assessment tools to incorporate root causes into their needs assessments and improvement plans. For example:

- Approaches and tools such as root cause analysis, the CDC's School Health Index, ASCD's School Improvement Tool, the Department of Education's School Climate Survey, the Wellness School Assessment Tool (WellSAT), the Center for Health and Health Care in Schools' "Partner, Build, Grow" action guide, and the Strengthening Partnerships: Community School Assessment Checklist from the Coalition for Community Schools and the Finance Project could serve as useful resources for districts.
- Sources such as County Health Rankings and Roadmaps and data from Community Commons and the National Neighborhood Indicators Partnership can illuminate community characteristics affecting health and education, such as poverty, housing instability, and crime.
- Some states are partnering with local districts to make sure that Youth Risk Behavior Survey data are used effectively to show connections between student behavior and academic performance, and to drive decision-making for school improvement plans. These data are available for most big cities but are less available in smaller, rural communities.
- Nonprofit hospitals collect and make public a broad array of data as part of their required community health needs assessments that could be used in school-level needs assessments.⁹⁹ However, one interview respondent from a state department of health noted that few districts and schools are using those data.
- A number of states have developed and issued guidance to LEAs on how to conduct comprehensive needs assessments that include health and wellness. Decision-makers and leaders can examine the state, district, and school innovative approaches provided throughout this HIA to better understand opportunities to build on and scale existing efforts.

Needs assessment and health: Stakeholder engagement

Role of engagement in educational and health outcomes

Parent and family involvement in schools boosts academic achievement and encourages students to raise their educational aspirations.¹⁰⁰ Several studies that examined the successful turnaround of low-performing schools or compared them with high-performing, high-needs schools have shown that parent engagement is not only a critical part of student achievement, but it also affects overall school quality and performance.¹⁰¹ In interviews for this HIA, several respondents said it is a challenge to engage low-income families that may have had negative interactions with schools. Others said many administrators and teachers lack the time, capacity, or formal training to successfully engage families.

Community partnerships can also play an important role in supporting student educational achievement and school performance. Although the size and scale of these partnerships can vary by school, district, and state, research shows that the quality of collaboration is most important.¹⁰² One example of effective community-school partnerships is the Communities in Schools model, an approach to dropout prevention that places coordinators in schools to assess the needs of students and their families and establish local partnerships to address identified issues.¹⁰³ A five-year national evaluation of this model found that schools that use it have fewer dropouts and higher rates of graduation, attendance, and academic achievement.¹⁰⁴

Evidence suggests that stakeholder engagement can improve factors important to health. A systematic review of research on community engagement initiatives found that most stakeholders involved experience benefits in terms of physical and emotional health and well-being, and increased self-confidence, self-esteem, social relationships, and individual empowerment.¹⁰⁵ Evidence suggests that stakeholder engagement in decision-making can strengthen connections between communities and decision-makers, decrease exclusion of population groups, and positively affect school environments.¹⁰⁶ Several interviewees also described the importance of including students in stakeholder engagement efforts and decision-making at the school level.

A systematic literature review found that when students meaningfully engage in school or class dialogues with administrators and other decision-makers, such as by participating on school or student councils, they build life skills, boost their self-esteem, and improve their relationships with adults.¹⁰⁷ These conclusions are supported by research by the Search Institute, which has found that traits associated with student engagement—such as empowerment, responsibility, planning and decision-making, personal power, and sense of purpose—help young people develop into successful and contributing adults.¹⁰⁸

In interviews for this HIA, respondents said the types of stakeholders that schools engage with vary. Rural school districts, for example, have fewer potential partners than do urban schools, which work with many nonprofits that support educational outcomes. But rural districts often develop strong collaborations to leverage their limited capacity and funding. Some respondents said LEAs and schools often actively engage only with staff and parents and other stakeholders singled out in federal or state requirements—and that interaction can be minimal. Respondents indicated that stakeholders need to be involved early in the needs assessment process to be included in a meaningful way. Interviewees also highlighted several challenges schools and LEAs face in engaging stakeholders: cultural differences, language barriers, ability to listen to and address multiple and sometimes diverging perspectives, and limited time and capacity.

Innovative approach

Texas: Using Data to Address Chronic Absenteeism

E3 Alliance is a nonprofit organization focused on improving educational outcomes for students in five counties in central Texas.

School districts in Texas, as in some other states, are funded based on the average daily attendance of students each year. In 2011, pending cuts to the state education budget prompted E3 Alliance to partner with philanthropic leaders and school superintendents to better understand the most pressing issues facing schools in the region. Superintendents unanimously agreed that a regional student attendance campaign was needed. Students cannot learn if they are not in school; teachers cannot teach if the students are not there; and every day that a student misses costs schools money. These conversations prompted E3 Alliance to launch the Missing School Matters public awareness campaign to increase student attendance by an average of three days per student per year, which would not only increase student achievement, but also bring an additional \$35 million to central Texas schools.

Missing School Matters includes an annual attendance kickoff celebration, local advertisements, celebrity public service announcements, and mailings to families about the importance of children being in school. E3 Alliance also partnered with school nurses to write short, comprehensive guides for families about managing student attendance.

In addition to the public awareness campaign, E3 Alliance conducted research in 2013 to understand the root causes of chronic absenteeism. This nine-school representative study, funded by St. David's Foundation and Central Health, allowed E3 Alliance to more comprehensively collect data on attendance and reasons for absences. Why are which students absent, and where? The research found that the primary reason students missed school was acute illness and that absences matched spikes in reported flu cases. The study also found that central Texas not only had more absences than the Texas average in every grade, but also that low-income students in this region had lower attendance than those in any urban area in the state. In 2014, as a result of this study, E3 Alliance launched the Kick the Flu campaign to provide in-school vaccines at no cost to districts or families. It began in 56 elementary schools. Two years later, it had expanded to more than 350.

Since Missing School Matters was launched in 2011, overall student absences have, for the first time in two decades, dropped even with continued increases in school enrollments, saving central Texas schools \$33 million from decreased absences, with \$8.5 million saved in 2015-16 alone.

Partnerships have been integral to E3 Alliance's success. Each school district had strategies to combat chronic absenteeism, but those efforts were independent and often did not address the root causes of these absences. By working with community and business partners, E3 Alliance has helped amplify the message about school attendance, increase community awareness, address root causes of health and absenteeism issues, and get students back in the classroom.

Opportunities to promote stakeholder engagement through needs assessments

Given the clear importance of engaging families, teachers, principals, and other stakeholders in efforts to improve schools and boost student achievement and health—and the factors inside and outside of school that affect academic performance—the HIA findings supported the proposed requirement that needs assessments be done in partnership with these groups. Moreover, evidence shows that the process of engaging stakeholders can promote health by facilitating improvements in educational outcomes, strengthening social relationships, and supporting individual empowerment.

In interviews for this HIA, nearly all respondents cited the importance of engaging a broad array of stakeholders in school improvement efforts. However, they described a wide variation in the extent to which schools and LEAs are likely to do this when they conduct needs assessments and develop improvement plans. As one interviewee said:

“Most schools are at the informing stage, not engagement. It’s scary for schools to turn that around and really listen. For parents in some of these areas, they may not have had a positive experience with their interactions with the school, or their student is struggling. There is no training on parent engagement or parent-teacher assessment. If we can’t get to a strong student-teacher relationship, then how do we get to this bigger picture when the parent’s first interest is their own child?”

Others expressed concern that schools and LEAs are not likely to engage stakeholders—students, families, or community—from or representing subgroups with the greatest needs, the very students these plans are intended to assist. As one interviewee said:

“Schools are set with old ways of engagement. ... They need to hear from parents who might be on the fringe of the community, [parents who] probably have some of the highest needs [in order to] feel they’re getting the support [they need] to raise their children.”

The Department of Education can help schools identify and respond to their students’ needs by encouraging LEAs to partner with multiple stakeholders, such as students, specialized instructional support personnel, community representatives, and individuals knowledgeable about how to meet the needs of specific subgroups. Involving these partners at the needs assessment stage will lay the foundation for future partnerships and resource sharing during improvement planning and potentially will expand the school’s ability to address student needs. The findings also suggest that the health benefits of stakeholder engagement could be enhanced when partners other than teachers, principals, and parents also participate in the process. Additional potential stakeholders include public health departments, local federally qualified health centers, hospitals, health and mental health providers, managed care organizations, and public health-focused community organizations. LEAs and schools will need to determine which organizations will be the most appropriate partners based on their local context and needs.

In interviews for this HIA, some participants described how engaging with families, students, and other stakeholders in their needs assessment and school improvement efforts can directly promote health. For example, one respondent described how family involvement in these activities has led to the development of joint use agreements with local schools—agreements that allow the use of school facilities for recreational activities—which have helped students and families become more physically active.

The Department of Education, by encouraging LEAs to engage these important stakeholders in needs assessments, could help ensure that the process includes perspectives on a broad range of social, economic, and academic factors that may contribute to student learning and other key academic metrics. The department and states could give LEAs guidance and best practice examples for meaningful stakeholder engagement to enhance their school improvement efforts in terms of educational outcomes and health.

Innovative approach

New York: Engaging Families Through the Whole Child Model

The Whole School, Whole Community, Whole Child (WSCC) model is an evidence-based approach to better address students' physical and emotional needs by coordinating the school and local community. Buffalo (New York) Public Schools adopted it in 2013 after a decade of laying the groundwork. This involved creating working groups and holding meetings to develop and adopt a district wellness policy, leveraging public and private funding, and hiring personnel to spearhead the effort. Buffalo hired a district wellness coordinator, funded by a New York state school health grant, to: expand the role of health-related services in the schools, which led to the implementation of WSCC; implement a comprehensive district wellness policy that aligned various departments; and collect student health data through the Youth Risk Behavior Survey.

In Buffalo, families play a significant role in shaping school activities, and WSCC provides a structure to engage them. A key part of the model is shared responsibility. Families commit to supporting their child's learning in multiple settings inside and outside the school, and school staff members create an environment in which families feel welcome and meaningfully involved. The Community Health Worker Network, funded by a grant, collaborates with the district wellness coordinator to train parents over the summer to work on school wellness teams. Parent facilitators are paid \$3,000 to work 30 hours a month to enhance and support family involvement initiatives that focus on improving student achievement. After 10 parents and 10 students participated the first summer, the network persuaded more families to participate the following summer, fall, and spring. Participation has since more than doubled. Engaging more families through this model led the district to reinstate salad bars in every school, explore reinstating recess in several schools, and add 30 physical education teachers.

Family engagement in Buffalo public schools also led the district to implement a community schools model in 13 schools in fall 2016. The Strong Community Schools initiative stemmed from parents' desire to have their children in neighborhood schools rather than across town in schools categorized as failing. This distance, and disconnect from these schools, contributed to limited parental involvement in their children's education. With a new superintendent in 2015 and a new state law supporting the funding for community schools programming, this option was embraced by the Buffalo community, educators, and parents. Like WSCC, Strong Community Schools aims to build bridges between families and communities to improve learning and health and increase parent engagement. Participating schools partner with community- and faith-based organizations, colleges, city and county services, and businesses, which will help provide housing, parent and adult learning opportunities, and other community services. Implementation of WSCC set the groundwork, climate, and infrastructure for these schools to transition to community schools in the 2016-17 school year in Buffalo.

Leveraging partnerships to support school improvement

Many schools, districts, and states have developed strong partnerships to help implement school improvement activities and address student needs identified through local assessments. This includes working with health departments, community health workers, local hospitals, cooperative extension programs, mental health service providers, local YMCAs and Boys & Girls Clubs, police departments, local businesses, and faith-based organizations to promote the health of students and families.

Several interview respondents stressed that although a school or district may examine root causes affecting educational and health outcomes as part of a needs assessment, it is not accountable for addressing all identified needs. Indeed, schools and LEAs cannot address these issues alone. Several people said schools should stay focused on educational goals and let partners address social, economic, environmental, and health challenges that may affect academic performance. As one said:

“I think the biggest thing that a partnership between a school and an outside organization can bring is that it allows [the] school to focus on [its] number one priority—which is education—and it allows the organization to supplement the educational goals with their programming. Schools don’t have to become health experts or food insecurity experts or transportation experts. They can let the experts come in and work with them, and they get to be the facilitator.”

In addition, interviewees described the important role of public health partners in collecting and producing data in a form that is meaningful for schools and LEAs to act on. Two participants had these comments:

“ I have never once heard anyone argue over the fact that healthy students learn better. But we’re not equipped to allow schools to reach a different vision. If you’re going to be a champion for change, you can’t just come in and say that you need to change this—you need data measures that demonstrate what the issue is and how your proposal is going to change [academic] outcomes.”

“To be collected, these indicators have to [relate to] accountability measures and directly impact student performance. It has to be related to something concrete that the school leadership can get their head around and can act on immediately with minimal resources.”

Several of the state and local examples, presented earlier in the document and in the appendices that follow, show how stakeholder engagement and partnership can be used to move from identifying needs to taking actions to improve schools. These examples, among others across the country, can be used to support other schools, districts, and states as they implement ESSA.

Actions to consider

The evidence collected from a review of the literature, interviews, and research on state and local examples suggests that state educational agencies, LEAs, schools, the federal Department of Education, and public health and health care stakeholders could take the following steps to improve implementation of the needs assessment requirements under ESSA.

State educational agencies can:

1. Partner with other state agencies, such as public health departments or departments of social services and state Medicaid agencies, to develop or enhance data collection tools and systems that can help districts and schools examine data on a broad range of social, economic, and environmental factors affecting health and education and their connection to required academic indicators. These tools and systems should aim to:
 - a. Ameliorate the challenges that districts and schools face in collecting data for required needs assessments.
 - b. Streamline and reduce the data collection burden for districts and schools.
 - c. Result in strategic data collection that benefits and is valuable to schools and LEAs.
 - d. Provide a template with sufficient flexibility to enable districts and schools to be innovative and responsive to local needs, such as providing a menu of options that districts and schools could choose from.
 - e. Assist school and district leaders in understanding the connection between suggested metrics and educational outcomes.
2. Provide guidance to districts and a template for conducting school needs assessments that examine root causes of student performance and their connection to required academic indicators. States could also urge districts to address student health and wellness and respond to the results of these assessments through local partnerships. To facilitate data collection and alignment with other aspects of ESSA implementation, the needs assessment templates could complement and build upon other required data collection efforts, such as local report cards.
3. Provide guidance to districts to assist them in meaningful and authentic engagement with stakeholders, including students, and model this engagement as they develop their state plans under ESSA.
4. Ensure that improvement plans for schools identified as low-performing are responsive to the issues found through the needs assessment process. And SEAs should help districts translate needs assessment findings, including those related to root causes, into effective plans. For example, states could:
 - a. Provide a framework for these plans that provides enough flexibility to address issues identified in the needs assessments and explicitly include references to social, emotional, and physical health issues.
 - b. Partner with state and local public health, social service, and health care agencies to review, provide feedback, and offer assistance on plans for identified schools to ensure districts are capable of responding to problems identified in the needs assessment and use evidence-informed strategies in their plans.
 - c. Encourage education leaders to highlight the value of addressing root causes in improvement plans, including clear and consistent talking points about how student health strategies will help schools meet indicators on the state's accountability systems.

Local educational agencies can:

1. Select indicators of local relevance when conducting needs assessments. LEAs should work with local stakeholders to include relevant indicators in the needs assessment process and to develop improvement plans that address priority root causes identified through the needs assessments, while avoiding duplicative effort or burdens that could exacerbate existing resource inequities among schools.
2. Support all identified schools in consistently collecting metrics reflecting local priorities to facilitate school comparisons and to support districtwide efforts to address priority issues affecting students and their families.
3. Facilitate partnerships between schools and organizations that address key factors affecting education and health—such as housing, transportation, and mental health—to identify and address student needs. Potential tactics include writing memorandums of understanding, creating districtwide coalitions and local wellness policies, supporting school health teams, and developing staff positions responsible for connecting schools with available community resources and programs to address identified student needs.
4. Work with schools to ensure that the needs assessment and resulting improvement process identifies and leverages the strengths and assets of students, families, staff, and the broader community. Once these strengths are identified, districts can use them to support school improvement.

Schools can:

1. Leverage partnerships to address social, economic, environmental, and health challenges that affect their educational goals. Building on the Department of Education's previous guidance, schools can work with relevant local partners to share local data on root causes of educational outcomes, providing mutual benefits.
2. Work with their LEAs to involve a broad range of stakeholders in collecting data for needs assessments, analyzing the resulting data, and developing strategies to address identified needs. At a minimum, these stakeholders should include students, instructional support personnel, families, and key community organizations and local agency partners. Schools should consider using existing mechanisms for collecting information from families to gather relevant data and information from parents outside of the school setting. This could include engaging local partners and service providers who have frequent contact with students' families.
3. Communicate the needs assessment findings and corresponding school improvement activities in an accessible way, for example, by ensuring that findings are translated into the primary languages spoken by students and their families, and making them widely available through web-based or social media platforms.
4. Work with their LEAs and SEAs to develop ways to conduct needs assessments and implement improvement plans, such as helping teachers pursue professional development that responds to identified needs and creating cross-functional teams and mechanisms for ongoing student engagement in improvement efforts.

The Department of Education can:

1. Issue guidance to LEAs, either directly or through SEAs, to help them:
 - a. Examine a broad range of in- and out-of-school factors affecting student performance that contribute to the reason(s) a school was identified for comprehensive support and improvement.
 - b. Use the needs assessment findings to create local partnerships and develop and implement improvement plans.

- c. Engage a broad group of stakeholders in a meaningful way when developing school needs assessments and improvement plans, such as students, specialized instructional support personnel, community representatives, families, and individuals knowledgeable about how to meet the needs of specific subgroups of students.
 - d. Examine whether they have the available resources, such as infrastructure and staffing capacity, to address needs identified in the assessment.
2. Encourage SEAs to:
- a. Emphasize the importance of examining root causes affecting student performance, such as neighborhood conditions, as well as in-school health factors like physical activity and healthy eating, and including them when designing school needs assessments. When possible, such factors should be aligned with existing state and district indicators and accountability metrics.
 - b. Address identified needs by leveraging existing efforts and helping LEAs establish partnerships. For example:
 - i. The Department of Agriculture released a final rule in July 2016 that strengthens requirements for ensuring transparency and stakeholder engagement in the development of local wellness policies and requires a triennial assessment of these policies.¹⁰⁹
 - ii. Many schools will be conducting needs assessments with a focus on well-rounded educational opportunities and healthy and safe school environments as part of their applications for funding under Title IV, Part A. LEAs can build upon these partnerships and activities in conducting needs assessments for identified schools.
 - iii. The Department of Education could build on prior collaborations with the Department of Health and Human Services and issue joint guidance to LEAs to support them in accessing existing data sources, addressing data privacy issues, and leveraging health and wellness activities already underway in their districts.
 - iv. Starting with the 2016-17 school year, state child nutrition agencies should post the results of each school district's administrative review on their websites. Conducted once every three years, these reviews cover all aspects of how the district is implementing federal school meal programs, including participation rates and compliance with meal patterns, food safety, local wellness policies, competitive food and fundraising policies, and civil rights. LEAs could incorporate these data into their needs assessments.
3. Coordinate with other federal agencies to include health effects in monitoring and evaluation research related to ESSA implementation (see next section).

Public health and health care stakeholders can:

1. Work in partnership with schools and LEAs to collect and disseminate information that is useful to their educational agency partners, including linking public health data to educational outcomes for which schools, districts, and states are accountable, such as attendance and academic performance. For example, under ESSA, schools will report data on measurements of school climate and safety, such as chronic absenteeism and discipline rates, for use in state and local report cards. Public health and health care stakeholders can support schools in understanding root cause and health-related issues affecting their performance on these metrics. This work should be aligned with existing efforts to collect and use data, such as the community health needs assessment process and school surveys like the Youth Risk Behavior Survey. They should also

develop tools and platforms, such as data dashboards (tools for visualizing and communicating important data), that help schools align available public health data within their district boundaries.

2. Work with education leaders to conduct more research on the educational and financial impacts of school improvement interventions focused on root causes in educational settings.
3. Clearly convey, in their health and education efforts, how a broad array of determinants can affect academic achievement and school performance.
4. Consider sharing personnel, such as public health workers, across schools or LEAs to address the issues identified by needs assessments.
5. Seek opportunities, by nonprofit hospitals and health departments in close partnership with schools and LEAs, to coordinate and leverage community health improvement and community benefit activities to support improvements in local educational outcomes.
6. Seek to align priorities of local and state funders working at the intersection of education and health with those identified by schools and LEAs through their needs assessments and improvement plans.

Monitoring and evaluation

The team conducted the HIA on the draft regulations of ESSA's Title I, Section 200.21(c) School-Level Needs Assessment, as well its future implementation, and submitted comments to the Department of Education on Aug. 1, 2016. On Nov. 29, 2016, the Department of Education released final regulations for Title I accountability and state plans, under which the school-level needs assessment provision falls.¹¹⁰ Of the recommendations the team made to the Department of Education regarding changes to the regulation's language, the agency partially adopted two. Specifically, the department revised the proposed regulations to:

- Require that when LEAs conduct needs assessments for schools identified for comprehensive support and improvement, they consider a school's unmet needs, specifically related to students, school leadership and teachers, the quality of classes offered, family and community involvement, school climate, and the distribution of resources.
- Encourage the involvement of students, as appropriate, in developing school improvement plans.

However, as previously mentioned, Congress voted in March 2017 to repeal the final regulations on accountability and state plans under Title I, including these revisions. Nevertheless, because needs assessments are still required for low-performing schools, SEAs, LEAs, schools, the Department of Education, and public health and health care stakeholders can still use the 21 actions proposed in this HIA to guide implementation of ESSA requirements. The team developed a monitoring plan that can be used by state and local educational agencies, schools, and the department to track the health-related outcomes related to the implementation of the needs assessments. (See Appendix E.)

Conclusions

For years, high-need and low-performing schools have been required to develop improvement plans. Despite great intentions and enormous efforts, many of the same schools and student populations still face disparities in educational outcomes. The new needs assessment requirements under ESSA provide an opportunity to help schools and LEAs use data to drive their school improvement efforts. The literature, interviews, and state and local examples examined in this HIA indicate that by identifying and addressing the broad range of factors inside and outside of school that influence academic achievement and school performance, school needs assessments and subsequent improvement plans can enhance the likelihood that every child in the United States will receive a quality education, with potential benefits to the student's health and equity.

States can encourage districts to conduct needs assessments that address root causes affecting children's ability to do well in school—and assist those that do. The Department of Education can support this approach by giving SEAs, LEAs, and schools more training, technical assistance, and capacity building.

The HIA findings also suggest that broad stakeholder engagement is an essential part of improving schools and boosting student achievement. By encouraging its inclusion in needs assessments and through ESSA, states and the Department of Education can improve outcomes for students and their families that are tied to better health and academic achievement.

LEAs and schools face significant resource and capacity constraints. The research reviewed in this HIA revealed that, to help implement needs assessments, SEAs and the department should avoid duplicative efforts or the imposition of burdens that could exacerbate inequities in school resources. States and the department can guide districts in how best to maximize resources and opportunities for partnerships. For example, required pre-service and professional development training for staff members provides an opportunity to build their capacity to identify and respond to root cause issues that affect their students.

By better addressing these root causes when developing and implementing school improvement plans, the nation's public education system and its partners can truly achieve what the law intends: that every student succeeds.

Appendix A: Glossary

Elementary and Secondary Education Act (ESEA) is the nation’s foundational education law. Enacted in 1965, it regulates federal funding for primary and secondary education. The original intention of ESEA was to improve educational quality for students from lower-income families by providing federal funds to school districts serving low-income students.

Every Student Succeeds Act (ESSA), passed in 2015, is the most recent reauthorization of ESEA. The law shifts more decision-making power and accountability to states and emphasizes funding for the lowest-performing schools and subgroups of students.

Local educational agencies (LEAs) are entities such as a public board of education or other public authority that operates local public primary and secondary schools. LEAs can be at the city, county, township, or school district level or other political subdivision, or a combination of school districts or counties.

The No Child Left Behind Act was the 2002 reauthorization of ESEA. It increased the federal role in public education by emphasizing academic accountability and testing standards and requiring schools and educational agencies to demonstrate improvements in academic performance.

Root causes are factors external to the classroom that affect a student’s academic performance, such as housing instability, food insecurity, community violence, and health problems.

Social determinants of health, also known as health determinants, are the social, economic, and environmental conditions in which people are born, live, learn, work, play, worship, and age that affect quality-of-life outcomes and health risks.

Stakeholder engagement is the ongoing and intentional involvement of people or entities that may be affected by changes to or decisions regarding schools and the education system, such as families, students, school staff and leadership, community-based organizations, businesses, and colleges and universities.

State educational agencies (SEAs) are the state-level government bodies, often called the state department of education, responsible for implementing state educational policies and providing resources and technical assistance to local educational agencies, schools, and residents.

Whole School, Whole Community, Whole Child (WSCC) is an educational model that aims to address the physical, social, mental, and emotional needs of students by coordinating and unifying the school and local community in which students learn. It builds on the CDC’s coordinated school health approach for integrating health-promoting practices in the school setting.

Appendix B: Additional innovative approaches

Arkansas: Helping Schools Improve Student Health

In 2003, Arkansas became a leader among states in using legislation to promote student health. Under a law it passed that year to combat childhood obesity, schools must create child health advisory and local district wellness committees; reduce access to unhealthy foods and beverages; and report body mass index for each student and results from the CDC's School Health Index survey. Schools are also required to incorporate health and wellness goals and objectives for nutrition and physical activity in the annual improvement plans they submit to the state.

Arkansas, unlike many states, also requires all public and charter schools to complete an annual comprehensive needs assessment and improvement plan, regardless of their performance status. The plans must include evidence-based actions to boost student achievement for the subsequent school year. Requiring that health and wellness goals be included in these plans provides an opportunity for schools to improve health and increase academic achievement. The school improvement plans also function as each school's application for applicable federal funds and programming distributed by the Arkansas Department of Education (ADE).

Although the requirements for improvement plans have increased schools' attention to and responsibility for student health outcomes, ADE has found that there has been little connection between school health and wellness priorities and other goals. In October 2016, in an effort to infuse health and wellness into schools' priority goals and bridge gaps identified in needs assessments, ADE's Departments of School Health Services and School Improvement and Child Nutrition began partnering with the Arkansas Department of Health's community health promotion specialists and community health nurse specialists to evaluate each school's wellness priorities. They help schools establish smarter objectives and promote incremental change. School improvement plans should encourage inter- and intra-agency collaboration since schools are also now required to identify their wellness committee chairs.

New Jersey: Using Partnerships to Promote Healthy School Climates

The School Culture and Climate Initiative, a partnership between the College of Saint Elizabeth and United Way of Northern New Jersey, is helping more than 40 schools in the northern part of the state complete a comprehensive needs assessment. Based on identified needs, it is also helping them build a better school culture and climate and improve students' social-emotional skills and health through school improvement plans. The initiative helps schools understand the importance of building an infrastructure that supports sustainable progress in reaching goals. It has been successful because it works with schools that are ready to devote time and resources and recognizes the different needs of schools and tailors its work accordingly.

This has included first identifying how much capacity schools have at the start of the partnership. For some, this means supporting initiatives that do not require additional time or resources. For example, one school in New Jersey began its efforts by simply putting the name of every student in the building on a separate note during a staff meeting. The adults then described their relationship with the students, from knowing them really well to knowing just their name. School climate and the level of student engagement can affect academic achievement and mental and physical health. This activity launched a needs assessment, as the school was able to identify students who were disconnected or disengaged and ensure that programming and staff interactions were directed toward them. Although this process did not capture all of the needs and root causes of academic achievement in that school, it was a good starting point to create an inventory of assets and needs that can be built upon to improve students' social-emotional skills and health.

Through partnerships with local health care systems, the School Culture and Climate Initiative has increased schools' focus on health without adding burdens on staff and resources. Once the initiative identifies schools that are ready to participate, it builds partnerships with school leaders, provides training to introduce goals and its process for school staff, and forms teams that examine staff and student climate and health. A consultant is assigned to each school and helps the teams determine a vision for their ideal school environment. The consultant also helps them create an inventory of existing assets and programs that address the school's culture, climate, and health. Students, staff, administrators, and families then complete a school climate and health survey to measure their perception of the school environment. The activities and survey help guide school improvement plans for both student and staff teams. This approach takes into consideration various school priorities and needs, while helping all to pursue positive and healthy environments.

The initiative received seed funding from the Robert Wood Johnson Foundation and a large local health care system. It is sustained through a collaborative community funding model, including a modest contribution from each school and small grants from Municipal Alliance funds, educational foundations, and other community organizations. This funding structure helps the initiative assess needs and create school improvement plans, build capacity and infrastructure within schools, and develop school-community ties to ensure the schools can continue to access resources in the community.

Evidence suggests that efforts to improve school climate can benefit students, teachers, and schools in several ways. Schools with positive school climates have fewer discipline problems and suspensions, higher student academic motivation, and improved teacher morale. Carrying out these strategies has been linked to improvements in academic performance.¹¹¹

District of Columbia: Expanding Access to Care Through Medicaid Partnerships

The District of Columbia has long aligned health care services and education, with leaders recognizing the interconnectedness of health and learning. Schools in the District identify children and families that lack health insurance but are eligible, enroll them in an insurance program, and help connect them with the care they need to stay healthy. As of October 2016, more than 97 percent of the students in its public schools have health insurance. The District's Office of Health and Wellness is able to analyze the Medicaid data and, with information from the school nurse, identify and deliver needed services for students. By examining students' needs, the office is able to negotiate additional reimbursable services with the District's Department of Health Care Finance. In 2016, the office examined data from school nurses and identified students who lacked adequate dental care and transgender students, who might have unmet mental health needs. Its director passed this information to school leaders so they could help connect these students with care and fund appropriate interventions.

During fiscal year 2010, the District's government, through the Department of Health Care Finance, became the second jurisdiction in the nation to implement the Medicaid expansion under the Patient Protection and Affordable Care Act. The District also had the second lowest percentage of uninsured residents in the nation that year, with only 3.2 percent of children lacking health insurance coverage.¹¹² Contributing to this rate was the District's change in Medicaid billing for its schools and its ability to secure federal funds to improve residents' access to health services. The Department of Health Care Finance submitted a state plan amendment for school-based health services to change the reimbursement methodology to align with federal policy and allow District public schools to bill Medicaid for newly eligible services, such as behavioral support, mental health and counseling, and nutrition services.¹¹³ This change allowed the District to bring service providers to school campuses to deliver this care, as well as preventive, less costly services. The partnership also created an easy way to enroll eligible children and families.

Illinois: Engaging School Health Professionals in Data Collection

The Orland School District in Orland Park, Illinois, a suburb southwest of Chicago, serves close to 5,000 students in 10 schools that have a growing population of English learner households. It has made addressing student health a priority by using school nurse data. Fifteen years ago, a few school nurses served the entire district. It now has one in every school. One of these nurses in a Title I school began collecting student health data. Initially, she recorded information manually, capturing the number of and reasons why students came to her. When the district made a large technology investment of \$6,000, she and other nurses started to use a software program to collect health-related data—making the process easier and the information gathered more accurate and robust. This includes data on students with chronic health conditions, the number of students who receive insulin injections, medications administered, the number of student visits per school nurse, and causes for 911 calls.

This information has been used to secure funding for additional medical staff, develop community support and partnerships to improve student health, and influence state policy decisions on school health delivery models.

Appendix C: Resources for states, districts, and schools for school-level needs assessments

ASCD (<http://www.ascd.org>): ASCD developed and supports the WSCC model, a collaborative approach to learning and health. ASCD offers publications, opportunities for professional learning and training, and a clearinghouse of tools such as the School Improvement Tool, as well as implementation examples and lessons learned.

Centers for Disease Control and Prevention (<http://www.cdc.gov/healthyschools/shi/index.htm>): The CDC provides guidance, tools, and resources to local schools on implementing a wellness policy; administers the Youth Risk Behavior Surveillance System; and supports the WSCC model and the use of the School Health Index, an online self-assessment and planning tool that schools can use to improve their health and safety policies and programs.

Department of Education (<https://safesupportivelearning.ed.gov/edscls>): The department has developed the School Climate Surveys, an adaptable, web-based platform that allows states, local districts, and schools to collect and act on reliable, nationally validated school climate data.

Wellness School Assessment Tool (<http://www.wellsat.org/resources.aspx>): The Rudd Center for Food Policy and Obesity developed WellSAT for schools, advocates, and leaders to assess the quality of a district's written wellness policy. The tool also provides personalized guidance and resources for making improvements. WellSAT is an abbreviated version of the 96-item Comprehensive Coding System to Measure the Quality of School Wellness Policies and covers topics such as nutrition education, school food, and physical activity in schools.

Partner Build Grow (<http://actionguide.healthinschools.org>): Sponsored by the Center for Health and Health Care in Schools, Partner Build Grow gives tools to school administrators, program directors, civic leaders, and other stakeholders to improve the sustainability of approaches that promote students' cognitive, social, and emotional health and educational success.

Coalition for Community Schools (http://www.communityschools.org/resources/needs_and_capacity_assessments.aspx): The Coalition for Community Schools has developed or consolidated several needs and capacity assessments, including the Strengthening Partnerships: Community School Assessment Checklist, a tool to help school and community leaders create and/or strengthen community school partnerships emerging out of the community schools movement. The checklist can serve as a planning tool to develop strategies to strengthen partnerships, improve coordination of existing programs and services, and/or expand current levels of support.

University of Kansas Work Group for Community Health and Development (<https://communityhealth.drupal.ku.edu/ctb/overview>): This online toolbox describes the process and provides examples of conducting an assessment survey to identify important community needs.

National Association of State Boards of Education (http://www.nasbe.org/healthy_schools/hs and <http://www.nasbe.org/wp-content/uploads/NASBE-HSW-FINAL.pdf>): This association offers several resources to support the integration of health and education, including the State School Health Policy Database, which catalogs all state policies related to school health, and "How Schools Work and How to Work with Schools," a primer on building strong partnerships with the education community.

"A Handbook for Meaningful Stakeholder Engagement" (http://partnersforeachandeverychild.org/P4_EngagementHandbook_ESSA_0616.pdf): Partners for Each and Every Child, a project to advance equity and excellence in education, created several resources to support equity in ESSA implementation and stakeholder engagement.

States' Needs Assessments Guidance: Many states issued guidance on conducting needs assessments before ESSA. Colorado and North Carolina are examples, but other states may create their own guidance as part of finalizing their state plans. See for example:

- Colorado (<https://www.cde.state.co.us/fedprograms/consapp/na>).
- North Carolina (<http://www.dpi.state.nc.us/schooltransformation/assessments>).

National PTA (<http://www.pta.org/programs/content.cfm?ItemNumber=4624&navItemNumber=4625>): The National PTA offers several tools to facilitate family engagement with schools to promote student success, including the PTA National Standards for Family-School Partnerships, and toolkits for diversity and inclusion, engaging males, military families, and urban families.

The California Endowment's Building Healthy Communities Initiative (<http://www.calendow.org/places>): The endowment partnered with 14 communities in the state to promote healthy changes in areas such as education, health, recreation, and economic development. It offers several case studies highlighting the role of schools in promoting healthy communities.

Table C.1
Relevant Data Resources

| Resource | Website |
|---|--|
| State and national data sets and tools | |
| Department of Education ESSA resources | http://www.ed.gov/essa?src=rn |
| American Community Survey | http://www.census.gov/acs/www/# |
| Behavioral Risk Factor Surveillance System (BRFSS) City and County Data | https://www.cdc.gov/brfss/smart/smart_data.htm |
| CDC Web-Based Injury Statistics Query and Reporting System (WISQARS), Injury Prevention and Control, Data and Statistics | http://www.cdc.gov/injury/wisqars |
| Community Action Partnership | http://www.communityactionpartnership.com |
| Community Commons | http://www.communitycommons.org/maps-data |
| Community Health Needs Assessment/Community Health Improvement Planning | http://assessment.communitycommons.org/CHNA http://www.naccho.org/programs/public-health-infrastructure/community-health-assessment |
| Consolidated Planning/CHAS (Comprehensive Housing Affordability Strategy) Data | http://www.huduser.org/portal/datasets/cp.html |
| County Health Rankings and Roadmaps | http://www.countyhealthrankings.org |
| State Health Compare | http://statehealthcompare.shadac.org |
| Health Resources and Services Administration Health Center Data and Reporting | https://bphc.hrsa.gov/datareporting |
| State and Local Tracking Programs on Health Data (CDC) | https://ephtracking.cdc.gov/showStateTracking |
| Homelessness Data Exchange (Point-in-Time Counts) | http://www.hudhdx.info |
| Healthy Communities Assessment Tool | https://www.huduser.gov/healthycommunities |
| Location Affordability Portal | http://locationaffordability.info |
| National Census of School-Based Health Centers | http://www.sbh4all.org/school-health-care/national-census-of-school-based-health-centers |
| Resident Characteristics Report | http://portal.hud.gov/hudportal/HUD?src=/program_offices/public_indian_housing/systems/pic/50058/rcr |
| Step Up and Be Counted (National School Nurse Standardized Data Set) | https://schoolnursenet.nasn.org/stepupbecounted/home |
| Census Bureau | http://www.census.gov |
| Department of Agriculture School Meals Data | http://www.fns.usda.gov/pd/child-nutrition-tables |
| Department of Justice, Office of Juvenile Justice and Delinquency Prevention | https://www.ojjdp.gov/ojstatbb/crime/JAR.asp |
| Walkscore (community walkability index) | https://www.walkscore.com |
| Youth Risk Behavior Surveillance System | http://www.cdc.gov/healthyyouth/data/yrbs |

| Resource | Website |
|---|---|
| Neighborhood or community-level health data sets | |
| Baltimore Neighborhood Indicators Alliance | http://bniajfi.org |
| Boston Indicators Project | http://www.bostonindicators.org/indicators/health |
| Chicago Public Health Indicators by Community | https://data.cityofchicago.org/Health-Human-Services/Public-Health-Statistics-Selected-public-health-in/iqnk-2tcu |
| Metro Atlanta Health Equity Atlas | http://atlantaequityatlas.com |
| Minnesota Compass | http://www.mncompass.org |
| Neighborhood Nexus (Atlanta) | http://neighborhoodnexus.org |
| New York Open Portal | https://data.ny.gov |
| New York City Environmental Tracking and Sustainability Portal | http://www.nyc.gov/health/tracking |
| New York City Interactive Health Data | http://a816-healthpsi.nyc.gov/epiquery |
| PLAN for a Healthy Los Angeles | http://healthyplan.la/the-health-profiles |
| Philadelphia Community Health Database | http://www.chdbdata.org |
| San Francisco Indicator Project | http://www.sfindicatorproject.org |
| San Francisco OpenData Portal | https://data.sfgov.org |

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Appendix D: Methods

HIA process

An HIA is conducted in six steps. Engaging stakeholders—including those who may be affected by a policy, project, or program decision; policymakers; and others with an interest in the outcome—is essential to conducting an HIA and occurs throughout the process.

The HIA Process

Step 1: Screening. The HIA team and stakeholders determine whether an HIA is needed, can be accomplished in a timely manner, and would add value to the decision-making process.

Step 2: Scoping. The team and stakeholders identify the potential health effects that will be considered and develop a plan for completing the assessment, including specifying their respective roles and responsibilities.

Step 3: Assessment. The team evaluates the proposed project, program, policy, or plan and identifies its most likely health effects. It uses a range of data sources, analytic methods, and stakeholder input to answer the research questions developed during scoping.

Step 4: Recommendations. The team and stakeholders develop practical solutions that can be implemented within the political, economic, or technical limitations of the project or policy to minimize identified health risks and maximize potential health benefits.

Step 5: Reporting. The team disseminates information—including the HIA's purpose, process, findings, and recommendations—to a wide range of stakeholders.

Step 6: Monitoring and evaluation. The team and stakeholders evaluate the HIA according to accepted standards of practice. They also propose a plan for monitoring and measuring the HIA's impact on decision-making and the effects of the implemented decision on health.

Step 1: Screening

The Health Impact Project and its partners determined that an HIA could add value to the Department of Education's decision-making regarding school needs assessment regulations by documenting the range of factors that can affect student educational outcomes and their connection to health, and by identifying opportunities for LEAs to collect data on and address these issues through their needs assessments and resulting improvement plans. The rule-making in this area had important equity implications, because it focused on schools that are identified as low-performing relative to other schools in the state. The May 2016 release of the draft regulations provided a timely decision point for the team to respond using a rapid HIA.

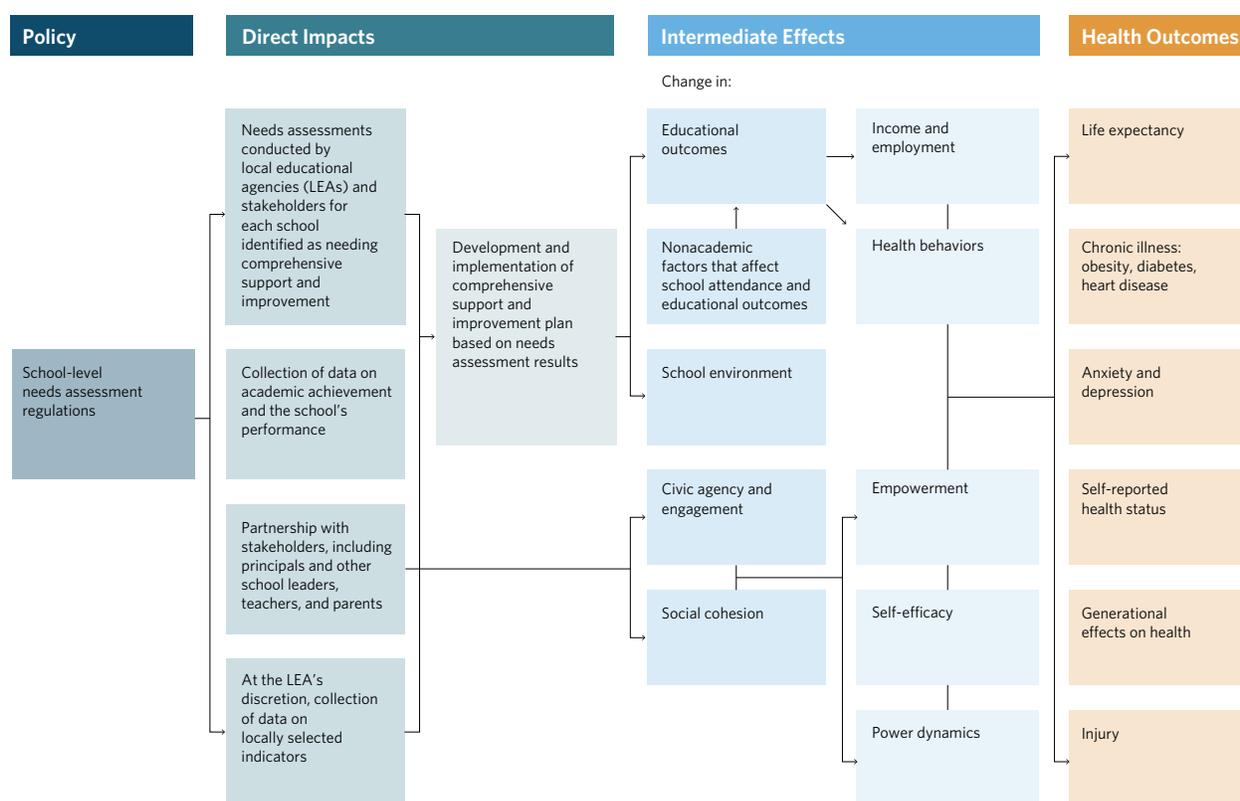
Step 2: Scoping

Scoping generally begins with a broad consideration of all potential effects and then focuses on those deemed most likely to have a significant impact on health. For this HIA, this phase began with identifying those components of the proposed regulations that could affect health and equity and that could be assessed in a short time frame. In consultation with an advisory group and other partners, the HIA team hypothesized pathways through which the school-level needs assessment regulations and their implementation could affect health (see Figure D.1), which in turn were used to develop detailed research questions (see Table D.1).

Figure D.1

Health Pathways Related to the Proposed Needs Assessment Regulations

Hypothetical connections between the rule-making and health



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Step 3: Assessment

The HIA team used a range of data sources, analytic methods, and stakeholder input to analyze the research questions developed during scoping.

- **Literature review:** The HIA team conducted a review of the peer-reviewed literature and searched for relevant reports and publications outside of academic journals and in subject-specific sources, such as the National Center for Education Statistics. The team examined about 100 peer-reviewed articles (including systematic reviews and meta-analyses) and reports, as well as fact sheets and policy briefs.
- **Interviews:** Stakeholders, such as school superintendents, SEA staff, parents, and school staff, served as an important source of information for this HIA because they possess expertise and community knowledge that can ground the assessment in the lives of affected populations.¹¹⁴ The HIA team conducted semi-structured interviews with 35 people to capture perspectives from key stakeholders, including local and state educational agency staff, school and district leaders, public health and school health professionals, teachers, parents, and national and local policy experts. The team used a rapid qualitative analysis approach in which HIA team members read and summarized interview notes that aligned with each research issue that it examined, and then identified and aggregated key themes. Topic coding, a detailed review of the text that aims to identify categories of content related to the research questions, guided this approach.¹¹⁵ Because these interviews were semi-structured, the qualitative data presented are not enumerated according to the frequency with which people expressed each statement being shared. Rather, the frequency of each topic was described qualitatively to present common themes, as well as unexpected experiences. To ensure that the collected data were valid, this aspect of the research was guided by the concepts of credibility (i.e., internal validity), confirmability (i.e., objectivity), and transferability (similar to external validity of quantitative data).¹¹⁶
- **State and local examples:** In consultation with the advisory group, the HIA team examined efforts in nine states and localities that were selected to identify innovative approaches that could be applied in other schools, districts, and states as they implement needs assessments. These data also supplement the literature review and interview data. To develop the state and local examples, the team reviewed existing documents summarizing the sites' initiatives and history, and interviewed at least one person directly involved with the program or policy examined.
- **Quantitative analysis:** The HIA team used Department of Education data on school status for 2014-15 and 2013-14 to identify priority and focus schools, as well as schools in any of the following stages of improvement action: improvement Year 1, improvement Year 2, corrective action, restructuring planning, or restructuring.¹¹⁷ These schools were used as a proxy for schools likely to be identified as needing comprehensive support and improvement under ESSA, though there are limitations to this approach because the schools identified under No Child Left Behind may differ somewhat from those identified under ESSA. To examine the characteristics of these schools, the team used ArcGIS to join the data on school status with the Department of Education's 2013-14 school-level Common Core of Data, and then exported the combined data to a spreadsheet for analysis.¹¹⁸ The 2013-14 Common Core Data were the most recently available at the time the team conducted the assessment.

Step 4: Recommendations

The recommendations phase of health impact assessments suggests actions to consider to minimize identified health risks and maximize potential health benefits of the proposed policy, plan, program, or project being studied. Based on the impacts identified during the assessment phase, the HIA team consulted with the advisory group and other stakeholders to develop and refine actions that various stakeholders can take when implementing needs assessments for low-performing schools.

Step 5: Reporting

This phase involves dissemination of information to a wide range of stakeholders. According to the National Research Council guidance on HIAs, it is “in the interest of decision-makers and the HIA team to keep in constant communication throughout the HIA process so that emerging results can be incorporated into the policy, plan, program, or project.”¹¹⁹ The team did so, not limiting its reporting to this final document. It disseminated its findings in a variety of ways and at different points in the process, including:

- Submitting public comments on the proposed Department of Education regulations on Aug. 1, 2016.¹²⁰
- Presenting findings to the National Collaborative on Education and Health and the Trust for America’s Health’s health and education working group in September and October 2016, respectively.
- Engaging advisory group members in disseminating the findings.
- Developing and disseminating this final HIA.

Step 6: Monitoring and evaluation

This phase involves evaluating the HIA according to accepted standards of practice and monitoring and measuring the impact of the HIA on decision-making. The team evaluated the HIA against the Minimum Elements and Practice Standards for HIA—which describe the essential components of assessments and provide guidance for effective HIA practice—and conducted a conversation to assess the HIA process during the in-person advisory group meeting.¹²¹ In addition, the team highlighted opportunities for tracking and monitoring health-related outcomes of the Department of Education’s decision-making regarding school-level needs assessments under Title I and their implementation.

Table D.1

Research Questions Guiding the Assessment

Topics examined through the HIA

| Baseline | Impact |
|--|---|
| <p>What are the socio-economic characteristics and prevalent health risks of students who are attending schools likely to be identified as needing comprehensive support and improvement, as defined by the Department of Education’s proposed regulations?</p> <p>What academic and nonacademic factors affect academic achievement and school performance and ultimately health outcomes?</p> <p>How do these factors vary by key subpopulations (e.g., students with disabilities, low-income students) or by school characteristics (e.g., funding level)?</p> | <p>To what extent would the proposed required elements of a school needs assessment (academic achievement information, school performance on long-term goals and accountability measures, and reasons the school was identified for comprehensive support and improvement) lead to the development of improvement plans that address root causes and health outcomes in their student populations?</p> |
| <p>What types of data are LEAs using to plan for school support and improvement activities? To what extent and in what ways are LEAs using data related to root causes such as housing stability and violence, and outcomes in planning for school support and improvement activities?</p> | <p>To what extent do the proposed regulations facilitate opportunities to include data related to root causes and health outcomes in a school needs assessment?</p> <p>What types of indicators would LEAs be likely to include under the proposed regulations? How would these indicators affect the needs assessment, the subsequent improvement plan, and student health?</p> <p>What data sources, indicators, or existing needs assessments related to root causes and health outcomes are available to all LEAs that could be used in school-level needs assessments?</p> |
| <p>To what extent are LEAs currently partnering with stakeholders such as principals, school leaders, teachers, and parents in planning for school support and improvement activities?</p> <p>To what extent does stakeholder engagement affect health outcomes or health determinants such as civic agency or social cohesion?</p> | <p>How would requiring LEAs to partner with stakeholders to conduct a comprehensive needs assessment for schools affect health?</p> |

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Stakeholder engagement

Stakeholder engagement continues throughout an HIA and informs all steps of the assessment. Below are the components of stakeholder engagement conducted for this HIA:

- **Advisory group:** The HIA team convened a 12-member advisory group composed of national organizations with a range of perspectives on education policy, school administration, academic measurement, as well as student health and health determinants. The group met twice by telephone, once during scoping and again during assessment, and once in person to provide input on the recommended actions. Following the meeting, the advisory group completed a questionnaire to evaluate the HIA process. The HIA team also sought the group's input at key points in the process via email and conference calls with individual members. The advisory group was not a decision-making body. Although its advice was given substantial weight, the team had final authority and responsibility for the HIA process and its findings and recommended actions.
- **Expert consultation:** The team consulted with partners at the Trust for America's Health, the Healthy Schools Campaign, the Robert Wood Johnson Foundation, and members of the National Collaborative on Education and Health throughout the HIA process. These experts were engaged in person and by phone to share insights on the policy context and history, offer suggestions on the assessment's scope and analyses, and provide feedback on the HIA findings.
- **Interviews and state and local examples:** As described above, the HIA team conducted semi-structured interviews with local and state educational agency staff, school and district leaders, public health and school health professionals, teachers, parents, and national and local policy experts. The team also examined nine state and local examples, through which it engaged school health professionals, local and state educational agency staff, and community partners. For each of the groups, the HIA team asked about opportunities to promote health through the school needs assessments under ESSA, characteristics of schools having to complete needs assessments, factors contributing to student achievement, data to include in needs assessments, stakeholder engagement in the needs assessment process, and the role of families in planning for school improvement activities.

Appendix E: Monitoring plan

The monitoring step of HIA, sometimes referred to as outcome evaluation, tracks the effect of the implemented decision on health determinants and outcomes.¹²² Guided by the Minimum Elements and Practice Standards for HIA, the team developed a monitoring plan that could be used to track the health-related outcomes of the implementation of school-level needs assessments under Title I.

Table E.1

Monitoring Tracks the Effects of the Decision on Health

Suggested monitoring approach

| Indicator | Agency or organization responsible for monitoring | Frequency |
|--|---|---------------|
| Proportion of school-level needs assessments that examine at least one root cause that could contribute to the reason(s) the school was identified for comprehensive support and improvement, such as drivers of absenteeism, neighborhood factors, and student household factors | SEAs, as reported to the Department of Education | Every 3 years |
| Proportion of comprehensive support and improvement plans that include strategies to address any root causes that are identified through the needs assessment as affecting academic achievement of students | SEAs, as reported to the Department of Education | Every 3 years |
| Trend data on select health determinants and indicators for identified schools, examining comparisons between schools where the needs assessments and comprehensive support and improvement plans identified and addressed root causes compared with those whose did not | LEAs | Every 3 years |
| Number and types of stakeholders engaged in the development of the needs assessment and resulting comprehensive support and improvement plans | LEAs | Every 3 years |
| Number of partnerships established to address root causes and evaluations of those efforts to examine the impact on health | Schools and LEAs | Annually |
| Changes in academic achievement and educational outcomes among previously identified schools, using the indicators measured in the first needs assessment | LEAs and SEAs | Every 3 years |

Appendix F: Summary of impacts

| Health driver or outcome | Direction of impact | Likelihood of impact | Summary of findings | Strength of evidence |
|---|---------------------|----------------------|--|--|
| Pathway 1: Academic performance and educational outcomes | | | | |
| Health outcomes associated with educational attainment, such as life expectancy, mental health, and diabetes | Positive | Possible | The stronger a person's education and academic record, the more opportunities he or she will have for a better-paying job and, in turn, access to safe and decent housing, nutritious food, and good medical care. Those with more education live longer and have a lower risk of chronic diseases such as diabetes. The HIA found that the regulations examined during the assessment would probably improve public health if they boosted the achievement of students attending low-performing schools. | High: Studies consistently show a strong correlation between a person's educational level and health over his or her lifetime, even after controlling for demographic characteristics such as income. |
| Effective school improvement efforts | Positive | Possible | Root causes such as housing instability, food insecurity, poverty, and health challenges can prevent children from achieving their full academic potential. The HIA found that school improvement efforts could be strengthened if local educational agencies examined these and other root causes in their needs assessments and establish partnerships to address identified problems, and predicted that this could help to maximize the effectiveness of school improvement strategies and lead to better education and health outcomes for students in the short and long term. | Low: More research is needed to measure the effect of school improvement activities on short- and long-term health of students. |
| Disparities in health outcomes such as asthma, obesity, injury, and mental health issues between students of different racial, ethnic, and income groups | Positive | Possible | Most of the children attending low-performing schools are students of color and from low-income families. These populations also experience gaps in academic achievement and health outcomes compared with higher-income and white students. Of the more than 9 million students enrolled in low-performing schools in 2013-14, nearly 70 percent were students of color. Based on the strong evidence linking educational attainment and health, the HIA team predicts that if the needs assessments and improvement plans lead to better educational outcomes, they could boost efforts to reduce racial and economic disparities in health. | Moderate: Research has not yet examined the association between implementation of school improvement strategies and long-term health outcomes. However, the evidence linking educational attainment and health is very strong. |

Continued on next page

| Health driver or outcome | Direction of impact | Likelihood of impact | Summary of findings | Strength of evidence |
|---|---------------------|----------------------|--|---|
| Pathway 2: Stakeholder engagement | | | | |
| Effective school improvement efforts | Positive | Possible | Parent and family involvement in schools boosts students' academic achievement and encourages them to have higher educational aspirations. Several studies that examined the successful turnaround of low-performing schools or compared them with high-performing, high-needs schools have shown that parent engagement is not only a critical part of student achievement, but it affects overall school quality and performance. Community partnerships can also play an important role in supporting student educational achievement and school performance. The evidence shows the importance of engaging families, teachers, principals, and other stakeholders in efforts to improve schools and boost students' achievement. Involving partners such as students, specialized instructional support personnel, and community representatives at the needs assessment stage will lay the foundation for future partnerships and resource sharing during improvement planning, as well as potentially expanding the school's ability to address student needs and root causes. | Moderate: Studies have demonstrated the link between parent and family engagement in school and students' academic achievement. More research is needed to connect community partnership and participation of other stakeholders in effective school improvement and corresponding health benefits. |
| Health outcomes related to stakeholder engagement, such as self-esteem, social relationships, and individual empowerment | Positive | Possible | Evidence suggests that stakeholder engagement can improve factors important to health. Engaging with families, students, and other stakeholders in needs assessment and school improvement efforts could directly promote health. | Moderate: Studies have documented the health benefits of stakeholder engagement in various community initiatives and interventions. More research is needed to demonstrate the link between engagement in school improvement activities and health. |

Legend

Direction of impact:

- Positive = Changes that may improve health.
- Negative = Changes that may detract from health.
- Uncertain = Unknown how health will be affected.
- No effect = No effect on health.
- Mixed = Changes that may both improve and detract from health.

Likelihood of impact:

- Likely = It is likely that impacts will occur as a result of the proposed changes.
- Possible = It is possible that impacts will occur as a result of the proposed changes.
- Unlikely = It is unlikely that impacts will occur as a result of the proposed changes.
- Uncertain = It is unclear if impacts will occur as a result of the proposed changes.

Strength of evidence:

- High = Multiple peer-reviewed studies provide consistent support for the finding; evidence from other sources (for example, qualitative data, modeling, and gray literature) is consistent with peer-reviewed studies and supports the finding.
- Moderate = Fewer peer-reviewed studies are available, but the available studies support the finding and are consistent with evidence from other sources.
- Low = Limited or conflicting evidence.

Endnotes

- 1 Commission on the Social Determinants of Health, "Closing the Gap in a Generation: Health Equity Through Action on Social Determinants of Health," World Health Organization (2008), http://whqlibdoc.who.int/publications/2008/9789241563703_eng.pdf; Robert Wood Johnson Foundation, "Education and Health: Exploring the Social Determinants of Health" (April 2011), http://www.rwjf.org/content/dam/farm/reports/issue_briefs/2011/rwjf70447; Nancy E. Adler and David H. Rehkopf, "U.S. Disparities in Health: Descriptions, Causes, and Mechanisms," *Annual Review of Public Health* 29 (2008): 235-52, <https://www.ncbi.nlm.nih.gov/pubmed/18031225>; Robert A. Hahn and Benedict I. Truman, "Education Improves Public Health and Promotes Health Equity," *International Journal of Health Services* 45, no. 4 (2015): 657-78, <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4691207>.
- 2 Jennifer L. DePaoli et al., "Building a Grad Nation: Progress and Challenge in Raising High School Graduation Rates: 2017 Annual Update," Civic Enterprises and Everyone Graduates Center (2017), <https://gradnation.americaspromise.org/report/2017-building-grad-nation-report>.
- 3 Camille L. Ryan and Kurt Bauman, "Educational Attainment in the United States: 2015," *Current Population Reports* (March 2016), <https://www.census.gov/content/dam/Census/library/publications/2016/demo/p20-578.pdf>.
- 4 See Alliance for a Healthier Generation and Healthy Schools Campaign, "State ESSA Plans to Support Student Health and Wellness: A Framework for Action," updated March 2017, <https://healthyschoolscampaign.org/wp-content/uploads/2017/03/ESSA-State-Framework.pdf>.
- 5 Liane Wardlow, "The Every Student Succeeds Act (ESSA) in Historical Context," Pearson Research and Innovation Network (Oct. 5, 2016), <http://www.pearsoned.com/education-blog/every-student-succeeds-act-historical>.
- 6 Ibid.
- 7 Alyson Klein, "The Nation's Main K-12 Law: A Timeline of the ESEA," *Education Week* (March 31, 2015), accessed Oct. 5, 2016, <http://www.edweek.org/ew/section/multimedia/the-nations-main-k-12-law-a-timeline.html>.
- 8 Wardlow, "The Every Student Succeeds Act."
- 9 Tiffany Taber, "Implementing the Every Student Succeeds Act to Enhance Equity and Excellence," *Homeroom* (blog), Department of Education, accessed Oct. 5, 2016, <http://blog.ed.gov/2016/05/implementing-the-every-student-succeeds-act-to-enhance-equity-and-excellence>.
- 10 Foundation for Excellence in Education, "The Every Student Succeeds Act (ESSA): What States Need to Know Now" (January 2016), <http://www.excelined.org/wp-content/uploads/ESSA-What-States-Need-to-Know-Now-January-2016.pdf>.
- 11 Department of Education, "Every Student Succeeds Act (ESSA)," accessed Oct. 5, 2016, <http://www.ed.gov/essa>. One reason for this enhanced focus on subgroups of students was concern that under the 2011 federal waivers, many schools had merged economically disadvantaged students and those from major ethnic and racial groups into "super-subgroups," which could potentially mask performance differences and needs. See Leadership Conference Education Fund, "Accountability Provisions in the Every Student Succeeds Act" (April 20, 2016), accessed Oct. 5, 2016, <http://civilrightsdocs.info/pdf/education/ESSA-Accountability-Fact-Sheet.pdf>.
- 12 Department of Education, "Every Student Succeeds Act (ESSA)."
- 13 Department of Education, "Key Policy Letters Signed by the Education Secretary or Deputy Secretary" (June 23, 2016), <http://www2.ed.gov/policy/elsec/guid/secletter/160622.html>.
- 14 Department of Education, Elementary and Secondary Education Act of 1965, as Amended Through P.L. 114-95 (2015), <http://www2.ed.gov/documents/essa-act-of-1965.pdf>.
- 15 Schools identified as having chronically underperforming subgroups of students are defined by the Department of Education as "any school participating in Title I that was identified for targeted support and improvement because it had a subgroup of students performing at or below the performance of all students in the lowest-performing schools and did not improve after implementing a targeted support and improvement plan over a State-determined number of years." Department of Education, "Category: Comprehensive Support and Improvement," accessed Jan. 18, 2017, <https://ed.gov/policy/elsec/leg/essa/essacctchart1127.pdf>; Department of Education, "Transitioning to the Every Student Succeeds Act: Frequently Asked Questions," accessed Oct. 5, 2016, <http://www2.ed.gov/policy/elsec/leg/essa/essafaqstransition62916.pdf>; Department of Education, Elementary and Secondary Education Act of 1965, as Amended Through P.L. 114-95.
- 16 National Conference of State Legislatures, "Summary of the Every Student Succeeds Act, Legislation Reauthorizing the Elementary and Secondary Education Act," accessed Oct. 5, 2016, http://www.ncsl.org/documents/educ/ESSA_summary_NCSL.pdf.
- 17 The Education Trust, "The Every Student Succeeds Act: What's in It? What Does It Mean for Equity?" (January 2016), <https://edtrust.org/wp-content/uploads/2014/09/What-is-in-ESSA-Funding.pdf>.

- 18 National Association of Elementary School Principals and National Association of Secondary School Principals, “Every Student Succeeds Act, Summary of Title I Provisions,” accessed Dec. 8, 2016, <https://saanys.org/wp-content/uploads/2015/12/ESSA-Summary.pdf>.
- 19 Ibid.
- 20 Department of Education, Elementary and Secondary Education Act of 1965, as Amended Through P.L. 114-95.
- 21 Elementary and Secondary Education Act of 1965, as Amended by the Every Student Succeeds Act—Accountability and State Plans, 81 Fed. Reg. 34539 (May 31, 2016), <https://www.gpo.gov/fdsys/pkg/FR-2016-05-31/pdf/2016-12451.pdf>.
- 22 The Pew Charitable Trusts, “Health Impact Project Offers Recommendations on Education Policy” (Aug. 1, 2016), <http://www.pewtrusts.org/en/research-and-analysis/speeches-and-testimony/2016/08/health-impact-project-offers-recommendations-on-education-policy>.
- 23 Department of Education, Elementary and Secondary Education Act of 1965, as Amended Through P.L. 114-95.
- 24 Department of Education, “Elementary and Secondary Education Act of 1965, as Amended by the Every Student Succeeds Act—Accountability and State Plans,” 81 Fed. Reg. 86076 (Nov. 29, 2016), <https://www.gpo.gov/fdsys/pkg/FR-2016-11-29/pdf/2016-27985.pdf>.
- 25 Department of Education, “Guidance on Standards, Assessments, and Accountability: Annual Yearly Progress,” accessed Oct. 6, 2016, http://www2.ed.gov/policy/elsec/guid/standardsassessment/guidance_pg5.html.
- 26 Council of Chief State School Officers, “Comparison of Select Elements of ESEA: No Child Left Behind v. Every Student Succeeds Act” (Dec. 8, 2015), <http://www.ccsso.org/Documents/2016/ESSA/CCSSOComparisonofSelectElementsofESEA12142015.pdf>.
- 27 Education Week, “Summary: Proposed Regulations on Accountability, State Plans, and Data Reporting Under ESSA,” *Ed Week* (blog), accessed Oct. 5, 2016, <http://blogs.edweek.org/edweek/campaign-k-12/ESSA%20Accountability%20NPRM%20Summary%20for%20Final.pdf>.
- 28 Ibid.
- 29 Ibid.
- 30 Department of Education, “Overview of Proposed Regulation: Accountability,” webinar (June 2016), <https://www2.ed.gov/policy/elsec/leg/essa/nprmacountabilitywebinar622016.pdf>.
- 31 National Center for Education Statistics, “Table 216.20. Number and Enrollment of Public Elementary and Secondary Schools, by School Level, Type, and Charter and Magnet Status: Selected Years, 1990-91 through 2013-14,” accessed July 13, 2016, https://nces.ed.gov/programs/digest/d15/tables/dt15_216.20.asp; National Center for Education Statistics, “The Condition of Education 2016,” accessed July 13, 2016, <http://nces.ed.gov/pubsearch/pubsinfo.asp?pubid=2016144>.
- 32 National Center for Education Statistics, “Table 216.20. Number and Enrollment”; National Center for Education Statistics, “Table 203.50. Enrollment and Percentage Distribution of Enrollment in Public Elementary and Secondary Schools, by Race/Ethnicity and Regions: Selected Years, Fall 1995 Through Fall 2025,” accessed July 13, 2016, http://nces.ed.gov/programs/digest/d15/tables/dt15_203.50.asp.
- 33 National Center for Education Statistics, “Characteristics of Traditional Public and Public Charter Schools”; National Center for Education Statistics, “Concentration of Public School Students Eligible for Free and Reduced-Price Lunch,” accessed July 13, 2016, http://nces.ed.gov/programs/coe/indicator_clb.asp.
- 34 National Center for Education Statistics, “Concentration of Public School Students.”
- 35 Ibid.
- 36 For a description of the data sets and methods used for this analysis, see Appendix D.
- 37 Although the percentage of students eligible for free or reduced-price lunch is a common proxy measure, it has several limitations and differs from the actual percentage of students in poverty enrolled in a given school. See, for example, Tom Snyder and Lauren Musu-Gillette, “Free or Reduced Price Lunch: A Proxy for Poverty,” *NCES Blog* (April 16, 2015), <https://nces.ed.gov/blogs/nces/post/free-or-reduced-price-lunch-a-proxy-for-poverty>.
- 38 National Institute for Health Care Management Foundation, “Reducing Health Disparities Among Children: Strategies and Programs for Health Plans” (February 2007), <http://www.nihcm.org/pdf/HealthDisparitiesFinal.pdf>.
- 39 Erika R. Cheng and David A. Kindig, “Disparities in Premature Mortality Between High- and Low-Income US Counties,” *Preventing Chronic Disease* (2012), <http://dx.doi.org/10.5888/pcd9.110120>; National Institute for Health Care Management, “Reducing Health Disparities”; Seth E. Frndak, “An Ecological Study of Food Desert Prevalence and 4th Grade Academic Achievement in New York State School Districts,” *Journal of Public Health Research* 3, no. 3 (2014): 130–7, <http://dx.doi.org/10.4081/jphr.2014.319>.
- 40 National Institute for Health Care Management Foundation, “Reducing Health Disparities.”

- 41 Jennifer L. DePaoli, Robert Balfanz, and John Bridgeland, "Building a Grad Nation: Progress and Challenge in Raising High School Graduation Rates," Civic Enterprises and Everyone Graduates Center (updated 2016), http://civicenterprises.net/MediaLibrary/Docs/civic_2016_full_report_FNL.pdf.
- 42 Ibid.
- 43 Ibid.
- 44 Ibid.
- 45 Health Impact Project, "About Health Impact Assessment," accessed Oct. 6, 2014, <http://www.pewtrusts.org/en/projects/health-impact-project/health-impact-assessment>.
- 46 Ibid.; National Research Council, "Improving Health in the United States: The Role of Health Impact Assessment," 5 (2011), <https://www.nap.edu/catalog/13229/improving-health-in-the-united-states-the-role-of-health>.
- 47 Miami-Dade County Public Schools, "Out-of-School Factors Affecting Academic Achievement," *Information Capsule* 1004 (September 2010), <http://files.eric.ed.gov/fulltext/ED536510.pdf>.
- 48 Human Impact Partners, "When Health Is the Root Cause of Poor Education Outcomes: How Local Control Funding Formula Can Help Students Succeed" (April 2014), accessed July 24, 2017, <https://schoolhealthteams.aap.org/uploads/ckeditor/files/when%20health%20is%20the%20root.pdf>.
- 49 Erika A. Patall, Harris Cooper, and Ashley Batts Allen, "Extending the School Day or School Year: A Systematic Review of Research (1985-2009)," *Review of Educational Research* (2010), <http://dx.doi.org/10.3102/0034654310377086>; In-Soo Shin and Jae Young Chung, "Class Size and Student Achievement in the United States: A Meta-Analysis," *KEDI Journal of Educational Policy* 6, no. 2 (2009): 3, <http://connection.ebscohost.com/c/articles/47507047/class-size-student-achievement-united-states-meta-analysis>; Grover J. "Russ" Whitehurst and Matthew M. Chingos, "Class Size: What Research Says and What It Means for State Policy," Brookings Institution (May 2011), https://www.brookings.edu/wp-content/uploads/2016/06/0511_class_size_whitehurst_chingos.pdf; Richard J. Murnane and Jennifer L. Steele, "What Is the Problem? The Challenge of Providing Effective Teachers for All Children," *Future Child* 17, no. 1 (2007): 15-43, <https://www.ncbi.nlm.nih.gov/pubmed/17407921>; Spyros Konstantopoulos, "Effects of Teachers on Minority and Disadvantaged Students' Achievement in the Early Grades," *Elementary School Journal* 110, no. 1 (2009): 92-113, <https://eric.ed.gov/?id=EJ851764>; Charles T. Clotfelter, Helen F. Ladd, and Jacob L. Vigdor, "Teacher Credentials and Student Achievement: Longitudinal Analysis With Student Fixed Effects," *Economics of Education Review* 26, no. 6 (2007): 673-82, <http://www.sciencedirect.com/science/article/pii/S0272775707000982>.
- 50 Sarah Archibald, "Narrowing In on Educational Resources That Do Affect Student Achievement," *Peabody Journal of Education* 81, no. 4 (2006); 2006: 23-42, http://dx.doi.org/10.1207/s15327930pje8104_2; Bruce Baker, "Does Money Matter in Education? Second Edition," Albert Shanker Institute (2016), accessed Jan. 23, 2017, http://www.shankerinstitute.org/sites/shanker/files/moneymatters_edition2.pdf; C. Kirabo Jackson, Johnson Rucker, and Claudia Persico, "The Effects of School Spending on Educational and Economic Outcomes: Evidence From School Finance Reforms," National Bureau of Economic Research, NBER Working Paper No. 20847 (January 2015), <http://www.nber.org/papers/w20847>.
- 51 Darla M. Castelli et al., "Active Education: Growing Evidence on Physical Activity and Academic Performance," *Active Living Research* (2015), accessed July 24, 2016, http://activelivingresearch.org/sites/default/files/ALR_Brief_ActiveEducation_Jan2015.pdf; Robert Murray and Catherine Ramstetter, "The Crucial Role of Recess in School," *Pediatrics* 131, no. 1 (2013), accessed July 24, 2016, <http://pediatrics.aappublications.org/content/131/1/183.full>.
- 52 Benjamin Kutsyuruba, Don A. Klinger, and Alicia Hussain, "Relationships Among School Climate, School Safety, and Student Achievement and Well-Being: A Review of the Literature," *Review of Education* 3, no. 2 (2015), <http://dx.doi.org/10.1002/rev3.3043>; Amrit Thapa et al., "A Review of School Climate Research," *Review of Educational Research* 83, no. 3 (2013), <http://dx.doi.org/10.3102/0034654313483907>.
- 53 Thapa et al., "A Review of School Climate Research"; Joseph E. Zins et al., "The Scientific Base Linking Social and Emotional Learning to School Success," *Journal of Educational and Psychological Consultation* 17, nos. 2 and 3 (2007): 191-210, <http://dx.doi.org/10.1080/10474410701413145>.
- 54 Thapa et al., "A Review of School Climate Research."
- 55 Valkiria Durán-Narucki, "School Building Condition, School Attendance, And Academic Achievement In New York City Public Schools: A Mediation Model," *Journal of Environmental Psychology*, 28, no. 3 (2008): 278-286, <http://dx.doi.org/10.1016/j.jenvp.2008.02.008>; Cynthia Uline and Megan Tschannen-Moran, "The Walls Speak: The Interplay of Quality Facilities, School Climate, and Student Achievement," *Journal of Educational Administration* 46, no. 1 (2008): 55-73, <http://dx.doi.org/10.1108/09578230810849817>.
- 56 Durán-Narucki, "School Building Condition."
- 57 Lindsay Bajer and Harvey Bernstein, "The Impact of School Buildings on Student Health and Performance," McGraw-Hill Research Foundation (Feb. 27, 2012), accessed Dec. 20, 2016, http://www.ncef.org/pubs/010715.McGrawHill_ImpactOnHealth.pdf.

- 58 Kerry Englert and Zoe A. Barley, "Identifying Differences Between Two Groups of High-Needs High Schools," *Mid-continent Research for Education and Learning* (2008), accessed Feb. 7, 2017, <http://files.eric.ed.gov/fulltext/ED544621.pdf>; Daniel L. Duke, "What We Know and Don't Know About Improving Low-Performing Schools," *Phi Delta Kappan* (June 2006), <http://dx.doi.org/10.1177/003172170608701005>; William H. Jaynes, "Parental Involvement and Student Achievement: A Meta-Analysis," *Family Involvement Research Digests* (December 2005), <http://www.hfrp.org/publications-resources/browse-our-publications/parental-involvement-and-student-achievement-a-meta-analysis>.
- 59 Stephen M. Nettles and Carolyn Herrington, "Revisiting the Importance of the Direct Effects of School Leadership on Student Achievement: The Implications for School Improvement Policy," *Peabody Journal of Education* 82, no. 4 (2007): 724–736, <http://dx.doi.org/10.1080/01619560701603239>; Karen Seashore Louis, Beverly Dretzke, and Kyla Wahlstrom, "How Does Leadership Affect Student Achievement? Results From a National US Survey," *School Effectiveness and School Improvement* 21, no. 3 (2010): 315–336, <http://dx.doi.org/10.1080/09243453.2010.486586>.
- 60 Sara Sepanski Whipple et al., "An Ecological Perspective on Cumulative School and Neighborhood Risk Factors Related to Achievement," *Journal of Applied Developmental Psychology* 31, no. 6 (2010): 422–427, <http://dx.doi.org/10.1016/j.appdev.2010.07.002>; Ronya Emory et al., "Neighborhood Social Processes and Academic Achievement in Elementary School," *Journal of Community Psychology* 36, no. 7 (2008), <http://dx.doi.org/doi:10.1002/jcop.20266>.
- 61 M. Lacour and L.D. Tissington, "The Effects of Poverty on Academic Achievement," *Educational Research and Review* 6, no. 7 (2011); Patricia Garrett-Peters et al., "The Role of Household Chaos in Understanding Relations Between Early Poverty and Children's Academic Achievement," *Early Childhood Research Quarterly* 37 (April 2016): 16–25, <http://dx.doi.org/10.1016/j.ecresq.2016.02.004>; Child Trends Databank, "Parental Expectations for Their Children's Academic Attainment" (October 2015), accessed July 27, 2016, <http://www.childtrends.org/?indicators=parental-expectations-for-their-childrens-academic-attainment>.
- 62 Whipple et al., "An Ecological Perspective."
- 63 Noreen McDonald, Sally Librera, and Elizabeth Deakin, "Free Transit for Low-Income Youth: Experience in San Francisco Bay Area, California," *Transportation Research Record* 1887 (2004): 153–160, <https://doi.org/10.3141/1887-18>; Los Angeles County Department of Health, "The Potential Costs and Benefits of Providing Free Public Transportation Passes to Students in Los Angeles County" (2013), accessed Jan. 4, 2017, <http://publichealth.lacounty.gov/plan/docs/HIA/12.16.2013Report.pdf>; Christopher A. Kearney, "School Absenteeism and School Refusal Behavior in Youth: A Contemporary Review," *Clinical Psychology Review* 28 (2008): 451–71, <http://dx.doi.org/10.1016/j.cpr.2007.07.012>; Kantahyanee W. Murray et al., "Barriers and Facilitators to School-Based Parent Involvement for Parents of Urban Public Middle School Students," *SAGE Open* (October–December 2014): 1–12, <http://dx.doi.org/10.1177/2158244014558030>; Kristin Turney and Grace Kao, "Barriers to School Involvement: Are Immigrant Parents Disadvantaged?" *Journal of Educational Research* 102, no. 4 (2009): 257–71, <http://dx.doi.org/10.3200/JOER.102.4.257-271>.
- 64 J.J. Cutuli et al., "Academic Achievement Trajectories of Homeless and Highly Mobile Students: Resilience in the Context of Chronic and Acute Risk," *Child Development* 84, no. 3 (2013): 841–857, <http://dx.doi.org/10.1111/cdev.12013>; Patricia Garrett-Peters et al., "The Role of Household Chaos."
- 65 Kerri J. Tobin, "Homeless Students and Academic Achievement: Evidence From a Large Urban Area," *Urban Education* 51, no. 2 (2016): 197–220, <http://dx.doi.org/10.1177/0042085914543116>.
- 66 John Cook and Karen Jeng, "Child Food Insecurity: The Economic Impact on Our Nation" (2009), *Feeding America*, accessed July 11, 2016, <https://www.nokidhungry.org/sites/default/files/child-economy-study.pdf>.
- 67 Katie Adolphus, Clare Lawton, and Louise Dye, "The Effects of Breakfast on Behavior and Academic Performance in Children and Adolescents," *Frontiers in Human Neuroscience* 7 (2013), <http://dx.doi.org/10.3389/fnhum.2013.00425>; Elizabeth Kristjansson et al., "School Feeding for Improving the Physical and Psychosocial Health of Disadvantaged Students," *Campbell Systematic Reviews* (2006), accessed Feb. 7, 2017, <https://www.campbellcollaboration.org/library/school-feeding-disadvantaged-students-improving-health.html>; Jian Li and Ann A. O'Connell, "Obesity, High-Calorie Food Intake, and Academic Achievement Trends Among U.S. School Children," *Journal of Educational Research* 105 (2012): 391–403, <http://dx.doi.org/10.1080/00220671.2011.646359>.
- 68 Adolphus, Lawton, and Dye, "The Effects of Breakfast."
- 69 Charles E. Basch, "Breakfast and the Achievement Gap Among Urban Minority Youth," *Journal of School Health* 81, no. 10 (2011): 635–640, <http://dx.doi.org/10.1111/j.1746-1561.2011.00638.x>; Rajiv Bhatia, Paula Jones, and Zetta Reicker, "Competitive Foods, Discrimination, and Participation in the National School Lunch Program," *American Journal of Public Health* 101, no. 8: 1380–1386, <http://dx.doi.org/doi:10.2105/AJPH.2011.300134>; Crystal Weedall FitzSimons, James D. Weill, and Lynn Parker, "Barriers That Prevent Low-Income People From Gaining Access to Food and Nutrition Programs," *Food Research and Action Center* (2011), accessed Jan. 4, 2017, <https://www.hungercenter.org/wp-content/uploads/2011/07/Barriers-to-Food-and-Nutrition-Programs-FRAC.pdf>; Food Research and Action Center, "School Breakfast Scorecard, 2014-2015 School Year" (February 2016), accessed Jan. 23, 2017, http://frac.org/wp-content/uploads/2016/09/School_Breakfast_Scorecard_SY_2014_2015.pdf.

- 70 Tia McGill et al., "Effects of Exposure to Community Violence and Family Violence on School Functioning Problems Among Urban Youth: The Potential Mediating Role of Posttraumatic Stress Symptoms," *Frontiers in Public Health* 2, no. 8 (February 2014): 1-8, <http://dx.doi.org/10.3389/fpubh.2014.00008>; Larissa Borofsky et al., "Community Violence Exposure and Adolescents' School Engagement and Academic Achievement Over Time," *Psychology of Violence* 3, no. 4 (2013): 381-395, <http://dx.doi.org/10.1037/a0034121>.
- 71 C. Nye, H. Turner, and J. Schwartz, "Approaches to Parent Involvement for Improving the Academic Performance of Elementary School Age Children," *Campbell Systematic Reviews* (2006).
- 72 Melati Sumari, Zaharah Hussin, and Saedah Siraj, "Factors Contributing to Academic Achievement and Moral Development: A Qualitative Study," *International Journal of Research and Review* 5, no. 2 (2010): 18-24, accessed Feb. 7, 2017, <http://repository.um.edu.my/7481/1/IJRR%202010.pdf>.
- 73 Terrinieka T. Williams and Bernadette Sanchez, "Identifying and Decreasing Barriers to Parental Involvement for Inner-City Parents," *Youth and Society* 45, no. 1 (2011): 54-74, <http://dx.doi.org/10.1177%2F0044118X11409066>; Kathryn V. Drummond and Deborah Stipek, "Low-Income Parents' Beliefs About Their Role in Children's Academic Learning," *Elementary School Journal* 104, no. 3 (2004): 197-213, accessed Feb. 7, 2017, <https://www.jstor.org/stable/pdf/3202949.pdf>.
- 74 Sheniz Moonie et al., "The Relationship Between School Absence, Academic Performance, and Asthma Status," *Journal of School Health* 78, no. 3 (2008): 140-148, <http://dx.doi.org/10.1111/j.1746-1561.2007.00276.x>; N. Freudenberg and J. Ruglis, "Reframing School Dropout as a Public Health Issue," *Preventing Chronic Disease* 4, no. 4 (2007), accessed July 24, 2016, http://www.cdc.gov/pcd/issues/2007/oct/07_0063.htm.
- 75 Human Impact Partners, "When Health is the Root Cause"; McGill et al., "Effects of Exposure."
- 76 William Jeynes, "A Meta-Analysis on the Factors That Best Reduce the Achievement Gap," *Education and Urban Society* 47 no. 5 (2015): 523-554, <http://dx.doi.org/10.1177%2F0013124514529155>; Frank Adamson and Linda Darling-Hammond, "Speaking of Salaries, What It Will Take to Get Qualified, Effective Teachers in All Communities" (2011), Center for American Progress, accessed July 12, 2016, https://cdn.americanprogress.org/wp-content/uploads/issues/2011/05/pdf/teacher_salary.pdf; Caroline Ratcliffe and Signe-Mary McKernan, "Child Poverty and Its Lasting Consequences" (2012), Urban Institute, accessed July 6, 2016, <http://www.urban.org/sites/default/files/alfresco/publication-pdfs/412659-Child-Poverty-and-Its-Lasting-Consequence.PDF>.
- 77 Anne Gregory, Russell Skiba, and Pedro A. Noguera, "The Achievement Gap and the Discipline Gap: Two Sides of the Same Coin," *Educational Researcher*, 39, no. 1 (2010): 59-68.
- 78 Ibid.
- 79 Michael J. Kieffer et al., "Accommodations for English Language Learners Taking Large-Scale Assessments: A Meta-Analysis on Effectiveness and Validity," *Review of Educational Research*, 79, no. 3 (2009): 1168-1201, <http://dx.doi.org/10.3102/0034654309332490>; H. Gary Cook, Timothy Boals, and Todd Lundberg, "Academic Achievement for English Learners: What Can We Reasonably Expect?" *Kappan Research and Development* 93, no. 3 (2011): 66-69, <http://dx.doi.org/10.1177/003172171109300316>; Anthony B. Fong, Soung Bae, and Min Huang, "Patterns of Student Mobility Among English Language Learner Students in Arizona Public Schools," Institute of Education Science, National Center for Education Evaluation and Regional Assistance (2010), accessed July 7, 2016, <http://files.eric.ed.gov/fulltext/ED512415.pdf>.
- 80 Juliana Raskauskas, and Scott Modell, "Modifying Anti-Bullying Programs to Include Students With Disabilities," *TEACHING Exceptional Children* 44, no. 1 (2011): 60-67, accessed Oct. 31, 2016, <http://dx.doi.org/10.1177/004005991104400107>; Michelle Birkett, Dorothy Espelage, and Brian Koenig, "LGB and Questioning Students in Schools: The Moderating Effects of Homophobic Bullying and School Climate on Negative Outcomes," *Journal of Youth and Adolescence* (2009): 989-1000, <http://dx.doi.org/10.1007/s10964-008-9389-1>.
- 81 David Jacobs et al., "The Relationship of Housing and Population Health: A 30-Year Retrospective Analysis," *Environmental Health Perspectives* 117 no. 4 (April 2009): 597-604, <http://dx.doi.org/10.1289/ehp.0800086>; Rebekah Levine Coley et al., "Relations Between Housing Characteristics and the Well-Being of Low-Income Children and Adolescents," *Developmental Psychology* 49, no. 9, (2013): 1775-1789, <http://dx.doi.org/10.1037/a0031033>.
- 82 Department of Education, "Chronic Absenteeism in the Nation's Schools: An Unprecedented Look at a Hidden Educational Crisis," accessed Nov. 21, 2016, <http://www2.ed.gov/datastory/chronicabsenteeism.html?src=pr>.
- 83 Ibid.
- 84 Ibid.
- 85 Ibid.
- 86 N. Freudenberg and J. Ruglis, "Reframing School Dropout as a Public Health Issue," *Preventing Chronic Disease* 4, no. 4 (2007), https://www.cdc.gov/pcd/issues/2007/oct/07_0063.htm.
- 87 Duke, "What We Know," 10.

- 88 Department of Education, "Guidance on School Improvement Grants Under Section 1003(g) of the Elementary and Secondary Education Act of 1965" (March 2015), accessed Jan. 24, 2017, <https://www2.ed.gov/programs/sif/legislation.html>; Lisa Dragoset et al., "School Improvement Grants: Implementation and Effectiveness" (January 2017), accessed Jan. 24, 2017, <https://ies.ed.gov/ncee/pubs/20174013/pdf/20174013.pdf>.
- 89 Department of Education, "Guidance on School Improvement Grants"; Dragoset et al., "School Improvement Grants."
- 90 Duke Okes, "Root Cause Analysis: The Core of Problem Solving and Corrective Action," American Society for Quality (1999); Cheryl James-Ward, Nancy Frey, and Douglas Fisher, "Root Cause Analysis: Getting to the Root of a Problem Strengthens School Improvement Efforts With Focused Solutions," National Association of Secondary School Principals (2012), https://s3-us-west-1.amazonaws.com/fisher-and-frey/documents/root_cause.pdf.
- 91 James-Ward, Frey, and Fisher, "Root Cause Analysis."
- 92 National Public Radio, "The Superintendent Who Turned Around a School District," *All Things Considered* (Jan. 3, 2016), accessed Nov. 1, 2016, <http://www.npr.org/2016/01/03/461205086/the-superintendent-who-turned-around-a-school-district>.
- 93 Angel Banks, "Determining Whether Recommendations From Comprehensive Needs Assessment Reports Are Reflected in School Improvement Plans in North Carolina," University of North Carolina, Chapel Hill (March 2012), accessed Nov. 2, 2016, <http://www.mpa.unc.edu/sites/www.mpa.unc.edu/files/Angel%20Banks.pdf>.
- 94 Michael Leachman et al., "Most States Have Cut School Funding, and Some Continue Cutting," Center on Budget and Policy Priorities (Jan. 25, 2016), accessed Oct. 31, 2016, <http://www.cbpp.org/research/state-budget-and-tax/most-states-have-cut-school-funding-and-some-continue-cutting>.
- 95 Nettie Legters and Robert Balfanz, "Do We Have What It Takes to Put All Students on the Graduation Path?" *New Directions for Youth Development*, no. 127 (2010): 11-24, <http://dx.doi.org/10.1002/yd.359>.
- 96 Zewditu Demissie et al., "School Health Profiles 2014: Characteristics of Health Programs Among Secondary Schools," Department of Health and Human Services (2015), accessed July 24, 2016, http://www.cdc.gov/healthyyouth/data/profiles/pdf/2014/2014_profiles_report.pdf.
- 97 Evolution, "Healthy Kids Colorado Survey: How Do Partners Across the State Use the Survey Results?" accessed Jan. 4, 2017, <http://www.becausemessagematters.com/wp-content/uploads/2015/04/HKCS-Examples-of-Data-Use1.pdf>.
- 98 Department of Education, "Data-Sharing Tool Kit for Communities: How to Leverage Community Relationships While Protecting Student Privacy" (March 2016), accessed July 27, 2016, <http://www2.ed.gov/programs/promiseneighborhoods/datasharingtool.pdf>.
- 99 Department of the Treasury, 26 CFR Parts 1, 53, and 602, "Additional Requirements for Charitable Hospitals; Community Health Needs Assessments for Charitable Hospitals; Requirement of a Section 4959 Excise Tax Return and Time for Filing the Return; Final Rule," 79 Fed. Reg. 78954 (Dec. 31, 2014), <https://www.gpo.gov/fdsys/pkg/FR-2014-12-31/pdf/2014-30525.pdf>.
- 100 National Education Association, "Parent, Family, Community Involvement in Education" (2008), accessed July 8, 2016, http://www.nea.org/assets/docs/PB11_ParentInvolvement08.pdf.
- 101 Englert and Barley, "Identifying Differences"; Duke, "What We Know."
- 102 Martin Blank, Reuben Jacobson, and Atelia Melaville, "Achieving Results Through Community School Partnerships. How District and Community Leaders Are Building Effective, Sustainable Relationships," Center for American Progress (January 2012), https://cdn.americanprogress.org/wp-content/uploads/issues/2012/01/pdf/community_schools.pdf.
- 103 Communities in Schools, "Our Model," accessed Aug. 11, 2017, <https://www.communitiesinschools.org/our-model>.
- 104 ICF International, "Communities in Schools National Evaluation Five Year Summary Report" (2010), accessed July 8, 2016, https://www.communitiesinschools.org/media/uploads/attachments/Communities_In_Schools_National_Evaluation_Five_Year_Summary_Report.pdf.
- 105 Pamela Attree et al., "The Experience of Community Engagement for Individuals: A Rapid Review of Evidence," *Health and Social Care in the Community* 19, no. 3 (2011): 250-260, <http://dx.doi.org/10.1111/j.1365-2524.2010.00976.x>.
- 106 Human Impact Partners and Group Health Research Institute, "Community Participation in Health Impact Assessments: A National Evaluation" (January 2016), http://www.humanimpact.org/wp-content/uploads/Full-report_Community-Participation-in-HIA-Evaluation.pdf.
- 107 Ursula Mager and Peter Nowak, "Effects of Student Participation in Decision Making at School: A Systematic Review and Synthesis of Empirical Research," *Educational Research Review* 7, no. 1 (2012): 37-61, <http://dx.doi.org/10.1016/j.edurev.2011.11.001>.
- 108 Search Institute, "40 Developmental Assets for Adolescents," Search Institute (2007), <http://www.search-institute.org/content/40-developmental-assets-adolescents-ages-12-18>.

- 109 Jessica Donze Black, "USDA Issues Final Rules Supporting Healthy School Snacks and Wellness Policies," Kids' Safe and Healthful Foods Project (July 2016), accessed July 23, 2016, <http://www.pewtrusts.org/en/research-and-analysis/analysis/2016/07/21/usda-issues-final-rules-supporting-healthy-school-snacks-and-wellness-policies>.
- 110 Department of Education, "Elementary and Secondary Education Act of 1965, as Amended by the Every Student Succeeds Act—Accountability and State Plans," 81 Fed. Reg. 86076 (Nov. 29, 2016), <https://www.gpo.gov/fdsys/pkg/FR-2016-11-29/pdf/2016-27985.pdf>.
- 111 Liz Warner and Patricia Heindel, "Student Success Built on a Positive School Climate," *New Jersey Education Association Review* (November 2016), http://www.unitedwaynnj.org/documents/press/NJEA_SchoolClimateArticle11_2016.pdf; Lindsey O'Brennan and Catherine Bradshaw, "Importance of School Climate," National Education Association, accessed Jan. 19, 2017, https://www.nea.org/assets/docs/15584_Bully_Free_Research_Brief-4pg.pdf.
- 112 District of Columbia Department of Healthcare Finance, "FY10 Performance Accountability Report" (2010), http://oca.dc.gov/sites/default/files/dc/sites/oca/publication/attachments/DHCF_FY10PAR.pdf.
- 113 Ibid.
- 114 National Collaborating Centre for Healthy Public Policy, "Citizen Participation in Health Impact Assessment: An Overview of the Principal Arguments Supporting It" (2011), http://www.ncchpp.ca/docs/EIS-HIA_participation_advantagesEN.pdf.
- 115 Lyn Richards and Janice M. Morse, *ReadMe First for a User's Guide to Qualitative Methods* (Thousand Oaks, CA: Sage Publications, 2013), <https://us.sagepub.com/en-us/nam/readme-first-for-a-users-guide-to-qualitative-methods/book236735>.
- 116 Yvonna S. Lincoln and E.G. Guba, *Naturalistic Inquiry* (London: Sage Publications, 1985).
- 117 Department of Education, "EDFacts Data Files," accessed Oct. 6, 2016, <https://www2.ed.gov/about/inits/ed/edfacts/data-files/school-status-data.html>. The HIA team used the "SY 2014-15 Improvement Status—School" and "SY 2013-14 Improvement Status—School" data files, and included in the analysis schools with any of the following status codes: improvement Year 1 ("IMPYR1"), improvement Year 2 ("IMPYR2"), corrective action ("CORRACT"), restructuring planning ("RESTRPLAN"), restructuring ("RESTR"), focus ("FOCUS"), or priority ("PRIORITY").
- 118 Department of Education, "School Level Common Core of Data 2013-14," "MapED," accessed Oct. 6, 2016, http://data.deptofed.opendata.arcgis.com/datasets/7c666af428f3467380a2bfa498397797_0.
- 119 National Research Council, "Improving Health," 73.
- 120 The Pew Charitable Trusts, "Health Impact Project Offers Recommendations."
- 121 Rajiv Bhatia et al., "Minimum Elements and Practice Standards for Health Impact Assessment, Version 3" (September 2014), <https://sophia.wildapricot.org/resources/Documents/HIA-Practice-Standards-September-2014.pdf>.
- 122 Ibid.

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The Health Impact Project, a collaboration of the Robert Wood Johnson Foundation and The Pew Charitable Trusts, is a national initiative designed to reduce health inequities and improve the health of all people by ensuring that health is a valued and routine consideration in decisions affecting them.