SCHOOL FINANCE SERIES

Measuring Student Socioeconomic Status

Toward a Comprehensive Approach

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Executive Summary

Accurately measuring the family incomes of students is essential to allocating school resources that meet the educational needs of all students, particularly the needs of students from low-income families. With the onset of the COVID-19 health and economic crisis, the need to accurately assess the financial condition of families who are suffering a loss of income and employment has taken on new and urgent importance. Under the current circumstances, it is very likely that poverty rates in the United States will reach their highest levels in 50 years. The dramatic downturn in revenue associated with the COVID-19 crisis has had and will continue to have an impact on the ability of low-income families to provide for their children. Public school districts are experiencing a significant loss of funding, making them more dependent on federal dollars to meet children's needs. Measuring student socioeconomic status (SES) accurately is essential if schools educating students from low-income and impoverished families are to receive the funds they need to offer quality education to those students furthest from opportunity.

The Free and Reduced-Price Lunch (FRPL) program has been the most commonly used measure of student poverty in the United States, but that is changing. This report examines the limitations of FRPL as a sole proxy for student poverty and the shift away from its use. It considers "direct certification," a newer process for determining students' eligibility for free or reduced-price meals, Title I–sponsored student services, and other programs.

This report offers several considerations for state policymakers who are seeking to accurately count students from low-income families through the direct certification process. These alternatives include expanding the range of programs considered for direct certification to identify students from low-income families, using a multiplier to adjust school-level counts of children from low-income families, retaining the option for families to fill out traditional FRPL applications, and using community income as a proxy for student economic status. The report concludes with a call for the continuous development of up-to-date, comprehensive measures of students' SES that will better serve the needs of policymakers, researchers, educators, and families.

The shift away from reliance on FRPL as a proxy for individual student socioeconomic data has been aided by the expansion of enrollment in the Community Eligibility Provision (CEP). Enacted as part of the Healthy, Hunger-Free Kids Act of 2010, the CEP is a federal option for schools, groups of schools, or districts serving high numbers of students from low-income families to offer free meals to all students within the school. The share of students with families participating in eligibility programs is known as the identified student percentage; schools with an identified student percentage over 40% are allowed to offer free meals to all students in the school. In the 2018–19 school year, approximately 28,542 schools in 4,633 school districts—or one in five schools nationwide—were enrolled in the CEP.

Many studies have confirmed that schools in areas of concentrated poverty encounter an intense set of problems that affect student achievement and require focused solutions. Importantly, a school's poverty level is associated with lower student achievement for all students, not just for students from low-income families, but the impact of a school's poverty level may be greatest on students who are themselves from economically disadvantaged families. However, strategies that bring

adequate school funding for wraparound supports—health, mental health, and social services—and extended learning to such schools through community school models can counteract these challenges and support higher achievement and attainment for students.

Ensuring reliable and accurate identification of students from low-income families—whose educational experiences and outcomes are impacted by the effects of poverty—is essential for ensuring that they have the services and supports needed to succeed in school. Experts agree that the traditional measure of eligibility for FRPL does not fully capture the number of students living in poverty because it relies on a single measure of self-reported income at a point in time, and the forms are difficult to collect each year from all families.

New community eligibility provisions from the federal government, enacted as part of the Healthy, Hunger-Free Kids Act of 2010, make it easier for schools to provide meals to a greater number of students—since all students in a school become eligible if at least 40% of the students' families are identified as low-income through their enrollment in other public service programs.

In the 1990s and early 2000s, many states began to use direct certification, a process of deeming eligible for free meals those students whose families are enrolled in the Supplemental Nutrition Assistance Program (SNAP). States now use SNAP and other public service programs to establish community eligibility for schools to serve meals to all their students. This approach poses challenges as well as benefits. Students in poverty can be undercounted when a narrow set of programs is used for calculations and when eligible families are not enrolled in the programs, due to funding shortfalls or fear of becoming ineligible due to their immigration status and recently enacted "public benefit" restrictions.

All states use SNAP for direct certification, but this produces a poverty measure considerably smaller than that produced by FRPL. As a result, the U.S. Department of Agriculture suggests that states use a multiplier of 1.6 times the number of students identified through direct certification to determine poverty levels in a school, as this is the ratio observed between FRPL counts and direct certification counts in an earlier study. We recommend that states use this multiplier along with additional measures of poverty.

States seeking more accurate measures of student poverty levels are increasingly considering basing direct certification on student family participation in a broad universe of public programs, such as SNAP, Temporary Assistance for Needy Families (TANF), foster care, programs addressing homelessness or students who run away, the Food Distribution Program on Indian Reservations, Medicaid, or Head Start. Further, they are supplementing these data with traditional FRPL data to achieve greater accuracy.

Researchers have proposed other indicators, including parent education, measures of student mobility, and early exposure to poverty as captured in longitudinal income data, as well as the use of program data from the Child Nutrition and WIC (Women, Infants, and Children) Reauthorization Act, the Affordable Care Act Health Insurance Marketplace, the Public Housing Program and Housing Choice Voucher Program, the Low Income Housing Energy Assistance Program, the Weatherization Assistance Program, and the Earned Income Tax Credit.

Even with the freedom to serve meals established by community eligibility, states should maintain data systems to count the number of eligible students in each school—certified in all of the ways the state adopts. This count is how other services—such as wraparound health and mental health

supports and extended learning—can be appropriately targeted to schools with concentrations of students in poverty. In addition, without income-related data attached to individual student identifiers, there is insufficient information to calculate opportunity and achievement gaps between students from low-income families and their peers.

It is clear that accurately assessing students' SES in order to meet their needs is complex and requires states to expand their measures of student poverty in ways that are supported by ongoing research that clarifies the implications of different strategies. A multiple measures approach, reflected in student-level data systems, is essential to understand and respond to student needs while monitoring their progress. In the time of COVID-19, it is especially important for us to accurately measure student SES because the risk of not accurately assessing the needs of students furthest from opportunity could result in even greater educational inequities than we see today.

Introduction

This report addresses the ongoing challenge of accurately measuring student socioeconomic status (SES) at the individual and aggregate levels for the purpose of directing resources to schools.[1] In addition to the fact that child poverty is associated with a range of individual students' needs, many studies have confirmed that schools in areas of concentrated poverty encounter an intense set of problems that more acutely affect student achievement and require focused solutions.[2] Importantly, high-poverty schools are associated with lower student achievement for all students, not just for students from low-income families, but the impact of a school's poverty level may be greatest on students who are themselves from economically disadvantaged families.[3] However, strategies that bring adequate school funding for wraparound supports—health, mental health, social services, and extended learning—to such schools through community school models can counteract these challenges and support higher achievement and attainment for students.

Getting these services to the right schools in the right proportions requires accurate measures of pupil SES and needs. Although students' eligibility to participate in the federal Free and Reduced-Price Lunch (FRPL) program has long been used as a key indicator, for some time, researchers and educators have recognized that it is a poor measure of SES.[4]

Addressing and rectifying this limitation is important because the use of a poor measure of student SES has a direct impact on the services schools provide to their students; it also directly impacts the trustworthiness of educational studies that rely on aggregate school and district measures of student levels of poverty.[5] A measurement that does not reflect the complexity of SES stands the risk of reporting incomplete or even false results. In the words of a recent Education Law Center publication, "A fair funding system should provide levels of funding based on student need."[6] Unfortunately, single measures of such a complex constellation of assets and liabilities as SES are vulnerable to inaccuracies because they focus on only one aspect of a person or person's life, whereas in reality, SES is composed of many indices indicating an individual's or group's position within a hierarchical social structure, such as income, wealth, race/ethnicity, occupation, and education.

With the onset of the COVID-19 health and economic crisis, the need to accurately assess the financial condition of families who are suffering a loss of income and employment has taken on new and urgent importance. Under the current circumstances, poverty rates in the United States will very likely reach their highest levels in 50 years.[7] The dramatic downturn in revenue associated with the COVID-19 crisis has had and will continue to have an impact on the ability of low-income families to provide for their children.[8] Public school districts are experiencing a significant loss of funding, making them more dependent on federal dollars to meet children's needs.[9] The loss of school funding during and after the Great Recession indicates that the fallout from the current COVID-19 crisis may last for many years to come.[10] If the past is any guide, there is a real danger that school funding will become less equitable as a consequence. Measuring student SES accurately is essential if schools educating students from low-income and impoverished families are to receive the necessary funds to offer quality education to those students furthest from opportunity.

A range of options is considered in this report. Taking into account what we know thus far about measuring student SES, we offer one path forward toward a consistent and reliable approach to measurement, subject to the caveat that there is still much work to be done in forging multiple measures of student SES that are valid, reliable, and stable over time.

The report begins with a background on the origins and limitations of FRPL. It then turns to the consequences of the Community Eligibility Provision (CEP) on the use of FRPL as a measure of student SES. This discussion is followed by an overview of the alternatives to using FRPL as the sole measure of student SES. Next, the report presents a set of methods to consider when measuring the share of students from low-income families. This issue is particularly important for districts serving a high concentration of students from low-income families. The report concludes with some considerations for policymakers as they assess how best to measure student SES.

The Free and Reduced-Price Lunch Program

In operation since 1946, the National School Lunch Program (NSLP) provides free or reduced-price lunches to almost 30 million students nationwide.[11] Students whose household income is below 130% of the federal poverty level qualify for free lunches, and students whose household income is between 130% and 185% of the poverty level qualify for reduced-price lunches.[12] Nearly 99% of public schools offer meals via the NSLP, and close to 60% of school-age children receive meals through the program.[13]

Historically, FRPL eligibility has been widely used as a proxy for student SES. Currently, 34 states—which all vary in how funding is provided to districts serving high numbers of students from low-income families—rely upon enrollment in FRPL as a proxy for student SES to determine eligibility for supplemental funding.[14]

Limitations of Reliance Upon FRPL Participation as the Sole Proxy for Student SES

There are several limitations of using FRPL as a sole measure for determining student SES:

- **The data are generally self-reported:** Family income is self-reported for purposes of determining eligibility for FRPL, but such data are often unreliable, as they suffer from errors and do not undergo the same verification and checks as data generated for research.
- **The data do not capture fluctuations in family income:** Because the income reported for FRPL reflects income for the month prior to enrollment, variability in family income over time, which may increase or decrease significantly over the course of months, is not accounted for.[15] In addition, FRPL does not account for geographic variations in the cost of living that impact net income after expenses are deducted.[16]
- **The data do not represent all students:** Depending upon the extent of school or district outreach, some families that may be eligible for FRPL may not apply. Further, some families, for a number of reasons, may be wary of providing financial or other personal information to a governmental entity.[17]
- **The data do not capture meaningful economic differences between students:** Because FRPL is a dichotomous measure, it does not capture meaningful differences between students in extreme poverty and students from families that have some stable income. In the lived experience of students, levels of family income matter, as they directly impact access to material and nonmaterial resources.[18]
- **The data may be limited:** Experts have also argued that the federal poverty guidelines upon which FRPL eligibility is determined need continuous updating and can become outdated.[19] Experts also have expressed concern with how the sole reliance on income overlooks other social factors that may negatively impact educational experiences and outcomes, including parental education, neighborhood resources, and residential stability.[20] By capturing income alone, the data provide no information about the costs that families are facing and no information about family wealth and other assets.

These reasons—along with the recent addition of the CEP discussed below—contribute to why many researchers no longer consider student enrollment in FRPL a reliable sole measure of family or student SES.[21]

Impact on FRPL of the Community Eligibility Provision

A major factor that has contributed to a shift away from reliance on FRPL eligibility as a proxy for individual student socioeconomic data is the expansion of enrollment in the CEP.[22] Enacted as part of the Healthy, Hunger-Free Kids Act of 2010,[23] the CEP is a federal option for schools, groups of schools, or districts serving high numbers of students from low-income families to offer free meals to all students within the school.[24] It authorizes schools to provide free meals to students by certifying student family participation in public benefit programs.[25] The share of students with families participating in eligibility programs is known as the identified student percentage;[26] schools with an identified student percentage of over 40% are allowed to offer free meals to all students in the school.[27] The federal government does not require CEP schools to collect individual student income data, although some states do require income data.[28]

The CEP became available nationwide in the 2014–15 school year. In the 2018–19 school year, approximately 28,542 schools in 4,633 school districts—or 1 in 5 schools nationwide—were enrolled in the CEP. These CEP schools offer nearly 13.6 million children free breakfast and lunch, an increase of 3,592 schools since the 2017–18 school year.[29]

Enrollment in the CEP allows schools, groups of schools, or districts to provide free meals to all their students, which can be advantageous, as there is growing evidence that adequate nutrition is related to student achievement.[30] One expert noted, however, that the changes brought about by direct certification as a means of enrollment in the CEP "herald the end of FRPL status as a uniform, student-level measure of economic disadvantage."[31] Another suggested that enrollment in the CEP could undermine the spirit of the Elementary and Secondary Education Act (ESEA) by hampering districts' ability to identify students who should—based on their self-reported eligibility for FRPL—have access to targeted interventions or services intended to support students from low-income families.[32] There also may be implications for how schools within a district are ranked for Title I funding purposes and how data on the students from the low-income families subgroup are calculated and reported across measures.

While it brings some advantages, a basic challenge of the CEP provision is that it masks important differences in the SES level of a school's student body. Using the single criteria of 40% for CEP status, it is hard to know how many students in a CEP school are actually from low-income families. This can be a challenge for state policies that seek to identify high-poverty schools for certain kinds of supports or interventions, because policymakers do not know if a school enrolls 40% of students from low-income families or a greater percentage of students from low-income families. There is, for instance, a greater need for services in schools that enroll 80% of students from low-income families than in schools that enroll 40%. This can be a challenge for state policies that seek to identify high-poverty schools for certain kinds of supports or interventions, because use of CEP status without additional data collection makes it impossible to know if a school is 40% low-income, 60%, 80%, or 100%.

Alternatives to Reliance on FRPL as the Sole Measure of Student Socioeconomic Status

In response to concerns about the reliance on FRPL as a sole measure of student SES, many districts and states have begun to use new ways of counting the numbers of students from low-income families. Experts have identified methods for this measurement that states can consider as they shape policies for measuring student SES.[33]

Direct Certification

In the 1990s and early 2000s, many states began to use direct certification, a process of deeming eligible for free meals those students whose families are enrolled in the Supplemental Nutrition Assistance Program (SNAP). Other public programs, including Temporary Assistance for Needy Families (TANF), Medicaid, the Food Distribution Program on Indian Reservations, foster care, programs for students experiencing homelessness, or Head Start may also be used to determine eligibility.[34] The 2004 Child Nutrition and WIC (Women, Infants, and Children) Reauthorization Act required local education agencies (LEAs) to establish systems to directly certify children from households that receive SNAP benefits by school year 2008–09,[35] and the Healthy, Hunger-Free Kids Act of 2010 required states to meet certain direct certification performance targets.[36]

A major strength of direct certification as a measure of students from low-income families is that it provides some assurances of the reliability of student family income, unlike unverified self-reported family income data provided on FRPL applications. Specifically, "As means-tested federal programs require individuals to meet well-specified eligibility requirements, they provide states with well-established public standards to identify students as low-income or economically needy."[37]

A major strength of direct certification as a measure of students from low-income families is that it provides some assurances of the reliability of student family income.

Like FRPL, however, direct certification may provide an inaccurate picture of families impacted by poverty, as many families may not enroll in public programs even if they are eligible. For example, in Indiana, "for every 100 poor families with children … in 2016–17, only seven received Temporary Assistance for Needy Families,"[38] and only about 83% of eligible Indiana families enrolled in SNAP in 2015.[39]

Further, varying state application procedures and eligibility determinations may impact enrollment of eligible families. As Urban Institute researcher Erica Greenberg noted:

> Direct certification may undercount low-income students whose families have low levels of literacy or limited English proficiency, those with transportation challenges or inflexible work schedules, those unable to document income, and students who might have qualified through old free-lunch forms.[40]

Recent eligibility changes made based on the "public charge" rule that penalize green card applicants for enrollment in public programs, such as SNAP, Medicaid, and the Children's Health Insurance Program, can discourage enrollment in programs that immigrant families may be

eligible for.[41] Some states do not provide TANF to qualified immigrants, even if they complete the federal 5-year waiting period for access to "means-tested" benefits, which could have implications for immigrant families and their children's enrollment in public programs. This can, then, result in the undercounting of students from low-income families in schools that use direct certification.[42]

While all states use SNAP for direct certification, this produces a poverty measure considerably smaller than that produced by FRPL. The income eligibility level for qualifying for SNAP—130% of the federal poverty level, or $2,665 per month gross family income for a family of four—is fairly low. This level overlooks many families that are still in dire need (such as those with incomes between 130% and 185% of the federal poverty level whose children qualify for reduced-price lunches) but whose incomes do not meet that low threshold.[43]

Technical challenges with matching school enrollment and public benefit databases may also contribute to the undercounting of students from low-income families.[44] Such technical challenges may include different spellings of students' names in different databases or general failure to accurately match students with public databases. Massachusetts is a state that has made an extensive effort to address these issues, as described in the box below.

Massachusetts: One State's Approach to Ensuring Direct Certification Reflects a Larger Share of Students From Low-Income Families

Massachusetts offers an example of how one state is addressing the potential for undercounting of students from low-income families that may result from direct certification.[45] It is doing so by broadly expanding the universe of programs relied upon to directly certify students whom the state categorizes (based upon family income) as "economically disadvantaged."[46] In addition to directly certifying students whose families are participating in SNAP and Traditional Aid to Families With Dependent Children,[47] Massachusetts directly certifies students living with household members who can be directly certified, as well as students experiencing homelessness, migrant students, students who have run away and are receiving services, students participating in Head Start, students enrolled in state Medicaid (MassHealth) with family incomes between 130% and 185% of the federal poverty level, and students in the state's Department of Children and Families foster care system.[48] In addition, the state also considers district-level measures of student poverty (based on the district's share of students from low-income families as compared with other districts in the state).[49]

However, even when using these measures, Massachusetts experienced a 31.4% drop in the share of students identified as economically disadvantaged after transitioning to direct certification from the FRPL measure.[50] The Massachusetts Department of Elementary and Secondary Education noted of this decrease: "Obviously this [reduction in share of students] has nothing to do with any real changes in family income; it is simply a shift from one valid measure to another valid measure.... Neither measure is 'right' or 'wrong.'"[51]

But this reduction can have consequences for funding, student services, accountability, reporting, and research.[52] For example, as school finance analysts have noted, "It can be challenging to obtain the individual income data required to determine compensatory aid in CEP schools.... [And] education accountability policies require individual indicators of income so that achievement data can be disaggregated by students who receive free and reduced-price meals and students who do not."[53]

Based on the steep drops in poverty counts that have accompanied changes in measures, researchers have recommended using additional programs for direct certification, including the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC), which is administered by the same federal agency as the National School Lunch Program and uses the same household income requirements, or the application for the federal Child Care and Development Fund, which serves as the application to receive funds from the Child Care and Development Block Grant.[54]

States considering which public programs to include for direct certification eligibility can use their discretion. As Greenberg notes, they should "weigh the costs, benefits, and resources available for additional data links and consider whether expanding direct certification systems can help better align direct certification counts of low-income students with those generated by school lunch forms before the growth of enrollment in the CEP."[55]

Methods to Consider When Measuring the Share of Students From Low-Income Families

The discussion above of how Massachusetts has expanded the range of measures to determine students' eligibility to receive needed services leads to an examination of a broader set of options that may be useful in other states. Creating the right mix of measures is best determined by the needs and educational strategies in state and local contexts. When these measures are aggregated (i.e., considered cumulatively), they may also help to refine the measures of SES used by policymakers and researchers. Some alternative approaches include:

- **Expanding the range of programs considered for direct certification to identify students eligible for free meals and Title I–funded programs.** Currently, all states rely on SNAP at a minimum to directly certify students for free or reduced-price meals.[56] These states may want to expand the number of programs they consider if they wish to directly certify students in order to capture a greater share of students from low-income families.[57] Additional programs that rely upon income verification (or "means-tested" programs) that researchers have identified for potential expansion of direct certification include:
  - The Special Supplemental Nutrition Program for Women, Infants, and Children
  - Participation in the Affordable Care Act Health Insurance Marketplace
  - Medicare and Medicaid
  - The Public Housing Program and Housing Choice Voucher Program
  - The Low-Income Housing Energy Assistance Program
  - The Weatherization Assistance Program
  - The Earned Income Tax Credit[58]
- **Using a multiplier to adjust school-level counts of children from low-income families.**[59] Because FRPL data can have implications for in-district allocation of federal Title I funds intended to support students from low-income families,[60] the U.S. Department of Education has provided guidance on how schools enrolled in the CEP can measure the numbers of these students.[61] The guidance recommends that LEAs multiply the number of students identified by direct certification in a school by a 1.6 multiplier and divide by the enrollment in the school as a way to help account for the difference in poverty

rates when using FRPL data for some schools and direct certification data for others.[62] The 1.6 multiplier is set by the U.S. Department of Agriculture. The department can set the multiplier between 1.3 and 1.6 for CEP purposes, and it has been set at 1.6 since the beginning of the program, based on research showing that for every 10 students directly certified for free meals, about six more come from families that would be approved for subsidized meals if they completed an application.[63] States like Texas use the 1.6 multiplier to estimate the share of students eligible for FRPL in CEP schools.[64]

- **Retaining the option for families to fill out a traditional application for FRPL** or alternative family income forms in addition to direct certification. Many states require families not enrolled in eligible public programs to fill out an application for FRPL,[65] which provides self-reported individual student family income data.[66] States can continue to offer families the option of filling out an FRPL application in addition to directly certifying students. While self-reported data carries the risk of inaccuracies outlined above, it also provides an opportunity for interested and eligible students to enroll in FRPL and share income status. Ensuring that the notification letters that are sent home to students are linguistically and culturally appropriate—and that families are aware that the forms are available throughout the year—can also aid in program participation. States can collect alternative forms to garner information about student family income, which could differ from the traditional FRPL form—an approach used in California.
- **California enables schools to collect alternative student family income forms**, which are paid for by the state and districts.[67] California has developed five such alternative forms for schools to use, which have been translated into multiple languages to further help students' families access the forms and aid schools in identifying students from low-income families.[68] One potential challenge of using alternative student family income forms is the administrative burden of distributing and collecting forms. CEP schools in Detroit, MI, and in New York City and Buffalo, NY, have addressed this challenge by restricting the collection of alternative forms to only those students who are not identified through direct certification in CEP schools.[69] Another potential challenge with using alternative forms is ensuring that families see the value in filling out such forms. As one report observes, "One concern is the possibility that response rates will decline if families do not see a direct benefit to completing an alternative form in CEP schools.... Less is known about how families will respond to an alternative form that is not linked to school-meals eligibility."[70] Therefore, outreach to and support for families to encourage submission of alternative income forms is necessary.
- **Using community income as a proxy for student SES.** Another approach is the use of community income as a proxy for individual SES.[71] This approach might yield reliable results in areas of concentrated poverty, but it would do less well in communities where impoverished families live among families with higher incomes.[72] Further, such community income data—like that collected through the U.S. Census Bureau's American Community Survey—is often drawn from samples, rather than the entire population, and later aggregated, thereby obscuring individual student family income data.[73]

A recent publication by the Urban Institute pointed to several alternative measures of student poverty. In addition to the alternatives discussed above, these measures include the following as proxies for family income level: parent education, measures of student mobility, and early exposure to poverty as captured in longitudinal income data.[74]

Considerations for Districts Serving High Concentrations of Students From Low-Income Families

In addition to considering how students from low-income families are accounted for within states' school finance formulas, it is important to consider the heightened level of resources needed in districts serving large concentrations of students from low-income families. Low achievement levels among students in many high-poverty schools signal the more extensive districtwide resources needed to adequately serve students. These include both wraparound supports for nutrition, health care, social services, and extended learning—which may be provided through community schools[75]—and the high-quality staff, curricular materials, and professional learning opportunities for teachers that generally matter for student outcomes and can help counteract the effects of a school's poverty level.[76]

In some school finance systems, such as the Local Control Funding Formula in California, high proportions of students from low-income families, as well as English learners and children in foster care, qualify districts for additional concentration grants. Recognizing these needs requires accurate counts of these characteristics of students that trigger the additional funding.

Conclusion

Ensuring reliable and accurate identification of students from low-income families—whose educational experiences and outcomes are impacted by the effects of poverty—is essential for ensuring that they have the services and supports needed to succeed in school. Experts agree that the traditional measure of eligibility for FRPL does not fully capture the number of students living in poverty because it relies on a single measure of self-reported income at a point in time, and the forms are difficult to collect each year from all families.

Ensuring reliable and accurate identification of students from low-income families—whose educational experiences and outcomes are impacted by the effects of poverty—is essential for ensuring that they have the services and supports needed to succeed in school.

New community eligibility provisions from the federal government, enacted as part of the Healthy, Hunger-Free Kids Act of 2010, make it easier for schools to provide meals to a greater number of students—since all students in a school become eligible if at least 40% of the students' families are identified as low-income through their enrollment in other public service programs.

In the 1990s and early 2000s, many states began to use direct certification, a process of deeming eligible for free meals those students whose families are enrolled in SNAP. States now use SNAP and other public service programs to establish community eligibility for schools to serve meals to all their students. This approach poses challenges as well as benefits. Students in poverty can be undercounted when a narrow set of programs is used for calculations and when eligible families are not enrolled in the programs, due to funding shortfalls or fear of becoming ineligible due to their immigration status and recently enacted "public benefit" restrictions.

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States seeking more accurate measures of student poverty levels are increasingly considering basing direct certification on student family participation in a broad universe of public programs, such as SNAP, TANF, foster care, programs addressing homelessness or students who run away, the Food Distribution Program on Indian Reservations, Medicaid, or Head Start. Further, they are supplementing these data with traditional FRPL data to achieve greater accuracy.

Researchers have proposed other indicators, including parent education, measures of student mobility, and early exposure to poverty as captured in longitudinal income data, as well as the use of program data from the Child Nutrition and WIC Reauthorization Act, the Affordable Care Act

Health Insurance Marketplace, the Public Housing Program and Housing Choice Voucher Program, the Low Income Housing Energy Assistance Program, the Weatherization Assistance Program, and the Earned Income Tax Credit.

Even with the freedom to serve meals established by community eligibility, states should maintain data systems to count the number of eligible students in each school—certified in all of the ways the state adopts. This count is how other services—such as wraparound health and mental health supports and extended learning—can be appropriately targeted to schools with concentrations of students in poverty. In addition, without income-related data attached to individual student identifiers, there is insufficient information to calculate opportunity and achievement gaps between students from low-income families and their peers.

Research finds that schools with large majorities of students from low-income families experience a more intense set of adverse conditions and needs than those with smaller numbers: A school with 80% of students living in poverty is quite different from one with 40% of students living in poverty, and many school funding strategies recognize the need for greater investments in schools with large concentrations of students requiring supplemental services.

With the onset of the COVID-19 health and economic crisis, we can expect that low-income and impoverished families will experience increasing material hardships and that the proportion of students attending public schools who require additional services will grow significantly in the coming years. It is clear that accurately assessing students' SES in order to meet their needs is complex and requires states to expand their measures of student poverty in ways that are supported by ongoing research that clarifies the implications of different strategies. A multiple measures approach, reflected in student-level data systems, is essential to understand and respond to student needs while monitoring their progress.

Endnotes

1. Skinner, R. R., & Aussenberg, R. A. (2016). *Overview of ESEA Title I-A and the school meals' Community Eligibility Provision.* Washington, DC: Congressional Research Service.

2. Ladd, H. F. (2012). Education and poverty: Confronting the evidence. *Journal of Policy and Management*, *31*(2), 203–227; Mickleson, R. A. (2018). *Is there systematic meaningful evidence of school poverty thresholds?* Washington, DC: National Coalition on School Diversity.

3. Biddle, B. (2001). *Social Class, Poverty, and Education*. Abingdon, UK: Routledge.

4. Greenberg, E., Blagg, K., & Rainer, M. (2019). *Measuring student poverty: Developing accurate counts for school funding, accountability, and research*. Washington, DC: Urban Institute. https://www.urban.org/research/publication/measuring-student-poverty.

5. Chingos, M. M. (2016). *No more free lunch for education policymakers and researchers*. Washington, DC: Brookings Institution. https://www.brookings.edu/research/no-more-free-lunch-for-education-policymakers-and-researchers/.

6. Baker, B. D., Farrie, D., & Sciarra, D. (2018). *Is school funding fair? A national report card*, p. iii. Newark, NJ: Education Law Center. https://edlawcenter.org/assets/files/pdfs/publications/Is_School_Funding_Fair_7th_Editi.pdf.

7. Parolin, Z., & Wimer, C. (2020, April 16). Forecasting estimates of poverty during the COVID-19 crisis. *Poverty & Social Policy Brief, 4*(6). https://www.povertycenter.columbia.edu/news-internal/coronavirus-forecasting-poverty-estimates (accessed 05/01/20).

8. Van Lancker, W., & Parolin, Z. (2020, April 7). COVID-19, school closures, and child poverty: A social crisis in the making. *The Lancet Public Health.* https://doi.org/10.1016/S2468-2667(20)30084-0 (accessed 05/01/20); Blagg, K., Blom, E., Gallagher, M., & Rainer, M. (2020). *Mapping student needs during COVID-19.* Washington, DC: Urban Institute. https://www.urban.org/research/publication/mapping-student-needs-during-covid-19 (accessed 05/01/2020); Danielson, C., & Gao, N. (2020). *Feeding children when schools are closed for COVID-19.* San Francisco, CA: Public Policy Institute for California. https://www.ppic.org/blog/feeding-children-when-schools-are-closed-for-covid-19/ (accessed 05/01/20).

9. Griffith, M. (2020, April 22). COVID-19 and school funding: What to expect and what you can do [Blog post]. https://learningpolicyinstitute.org/blog/covid-19-and-school-funding-what-expect-and-what-you-can-do (accessed 05/01/20); Cardichon, J. (2020, April 7). Using federal stimulus funds to advance equity and opportunity [Blog post]. https://learningpolicyinstitute.org/blog/using-federal-stimulus-funds-advance-equity-opportunity (accessed 05/01/20).

10. Evans, W. N., Schwab, R. M., & Wagner, K. L. (2019). The great recession and public education. *Education Finance and Policy, 14*(2), 298–326. https://doi.org/10.1162/edfp_a_00245 (accessed 05/01/20).

11. "The National School Lunch Program is the Nation's second largest food and nutrition assistance program. In fiscal year (FY) 2018, it operated in nearly 100,000 public and nonprofit private schools (grades PK-12) and residential childcare institutions. The NSLP provided low-cost or free lunches to 29.7 million children daily at a cost of $13.8 billion." U.S. Department of Agriculture, Economic Research Service. (n.d.). National School Lunch Program. https://www.ers.usda.gov/topics/food-nutrition-assistance/child-nutrition-programs/national-school-lunch-program (accessed 12/05/19).

12. According to the Center on Budget and Policy Priorities, 130% of the federal poverty line for a family of four is $2,665 per month, or about $27,000 per year. Center on Budget and Policy Priorities. (2018). *A quick guide to SNAP eligibility and benefits.* Washington, DC: Author. https://www.cbpp.org/research/food-assistance/a-quick-guide-to-snap-eligibility-and-benefits (accessed 10/23/19). The 2019 poverty guidelines indicate that 185% of the federal poverty line for a family of three is $39,461, or about $3,288 per month. Office of the Assistant Secretary for Planning and Evaluation. (n.d.). HHS poverty guidelines for 2019. https://aspe.hhs.gov/poverty-guidelines (accessed 10/24/19).

13. Domina, T., Pharris-Ciurej, N., Penner, A. M., Penner, E. K., Brummet, Q., Porter, S. R., & Sanabria, T. (2018). Is Free and Reduced-Price Lunch a valid measure of educational disadvantage? *Educational Researcher, 47*(9), 539–555. https://journals.sagepub.com/doi/abs/10.3102/0013189X18797609.

14. EdBuild. (n.d.). FundEd: Student poverty funding: Policies in each state. http://funded.edbuild.org/reports/issue/student-poverty; Domina, T., Pharris-Ciurej, N., Penner, A. M., Penner, E. K., Brummet, Q., Porter, S. R., & Sanabria, T. (2018). Is Free and Reduced-Price Lunch a valid measure of educational disadvantage? *Educational Researcher*, *47*(9), 539–555. https://journals.sagepub.com/doi/abs/10.3102/0013189X18797609.

15. Domina, T., Pharris-Ciurej, N., Penner, A. M., Penner, E. K., Brummet, Q., Porter, S. R., & Sanabria, T. (2018). Is Free and Reduced-Price Lunch a valid measure of educational disadvantage? *Educational Researcher*, *47*(9), 539–555. https://journals.sagepub.com/doi/abs/10.3102/0013189X18797609.

16. Domina, T., Pharris-Ciurej, N., Penner, A. M., Penner, E. K., Brummet, Q., Porter, S. R., & Sanabria, T. (2018). Is Free and Reduced-Price Lunch a valid measure of educational disadvantage? *Educational Researcher*, *47*(9), 539–555. https://journals.sagepub.com/doi/abs/10.3102/0013189X18797609.

17. Greenberg, E., Blagg, K., & Rainer, M. (2019). *Measuring student poverty: Developing accurate counts for school funding, accountability, and research*. Washington, DC: Urban Institute. https://www.urban.org/research/publication/measuring-student-poverty.

18. American Voices Project. (n.d.). https://americanvoicesproject.org (accessed 01/08/2020).

19. Congressional Budget Office (2015). *Child nutrition programs: Spending and policy options*. Washington, DC: Author. https://www.cbo.gov/sites/default/files/114th-congress-2015-2016/reports/50737-childnutrition.pdf.

20. Domina, T., Pharris-Ciurej, N., Penner, A. M., Penner, E. K., Brummet, Q., Porter, S. R., & Sanabria, T. (2018). Is Free and Reduced-Price Lunch a valid measure of educational disadvantage? *Educational Researcher*, *47*(9), 539–555. https://journals.sagepub.com/doi/abs/10.3102/0013189X18797609.

21. "While the free/reduced lunch percentages can serve as a useful indicator of the relative numbers of poor children, it does not substitute as a measure of the level of child poverty, nor changes in poverty rates over time." Snyder, T., & Musu-Gillette, L. (2015, April 16). Free or reduced price lunch: A proxy for poverty? [Blog post]. National Center for Education Statistics (NCES). https://nces.ed.gov/blogs/nces/post/free-or-reduced-price-lunch-a-proxy-for-poverty.

22. U.S. Department of Agriculture. (n.d.). National School Lunch Program: Community Eligibility Provision. https://www.fns.usda.gov/school-meals/community-eligibility-provision.

23. Healthy, Hunger-Free Kids Act of 2010, Pub. L. 111-296 (2010). https://www.govinfo.gov/content/pkg/PLAW-111publ296/pdf/PLAW-111publ296.pdf.

24. Healthy, Hunger-Free Kids Act of 2010, Pub. L. 111-296, Section 104(a), amending Section 11(a)(1) of the Richard B. Russell National School Lunch Act.

25. Domina, T., Pharris-Ciurej, N., Penner, A. M., Penner, E. K., Brummet, Q., Porter, S. R., & Sanabria, T. (2018). Is Free and Reduced-Price Lunch a valid measure of educational disadvantage? *Educational Researcher*, *47*(9), 539–555. https://journals.sagepub.com/doi/abs/10.3102/0013189X18797609.

26. Greenberg, E. (2019, March 1). Toward an Accurate Count of Low-Income Students. Statement of Erica Greenberg, Senior Research Associate, Urban Institute, before the Education Committee, Connecticut General Assembly. https://www.urban.org/sites/default/files/publication/99856/2019_03_01_toward_an_accurate_count_of_low-income_students.pdf.

27. U.S. Department of Agriculture. (2015). *The Community Eligibility Provision (CEP): What does it mean for your school or local educational agency?* [Fact sheet]. Washington, DC: Author. https://fns-prod.azureedge.net/sites/default/files/cn/CEPfactsheet.pdf.

28. Hewins, J., & Segal, B. (2015). *The Community Eligibility Provision: What food service management companies need to know*. Washington, DC: Center on Budget and Policy Priorities. https://www.cbpp.org/research/food-assistance/the-community-eligibility-provision-what-food-service-management-companies.

29. Chingos, M. M. (2018). *A promising alternative to subsidized lunch receipt as a measure of student poverty*. Washington, DC: Brookings Institution. https://www.brookings.edu/research/a-promising-alternative-to-subsidized-lunch-receipt-as-a-measure-of-student-poverty/; Food Research & Action Center. (n.d.). Community eligibility. https://www.frac.org/community-eligibility (accessed 11/26/19).

30. Ruffini, K. (2018). *Universal access to free school meals and student achievement: Evidence from the Community Eligibility Provision*. (IRLE Working Paper 102-18). https://irle.berkeley.edu/files/2018/10/Universal-Access-to-Free-School-Meals-and-Student-Achievement.pdf.

31. Greenberg, E. (2018). *New measures of student poverty: Replacing free and reduced-price lunch status based on household income with direct certification*. Washington, DC: Urban Institute. https://www.urban.org/sites/default/files/publication/99325/new_measures_of_student_poverty_1.pdf.

32. Chingos, M. M. (2018). *A promising alternative to subsidized lunch receipt as a measure of student poverty*. Washington, DC: Brookings Institution. https://www.brookings.edu/research/a-promising-alternative-to-subsidized-lunch-receipt-as-a-measure-of-student-poverty/.

33. Chingos, M. (2018). *Measuring student poverty: Dishing up alternatives to Free and Reduced-Price Lunch*. Washington, DC: Urban Institute. https://www.urban.org/features/measuring-student-poverty-dishing-alternatives-free-and-reduced-price-lunch.

34. Greenberg, E. (2018). *New measures of student poverty: Replacing free and reduced-price lunch status based on household income with direct certification*. Washington, DC: Urban Institute. https://www.urban.org/sites/default/files/publication/99325/new_measures_of_student_poverty_1.pdf.

35. Pub. L. 108-265 (2004).

36. Pub. L. 111-296 (2010).

37. Croninger, R., Rice, J. K., & Checovich, L. (2015). *Evaluation of the use of free and reduced-price meal eligibility as a proxy for identifying economically disadvantaged students. Alternative measures and recommendations*. Denver, CO: Augenblick, Palaich and Associates. http://www.marylandpublicschools.org/Documents/adequacystudy/EvaluationFRPMEligibilityProxyEconomicDisadvantage.pdf.

38. McCoy, D. P. (2019, April 10). Is Indiana using the best method for counting children living in poverty? *Chalkbeat*. https://www.chalkbeat.org/posts/in/2019/04/10/is-indiana-using-the-best-method-for-counting-children-living-in-poverty/.

39. McCoy, D. P. (2019, April 10). Is Indiana using the best method for counting children living in poverty? *Chalkbeat*. https://www.chalkbeat.org/posts/in/2019/04/10/is-indiana-using-the-best-method-for-counting-children-living-in-poverty/.

40. Greenberg, E. (2018). *New measures of student poverty: Replacing free and reduced-price lunch status based on household income with direct certification*. Washington, DC: Urban Institute. https://www.urban.org/sites/default/files/publication/99325/new_measures_of_student_poverty_1.pdf.

41. "On August 14, 2019, the Department of Homeland Security (DHS) published a final rule related to public charge in the Federal Register.... The new rule interprets a provision of the Immigration and Nationality Act (INA) pertaining to inadmissibility. The inadmissibility ground at issue says a person is inadmissible if they are likely to become a public charge." Immigrant Legal Resource Center. (n.d.). Public charge. https://www.ilrc.org/public-charge (accessed 11/18/19).

42. Broder, T., Moussavian, A., & Blazer, J. (2015). *Overview of immigrant eligibility for federal programs*. Washington, DC: National Immigration Law Center. https://www.nilc.org/wp-content/uploads/2015/12/overview-immeligfedprograms-2015-12-09.pdf.

43. Mathematica. (n.d.). Ensuring the integrity of the school meals application process: 2016–2019. Prepared for the U.S. Department of Agriculture, Food and Nutrition Service. https://www.mathematica.org/our-publications-and-findings/projects/ensuring-the-integrity-of-the-school-meals-application-process (accessed 11/20/19).

44. Greenberg, E. (2018). *New measures of student poverty: Replacing free and reduced-price lunch status based on household income with direct certification*. Washington, DC: Urban Institute. https://www.urban.org/sites/default/files/publication/99325/new_measures_of_student_poverty_1.pdf.

45. Massachusetts Department of Elementary and Secondary Education. (n.d.). Redefining low income—a new metric for k–12 education. http://www.doe.mass.edu/infoservices/data/ed.html (accessed 10/12/19).

46. Greenberg, E. (2018). *New measures of student poverty: Replacing free and reduced-price lunch status based on household income with direct certification*. Washington, DC: Urban Institute. https://www.urban.org/sites/default/files/publication/99325/new_measures_of_student_poverty_1.pdf.

47. Benefits.gov. (n.d.). Massachusetts Transitional Aid to Families With Dependent Children. https://www.benefits.gov/benefit/1281.

48. Massachusetts Department of Elementary and Secondary Education, Office for Food and Nutrition Programs. (n.d.). Community Eligibility Provision. http://www.doe.mass.edu/cnp/nprograms/cep/ (accessed 10/09/19).

49. "Districts receive a dollar amount per low-income student which differs depending on the decile to which it is assigned. In FY2018, the school districts with the smallest share of low-income students received $3,817 per low-income student, while those with the greatest share received $4,181 per low-income student." EdBuild. (n.d.). FundEd: State policy analysis, Massachusetts. http://funded.edbuild.org/state/MA (accessed 10/14/19).

50. Greenberg, E. (2018). *New measures of student poverty: Replacing free and reduced-price lunch status based on household income with direct certification*. Washington, DC: Urban Institute. https://www.urban.org/sites/default/files/publication/99325/new_measures_of_student_poverty_1.pdf.

51. Massachusetts Department of Elementary and Secondary Education. (n.d.). Redefining low income—a new metric for k–12 education. https://www.doe.mass.edu/infoservices/data/ed.html (accessed 10/12/19).

52. Greenberg, E. (2018). *New measures of student poverty: Replacing free and reduced-price lunch status based on household income with direct certification*. Washington, DC: Urban Institute. https://www.urban.org/sites/default/files/publication/99325/new_measures_of_student_poverty_1.pdf.

53. Croninger, R., Rice, J. K., & Checovich, L. (2015). *Evaluation of the use of free and reduced-price meal eligibility as a proxy for identifying economically disadvantaged students. Alternative measures and recommendations*. Denver, CO: Augenblick, Palaich and Associates. http://www.marylandpublicschools.org/Documents/adequacystudy/EvaluationFRPMEligibilityProxyEconomicDisadvantage.pdf.

54. U.S. Department of Health & Human Services. (2012). Child Care and Development Fund. https://www.acf.hhs.gov/archive/occ/resource/child-care-and-development-fund; Greenberg, E. (2018). *New measures of student poverty: Replacing free and reduced-price lunch status based on household income with direct certification*. Washington, DC: Urban Institute. https://www.urban.org/sites/default/files/publication/99325/new_measures_of_student_poverty_1.pdf.

55. Greenberg, E. (2018). *New measures of student poverty: Replacing free and reduced-price lunch status based on household income with direct certification*. Washington, DC: Urban Institute. https://www.urban.org/sites/default/files/publication/99325/new_measures_of_student_poverty_1.pdf.

56. A Medicaid pilot was launched last year and gives families the option of being directly certified through Medicaid or submitting a traditional application. State of Indiana Department of Education. (n.d.). Direct certification and verification, school year 2019–2020. https://scndcdv.doe.in.gov/ (accessed 08/15/19).

57. Greenberg, E. (2018). *New measures of student poverty: Replacing free and reduced-price lunch status based on household income with direct certification*. Washington, DC: Urban Institute. https://www.urban.org/sites/default/files/publication/99325/new_measures_of_student_poverty_1.pdf.

58. Garasky, S., Harrison, R., Campbell, A., Matthews-Ewald, M., & Ruggiere, P. (2016). *Examining the potential to expand data matching in the National School Lunch and Breakfast programs' eligibility and verification processes.* (White paper). Washington, DC: Food and Nutrition Service, Office of Policy Support, United States Department of Agriculture. https://fns-prod.azureedge.net/sites/default/files/ops/DataMatching.pdf.

59. U.S. Department of Education, Office of Elementary and Secondary Education. (2014, January). Guidance: The Community Eligibility Provision and Selected Requirements Under Title I, Part A of the Elementary and Secondary Education Act of 1965, as Amended. http://www2.ed.gov/programs/titleiparta/13-0381guidance.doc (accessed 10/15/19).

60. "Districts generally must rank their public schools by their percentage of students from low-income families and then allocate Title I funds among their schools with the highest percentages of such students in proportion to each eligible school's number of students from low-income families." Neuberger, Z., & Riddle, W. (2015, July 1). *Summary of implications of community eligibility for Title I*. Washington, DC: Center on Budget and Policy Priorities. https://www.cbpp.org/research/food-assistance/summary-of-implications-of-community-eligibility-for-title-i.

61. U.S. Department of Education, Office of Elementary and Secondary Education. (2014, January). Guidance: The Community Eligibility Provision and Selected Requirements Under Title I, Part A of the Elementary and Secondary Education Act of 1965, as Amended. https://www2.ed.gov/programs/titleiparta/13-0381guidance.doc.

62. U.S. Department of Education, Office of Elementary and Secondary Education. (2014, January). Guidance: The Community Eligibility Provision and Selected Requirements Under Title I, Part A of the Elementary and Secondary Education Act of 1965, as Amended. https://www2.ed.gov/programs/titleiparta/13-0381guidance.doc.

63. Rogus, S., Guthrie, J., & Ralston, K. (2018). *Characteristics of school districts offering free school meals to all students through the community eligibility provision of the National School Lunch Program*. (ERR-255). Washington, DC: U.S. Department of Agriculture, Economic Research Service; Segal, B., & Neuberger, Z. (2014). *New policy makes it easier for community eligibility schools to participate in e-rate program*. Washington, DC: Center on Budget and Policy Priorities.

64. Center for Public Policy Priorities. (2018, June). *Community eligibility: Feeding all your students for free*. Austin, TX: Author. https://www.forabettertexas.org/images/FN_2018_ComEligibility_Factsheet.pdf.

65. State of Indiana Department of Education. (n.d.). Direct certification and verification, school year 2019–2020. https://scndcdv.doe.in.gov/ (accessed 08/15/19).

66. "When SNAP (Food Stamp), TANF, and Medicaid information is known by the school, households will receive a letter that states their child is enrolled in free or reduced meals, and an application does not need to be completed." Baker, A. (2018, August 23). *Indiana Department of Education announces income eligibility guidelines for free and reduced-price school meals and milk programs* [Press release]. Indianapolis, IN: Indiana Department of Education. https://www.doe.in.gov/news/indiana-department-education-announces-income-eligibility-guidelines-free-and-reduced-price-0.

67. Croninger, R., Rice, J. K., & Checovich, L. (2015). *Evaluation of the use of free and reduced-price meal eligibility as a proxy for identifying economically disadvantaged students. Alternative measures and recommendations*. Denver, CO: Augenblick, Palaich and Associates. http://www.marylandpublicschools.org/Documents/adequacystudy/EvaluationFRPMEligibilityProxyEconomicDisadvantage.pdf.

68. California Department of Education. (2016). *LCFF frequently asked questions: Free and Reduced-Price Meal (FRPM) income eligibility under the LCFF*. https://www.cde.ca.gov/fg/aa/lc/lcfffaq.asp#FREE.

69. Croninger, R., Rice, J. K., & Checovich, L. (2015). *Evaluation of the use of free and reduced-price meal eligibility as a proxy for identifying economically disadvantaged students. Alternative measures and recommendations*. Denver, CO: Augenblick, Palaich and Associates. http://www.marylandpublicschools.org/Documents/adequacystudy/EvaluationFRPMEligibilityProxyEconomicDisadvantage.pdf.

70. Croninger, R., Rice, J. K., & Checovich, L. (2015). *Evaluation of the use of free and reduced-price meal eligibility as a proxy for identifying economically disadvantaged students. Alternative measures and recommendations*. Denver, CO: Augenblick, Palaich and Associates. http://www.marylandpublicschools.org/Documents/adequacystudy/EvaluationFRPMEligibilityProxyEconomicDisadvantage.pdf.

71. Ware, J. (2017). Property value as a proxy of socioeconomic status in education. *Education and Urban Society*, *51*(1), 99–119. https://journals.sagepub.com/doi/abs/10.1177/0013124517714850.

72. "Using neighborhood economic information is a poor stand-in for FRPL status.… Analysis of American Community Survey data shows that geographic measures of poverty are most likely to be inaccurate in the communities with the most low-income students, as measured by FRPL status." Greenberg, E. (2019, March 1). Toward an Accurate Count of Low-Income Students. Statement of Erica Greenberg, Senior Research Associate, Urban Institute, before the Education Committee, Connecticut General Assembly. https://www.urban.org/sites/default/files/publication/99856/2019_03_01_toward_an_accurate_count_of_low-income_students.pdf.

73. National Forum on Education Statistics. (2015). *Forum guide to alternative measures of socioeconomic status in education data systems*. (NCES 2015-158). Washington, DC: U.S. Department of Education. https://www.nces.ed.gov/pubs2015/2015158.pdf.

74. Greenberg, E., Blagg, K., & Rainer, M. (2019). *Measuring student poverty: Developing accurate counts for school funding, accountability, and research*. Washington, DC: Urban Institute. https://www.urban.org/research/publication/measuring-student-poverty.

75. Maier, A., Daniel, J., Oakes, J., & Lam, L. (2017). *Community schools as an effective school improvement strategy: A review of the evidence*. Palo Alto, CA: Learning Policy Institute. https://learningpolicyinstitute.org/product/community-schools-effective-school-improvement-report.

76. Baker, B. D. (2017). *How money matters for schools*. Palo Alto, CA: Learning Policy Institute. https://learningpolicyinstitute.org/product/how-money-matters-report.

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