Toward a Better Measure

Recommendations for State Policy and Education Leaders on Measuring Student Need

DQC
Data Quality Campaign

Introduction

State policymakers must adopt new approaches to measuring student economic disadvantage to support all students. For too long, states and districts have relied on data from free and reduced-price lunch (FRL) programs to identify students who may benefit from additional resources—even though this data lacks critical nuance about students' experiences and has become an increasingly inaccurate proxy for families' economic disadvantage. Perhaps most importantly, traditional measures of economic disadvantage look only at student-level data and fail to capture the systemic factors that influence poverty, access to opportunities, and individual outcomes.

Emerging research on student risk and economic disadvantage should prompt policymakers to act in two ways:

1. **In the near term, adopt measures of economic disadvantage based on direct certification instead of FRL eligibility.**

2. **In the longer term, look beyond student economic disadvantage and explore more holistic means of measuring the many ways that circumstance and policy disadvantage students.**

By embracing more precise and nuanced measures of obstacles to student learning, policymakers and educators will gain valuable insights into what young people need and will be able to more accurately identify and redress systemic barriers to student success.

Leaders Need Data on Student Disadvantage for Multiple Purposes

Since the establishment of the National School Lunch Program in 1946, schools nationwide have collected household income data from their students to identify those eligible for FRL. Education leaders, policymakers, and researchers have long used this data for other purposes including:

- **Accountability and reporting.** Under federal and state laws, schools are evaluated partially based on the performance of particular student groups—including students from economically disadvantaged backgrounds. Policymakers have used FRL eligibility as a proxy for a family's low-income status when measuring and reporting these students' learning.

- **State funding.** Forty-five states provide additional funds to districts based on their populations of students from economically disadvantaged backgrounds. To allocate this money, many states use funding formulas that factor in the number of FRL-eligible students that the district or school serves.

- **Research and advocacy.** Researchers seeking to understand the challenges that students from economically disadvantaged backgrounds face or to evaluate programs or policies often use FRL data to differentiate between economically disadvantaged students and their peers. Advocates rely on this information to push for more supports for young people.

RECOMMENDATIONS

Measure economic disadvantage with direct certification.

Policy changes necessitate new measurement approaches. As states and districts make subsidized lunch programs more inclusive, FRL data is becoming less useful for other purposes.

The Community Eligibility Provision (CEP) of the Healthy, Hunger-Free Kids Act of 2010 enabled schools with more than 40 percent of students participating in public assistance programs to provide free lunch to all students. This change means these schools no longer have to collect household income information for every student. **While the CEP has successfully connected more vulnerable students with meals, it has reduced the availability and accuracy of FRL data as a proxy for student poverty.**

A process known as *direct certification* offers an alternative to FRL data. States directly certify students for free meals using enrollment records from public assistance programs, such as the Supplemental Nutrition Assistance Program (SNAP) and Temporary Assistance for Needy Families (TANF). Because it is automatically generated, direct certification minimizes the administrative burden on schools to collect household income data and decreases the risk of human error. Research also shows that direct certification more accurately reflects actual household income than FRL eligibility. **Because direct certification provides more accurate data with a less burdensome collection process, policymakers should prioritize using direct certification data for accountability, funding, and research purposes.**

Adopt measures that provide deeper insights into student needs.

Direct certification data is a much more accurate proxy for student economic disadvantage than FRL eligibility, but it has its own limitations. For example, direct certification does not capture families that meet income eligibility requirements for public assistance programs but elect not to participate. Differences in state policies that allow families to qualify for SNAP benefits based on their eligibility for other state benefits also mean that direct certification data may not be comparable across states.

Moreover, measures that are based on direct certification or FRL capture only income-based poverty, yet poverty is just one symptom of continued disinvestment in some communities, particularly those where many Black and brown students live. Broader definitions of risk and disadvantage that consider factors such as housing security, opportunities to learn, and receipt of social services can produce more meaningful insights into the barriers students face and the supports they need to succeed.

Policymakers, state leaders, and researchers should prioritize direct certification as a more accurate proxy for student poverty in the short term. But they also have an opportunity to use emerging insights into the nuances of student disadvantage to rethink more broadly the data they collect and use to understand student needs.

EXAMPLES FROM THE FIELD
Emerging models for measuring student experiences

Researchers and education experts are developing new, multifaceted measures of students' demographics, experiences, and outcomes.

- **Researchers at the University of Missouri** have piloted a framework that uses multiple years of data to identify students who may face particular academic performance challenges. This framework combines a number of individual- and community-level indicators to more accurately reflect students' needs and changing experiences over time.

- The **National Academies of Sciences, Engineering, and Medicine** convened an expert committee to develop indicators of educational equity. These indicators look at both student-level outcomes (like educational attainment and attendance) and system-level disparities in access to opportunities and learning (like access to high-quality early childhood programs and the extent of racial and economic segregation).

- **Public Impact and Education Analytics'** School Needs Index uses dozens of indicators across four areas (student engagement, demographics, academics, and economics) weighted based on how much they contribute to student outcomes. The index allows school leaders to compare learning in schools serving similar populations and allocate resources more equitably.

- **Chapin Hall at the University of Chicago** pulls together K–12, postsecondary, and social services data to better identify specific barriers that keep vulnerable students in Chicago from completing college and make tailored policy recommendations.

- The **National Center for Education Statistics School Neighborhood Poverty Index** estimates the level of poverty in schools based on household income data from the American Community Survey. While this measure looks only at income, it doesn't rely on families participating in public assistance programs or actively providing data.

Considerations for New Measures of Student Disadvantage

1. Use multiple indicators to capture different dimensions of disadvantage for different purposes.

Start with the purpose for measuring student economic disadvantage. For example, direct certification data is suitable for estimating the number of students living below the specified income threshold, which is useful for reporting and research purposes. But if the goal is to identify students who are most in need of additional resources, then relying on direct certification alone could mean overlooking many students in need.

Consider the type of information that will answer key questions. FRL and direct certification data are widely used to evaluate and target resources to schools serving vulnerable students. Yet as individual-level measures, they are not designed to capture the many factors that influence student academic outcomes, such as historic disinvestment, racial or economic segregation, or access to opportunities. Policymakers can look to additional data that is available at the school or district level, such as tax records or local poverty metrics, to better account for these systemic factors and promote more equitable, transformative solutions.

2. Explore how information in existing data systems can provide nuanced measures.

Leverage data system linkages to incorporate multiple indicators of need. Over the past two decades, states have made great strides in securely connecting data across state agencies and sectors. These connections can shed light on student need and disadvantage. Rather than relying on measures that focus solely on household income, policymakers and leaders should consider what additional data they can incorporate to gain deeper insights into student disadvantage and need.

Use modern methodological tools to produce more actionable information. FRL and direct certification are binary measures—they capture student poverty status at only a single point in time and with varying levels of accuracy. More sophisticated measurement approaches can provide much more information about student needs. For

example, continuous measures can distinguish between students whose families are just above the poverty level and those experiencing severe poverty. And longitudinal data collected over multiple years can be used to identify students experiencing chronic poverty and other persistent challenges.

3. Prioritize principles of equitable and ethical data use.

Prioritize system-level approaches to entrenched problems. Traditional measures of student need focus on individual-level need but fail to acknowledge the historic, systemic factors that influence student access to opportunities and barriers to success. By using more community-level measures, policymakers can ensure that they are promoting equitable solutions.

Use people-first and asset-based language to acknowledge individuals' humanity. Students are more than the barriers that they face. When it comes to talking about student poverty and disadvantage, language matters. By practicing asset framing—or talking about students in terms of their strengths—policymakers can reframe conversations about educational outcomes. It is also critical that leaders

include parents and the public in conversations about how and why they are measuring student need.

Terms such as "at risk" can create negative biases against students for factors outside of their control. California will use "at promise" to describe students who are economically disadvantaged, have a history of academic underachievement, have low scores on standardized tests, exhibit low motivation, or have irregular attendance. Terminology changes such as these emphasize students' strengths and influence how people think about educational disparities. When adopting terms to use in analysis and reporting, it's very important that policy leaders engage with their communities about how they want to be described.

EXAMPLES FROM THE FIELD
How states are improving measures of poverty and risk

Several states and districts have already developed more complex indicators of student disadvantage that look beyond poverty to include multiple types of experiences that research has shown can compromise learning.

- **The District of Columbia** uses an expanded definition of student disadvantage in its accountability system. In addition to SNAP/TANF participation or homeless status, it includes any high school student who is more than one year older than the expected age for their grade. This is one way that states can leverage available research on factors tied to student success to inform systems for identifying and supporting vulnerable students.
- **New Mexico** legislators passed a law requiring the Department of Tax and Revenue to share income data from state tax returns with the Department

of Public Instruction. Students will be assigned to one of five income categories, which will then be used to calculate a family income index for each school. By establishing data linkages and adopting a continuous measure of school-level poverty, New Mexico leaders can increase the accuracy of student poverty data and allocate resources accordingly.

- In 2019, **Texas** established a new methodology for allocating additional funds to schools to reduce educational disparities. Funds are assigned based on students' census blocks, which are sorted into five tiers based on factors including median household income, percentage of homeownership, and highest average educational level of the population. By allocating funds to schools based on the where students actually live, Texas lawmakers hope to better target resources where need is greatest.

Conclusion

Different measures of student disadvantage capture different aspects of students' backgrounds and experiences. Rather than continuing to rely on antiquated measures, policymakers and state leaders must focus on their ultimate goal—whether it's allocating funding where need is greatest or understanding how economic hardships affect young people later in life. By starting with their questions, leaders can ensure that they are using measures that represent a more holistic and accurate view of their students, their communities, and the consequences of their policy decisions.

Comparing Measures of Student Economic Disadvantage

	Free and Reduced-Price Lunch (FRL)	Direct Certification (DC)	*Potential Alternative Approaches*
What measure is intended to be used as a proxy of student economic disadvantage or need?	**Household income.** Enrollment in FRL programs is intended to be based on family income status relative to the poverty line. Measures that use FRL data do not capture students who may be eligible but do not participate in FRL programs.	**Enrollment in various public assistance programs** based on state-specific income eligibility requirements. DC status does not capture risk factors other than household income and does not capture students whose families may be eligible but do not participate in public assistance programs.	**Multiple individual- and/or community-level factors** including but not limited to household income. Models may also incorporate multiple dimensions of risk and vulnerability including student homeless status or the median income of the student's census block.
Where does the information for the measure come from?	**Self-reported surveys.** Schools collect household income information directly from families and then manually enter the information into their student information system.	**Program enrollment data.** Administrative data on enrollment in public assistance programs is connected via data-sharing agreements between state education agencies and the agencies administering the relevant assistance programs.	**Multiple administrative data sets.** Depending on the model used, the measure may include multiple indicators from state education, health, or justice systems or from other state or district data systems.
What type of measure is produced with the data?	**Binary.** Based on the federal poverty line, students are categorized as eligible for FRL or not. The measure does not distinguish between students at different levels of poverty or changes in poverty status over time. Moreover, research shows that FRL data overstates actual poverty.	**Binary.** Students' families are either enrolled in relevant public assistance programs or not. The measure does not distinguish between students at different levels of poverty or changes in poverty status over time.	**Continuous or near continuous.** Depending on the model, students could be identified at different levels of risk (for example, near poverty vs. severe poverty) or based on different measures of need. These measures may also incorporate data over time to capture student experiences (like chronic vs. temporary poverty).
What does the measure reflect?	**Individual status.** The measure is based on individual family-level income data. It can be aggregated for school-level applications, such as funding or accountability.	**Individual status.** The measure is based solely on individual family-level income data. It can be aggregated for school-level applications, such as funding or accountability.	**Individual- and system-level factors.** Models may combine individual- and community-level indicators, such as tax records or local income data. They can measure need at the school level for funding and accountability purposes.
Is the measure comparable and universally available?	**Comparable but not universally available.** FRL is intended to be based on the same income threshold in all states. However, because schools that have adopted the Community Eligibility Provision of the Healthy, Hunger-Free Kids Act no longer administer household income surveys, updated FRL data is not available for students at every school.	**Universally available but not necessarily comparable.** All states are required to have DC systems in place. However, income eligibility requirements may vary by state or be based on the specific public assistance programs included and policies such as Broad-Based Categorical Eligibility.	**Depends.** Availability and comparability would depend on the specific data elements used in the measure. Unlike FRL and DC, which are based on federal programs, any alternative approaches could differ at the district or state level.