

7 Recommendations for Using Education Data to Support Equitable Learning Outcomes

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While there are many different types of education data, policymakers and education leaders often place heavy emphasis on a small number of data sources that are easy to compare across schools and districts.

These data sources are often large-scale quantitative measures, such as annual state assessment results. But data from these sources alone do not provide a complete picture of learning and are often not well suited to informing many of the important decisions needed to improve systems at the local level.

This brief provides seven recommendations to help educators, administrators, policymakers, and others use a wider range of data to more effectively support equitable learning outcomes. The recommendations are informed by literature about effective data use as well as lessons learned from the work of the Center for Standards, Assessment, and Accountability at WestEd to support states and districts to effectively use data.



1. Align Data to Your Purpose

Selecting the right data is key to understanding and addressing inequities and improving outcomes in education. Data should have a direct connection to the issue you are trying to understand or the outcomes you are trying to improve. As you consider data sources, ask if these data can actually provide insight that can help you understand the challenge you are trying to address, develop a response, and monitor or analyze the progress of your response.



2. Use Multiple Measures

While a single data source can provide a specific perspective on an issue or challenge, using multiple, diverse sources of data can provide a more robust picture of learning. Using multiple measures does not require examining a deluge of data that can be hard to untangle and understand. Rather, it entails being intentional about choosing different data sources that can be analyzed collectively to provide a well-rounded perspective (Safir & Dugan, 2021). To avoid gaps in knowledge, data sources should be carefully selected to ensure that they offer distinct yet complementary information.



3. Move Beyond Using Only Numerical Data

When trying to understand their systems, education leaders frequently rely on data that can be easily quantified and analyzed in aggregate, such as test scores, graduation rates, and attendance data. While these data are useful and can provide information about big-picture patterns and trends, they are usually what Safir and Dugan (2021) call *satellite data*. That is, they provide a high-level view but do not provide the context, detail, and nuance that are important for fully understanding and responding to student learning needs. Qualitative data can be essential for understanding the human side of teaching and learning. These can include data that capture the voices of students, families, and teachers, as well as data gathered from documents that provide insight into students' learning conditions and learning progress, such as syllabi, lesson plans, and student work. Using both quantitative and qualitative data can bring greater clarity and insight to complex questions about student learning within specific contexts.



4. Attend to Data Quality

We cannot take all data at face value. Before deciding how much stock to place in your analysis of the data, it is important to first consider the quality of the data: *How were the data collected, managed, and retrieved?* For example, with assessment data, it is important to understand the design and purpose of an assessment and how it was administered before analyzing the results. With survey data, it is essential to consider the design of the survey and the representativeness of the respondents before interpreting the results. High-quality data are a prerequisite for any meaningful data analysis effort.



5. Keep Students at the Center

It is easy to get caught up in data—looking at trends and patterns in the context of policies and programs—and lose sight of the students you are aiming to better serve. As you use data, remember to keep the context of the lived experiences of your students front and center. One way to do this is to ensure you have data that reflect the lives of your students (Safir & Dugan, 2021; Warner, 2021).



6. Use Data Collaboratively

Data are most powerful when they are used as part of a collective sense-making process among educators. By using a structured data analysis process in a collaborative group, educators can harness multiple perspectives and ideas and can develop and implement responses more systematically to better support improved learning outcomes.



7. Interrogate Bias

We all bring unconscious bias to our analysis of data. Bias can take many forms: racial and ethnic bias, bias toward certain behaviors and attitudes, bias about teaching and learning, and many others. Working with colleagues to unpack biases, creating space to be honest and vulnerable about biases, and building skills to name bias in action are all important processes to support more effective data use (Newell, 2020).

Concluding Thoughts

Data allow us to understand student learning and the efficacy of our educational programs and policies to transform outcomes for students. Intentional data use practices that prioritize full and authentic pictures of learning, focus on equity, and center the lived experiences of students are the foundation for effectively understanding and improving student learning.

References

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