

Examining student data through the lens of pressing questions can mobilize staff, promote data literacy, and help raise student achievement.

Daily life in districts and schools requires educators to effectively navigate a sea of data: diagnostic and norm-referenced standardized assessment data, state and local assessment data, in combination with other data related to instructional programs and demographic, attendance, and dropout trends. This new level of applied data use requires district and school administrators, teacher leaders, and classroom teachers to be data literate, that is, able to use multiple types of assessment and other data to inform decisions that lead to higher student achievement.

Despite the increased amounts of data available, many educators still feel ill prepared to analyze and use their school data effectively. They are data rich, but information poor. Our experiences working with data use in schools and districts have led us to define an effective framework for building data literacy. This framework is fueled by an essential-questions approach that organizes data use around a cycle of inquiry and a culture that supports data use.

The Data Difference

Schools and districts of all sizes can use the essential-questions approach to become data-driven decision makers focused on improving student learning and achievement. Properly used, data can make a difference in meeting the needs of every student and can be a powerful ally in stimulating positive change and improvement from the central office to the classroom.

The Essential-Questions Approach

A study on data use in several urban U.S. high schools showed that when school leaders used questions to focus the collaborative examination of data, school staff became more engaged in the process. When important questions drove the dialogue about school effectiveness, school staff quickly learned how to identify and use different types of data to answer those questions (Lachat & Smith, 2004).

Organizing data use around essential questions about student performance is a powerful strategy for building data literacy.

Consider the following questions:

- How do student outcomes differ by demographics, programs, and schools?
- To what extent have specific programs, interventions, and services improved outcomes?
- What is the longitudinal progress of a specific cohort of students?
- What are the characteristics of students who achieve proficiency and of those who do not?
- Where are we making the most progress in closing achievement gaps?
- How do absence and mobility affect assessment results?
- How do student grades correlate with state assessment results and other measures?

continued

Asking questions such as these enables administrators and teachers to focus on what is most important, identify the data they need to address their questions, and use the questions as a lens for data analysis and interpretation. To avoid the common tendency to get lost in a long list of questions, district or school staff should, in general, identify no more than five or six crucial questions that get at the heart of what they need to know. The essential-questions approach provides the fuel that drives collaborative analysis. To use data purposefully and in a sustained way over time, schools and districts have to establish a culture for data use.

Data Culture

Achieving purposeful and sustained data use necessitates a culture shift. It requires paying deliberate attention to issues of leadership, policy, accountability, shared beliefs, and collaboration (Boudett & Steele, 2007; Firestone & Gonzalez, 2007). This entails establishing and providing leadership direction to data teams, modeling effective data use, scheduling time for collaborative data-driven conversations, and connecting data analysis to clear action steps. Holcomb (1999) compellingly wrote about the importance of mobilizing broad stakeholder involvement and getting people excited about data use. She refers to this as focusing “people, passion, and proof” on strategically aligning all elements of a school to analyze what is and isn’t working to improve student learning.

Pass the Question Protocol

Purpose: To share, reflect, and deepen understandings

Time Allotted: Approximately 30 minutes

Supplies: Chart paper and writing utensils

Roles: Arrangement of participants will be solo, partners, and sets of partners (small groups of 2 to 4)

Process: 1. Individually, write a response to the following prompt in the box below:

“As an instructional leader, describe some ways in which you promote the use of assessments.”



2. Share your response with a partner.
3. As partners, trade your response papers with another partner group.
4. Read and discuss responses with your partner only.
5. Rejoin the partners you originally traded responses with and discuss how you could combine your thinking to rewrite a response inclusive of both sets of partners' ideas.
6. Use the chart paper to record the group's response.
7. Be prepared to share your group response with the larger group.
8. Reflect on the different ways assessments are being used to support and/or hinder teaching and learning.