

Data play a central role in improving educational outcomes. Whether we are focused on individual students or making program improvements, selecting the right data for a given purpose is essential. Educational systems often place primacy on assessment data, particularly large-scale assessment data, but these data do not provide a complete picture of learning from which to make instructional decisions. Selecting data wisely and thinking broadly about the forms data can take can open possibilities for equity and improvement.

The resources on this page can help leaders and teachers to select the right data sources for their information needs and to collaboratively make sense of the data using different discussion protocols. The selected resources below are from the Minnesota Data and Assessment Literacy course for Teachers and Leaders, [>Strand 4: Data use for Continuous Improvement and Equity</a>.](https://mndepted.instructure.com/courses/441/modules#module_3103)

[<img alt="Data Use for Continuous Improvement video" data-bbox="111 540 886 569"/>](https://iad.cdn.nv.instructuremedia.com/originals/o-BFWeAfN7MtsvfEYThQsCJfYNd3Jm1b1/transcodings/t-DZ7HH4oPc2itGEfp9Pk1SxKNJa69tTP.mp4?&Expires=1693701153&Signature=OoQJt9xAdCvI1NBcVoVW~Uo36ZNNsMRHo8gwOZgJZDUKpYGjBROLdBeJOorJDpi0J3FBUmCHama7gteIFMTc5XXnFgC1tmNVAOJ~Owo9EF0NeIFoQ0MRrTpqyL6KCaAgzlgzE7V6Enlj~vd8D8zkrxCimfSQTit4DEMrwV54iWpbQrLMjy625c4lxnz86IT~x-ntyZWp-TIkAJ~IPtoRpToiAEaeJF2bB~GoECFdqkenwk05wm0HfBHrgX9Gg~hpEWQwkojvxDUm4R5dLuRRqwd~ukurFKaulzTV109gjWpr6QnHz9PlvKB2d9pOJ6R9TZdh0-dGtWTz7wYPB3OG4w__&Key-Pair-Id=APKAJLP4NHW7VFATZNDQ)

- [Identifying Appropriate Data Sources](#) - Read this article to consider how data can be used in ways that are more informative, equitable, and supportive of improvement for all learning.
- [Qualitative Data Sources](#) - Qualitative data are an important complement to quantitative data to help create a more complete picture of student experiences at your school or district. Read this article for information on different ways to gather and use qualitative data.
- [Purposes of Different Data](#) - We use data in meaningful ways that are not always tied to improvement efforts. In this activity, we will consider three common purposes for using data: accountability, improvement, and research. They all have their place in our classrooms, schools, and districts, but it is important to understand the differences between these purposes and the data that are best suited to each context.

[Data Inventory Worksheet](#) - This worksheet is intended to help educators and leaders identify data sources to help inform teaching and learning in the classroom. Follow the directions to complete a data inventory and answer the reflection questions that follow.

#### Data Sources and Data Inventory Resources

**Resources for Family Engagement in Data Use:**

- [Creating Authentic Partnerships with Historically Marginalized Families and Other Stakeholders](#) - Read this National Center for Systemic Improvement (NCSI) article to learn about shifts in cultural norms that leaders can embrace to support authentic engagement of all partners.
- [Envisioning Equity-Minded Engagement](#) - Use this worksheet to reflect on the ideas in the article and to build your vision for authentic, equity-minded data engagements.
- [Engaging Families and Caregivers](#) - Read this article to explore some key needs that caregivers have when it comes to data use and explore strategies to effectively engage families and caregivers as partners in making sense of, and responding to, data about students and the schools in which they learn.

**Resources for Student-Led Data Projects:**

- [Selected Statewide Data Sources for Student Data Inquiry Activities](#) - This article and activity identifies key data sources that may be useful for planning a student-led data lesson or project.

#### Elevate Student and Family Voices

- [Culturally Responsive Data Literacy](#) - Read this National Center for Systemic Improvement (NCSI) article to learn more about the practices that can encourage centering the lived experience of our students in our use of data to support their learning. Respond to the questions in Step 2 after reading the article.

**Resources for School and District Leaders:**

- [Continuous Improvement in Districts and Schools](https://education.mn.gov/MDE/dse/compass/cimp/) - This MDE page contains resources for outlining a continuous improvement framework and conducting a school- or district-wide Comprehensive Needs Assessment (CNA) process.
- [Tools for Root Cause Analysis](#) - Read this article to learn more about three useful tools that can help you engage in root cause analysis to inform improvement plans and a corresponding system of measures after doing a needs assessment.

**Resources for Teachers:**

- [Data-Driven Decision Making Model for Educators](#) - this article describes a model for teachers to apply a data use model within the classroom to guide actions and decisions.
- [Year-long Data Cycle Worksheet for Teachers](#) - This data cycle worksheet provides an example of how a teacher uses data to support different classroom-level goals over the course of a school year. It also contains and prompts for reflection about current data use practices for educators and leaders at your school or district and how these practices might be expanded based on specific goals for classrooms or schools.

#### Data use for Continuous Improvement and Equity

- [Opportunity to Learn \(OTL\) Data Activity](#) - Review this OTL data activity and consider how you might use it in your context.
- [Planning a Data Engagement Activity](#) - Use this tool to reflect on how authentic engagement of all partners can come together to inform your planning for authentic data-based engagement.
- [Protocol: Data for Equity Conversation](#) - This data for equity conversation protocol, developed by Regional Education Laboratory: Northeast & Islands, guides a data discussion that places equity at the forefront and prompts participants to reflect on their assumptions as they analyze and interpret data.
- [Empathy Interview Protocol](#) - Review this empathy interview protocol and consider how this tool might be used by educators, counselors, and other staff to gather data to better understand student experiences at your school or district.
- [Culturally Responsive Data Use Planning Sheet](#) - Use this planning sheet to reflect on when you've seen bias-based attributions and how you might respond to these attributions and reshape thinking for deeper conversations in the future.
- [Video: Culturally Responsive Problem Solving, Part I](https://mndepted.instructure.com/courses/441/pages/15-dot-4-video-culturally-responsive-problem-solving?wrap=1) - Dr. Markeda Newell addresses ways that teams of educators can address solvable problems in order to understand and respond to student needs. Dr. Newell focuses on shifting away from deficit-based thinking and ideas that place blame on students and families to focusing on the changes to the system in which the student is learning.

#### Data Inquiry Protocols

There are many ways to display and share data with educational partners, so it is important to choose the best data visualizations for the intended purpose and audience.

- [Data Visualization Makeover](#) - This resource illustrates a practical approach for designing data visualizations that resonate with diverse audiences.

#### Data Visualization Resources

- [Systemic Data Use with an Equity Mindset](#) - Read this article and consider the information and recommendations in the context of your school or district. How might these ideas help you shift the culture in your school or district regarding equity and data use?
- [Evaluating the Data use conditions in your organization Activity](#) - How can you evaluate the current status of these conditions in your school or district and build a plan to guide your next steps to learn more? Use this worksheet to capture your reflections and ideas.

Leaders who want to support effective data use across their system must start with a clear understanding of the necessary conditions that must be in place for data use to become an essential part of doing business for leaders, teachers, students, and families.

Additional resources are available in [Module 16.2](https://mndepted.instructure.com/courses/441/pages/16-dot-2-narrated-presentation-and-resources?module_item_id=31979) from the Minnesota Data and Assessment Literacy course to help leaders reflect, plan and improve the data use culture at your organization. Log in or create a Canvas account to access these resources.

#### Building Data Use Culture

