MTSS Conversation Starter

Analyzing Data

A primary goal of the Illinois MTSS Network is to provide research-based professional learning and coaching to assist school districts in building educators' capacity and confidence in implementing a Multi-Tiered System of Supports (MTSS). The purpose of this guide is to support conversations around best practices in utilizing data for continuous improvement and increasing equity in student outcomes.

Two Purposes for Looking at Data

Data analysis is a core component of successful MTSS and continuous improvement. Schools and districts review data at multiple levels (District, School, Grade level/Subject area, small group and individual) in order to make accurate decisions to best support students. There are two big purposes for taking the time to engage in data analysis. The first is because there is an identified need/concern which requires development of a plan. This might be a large number of students failing a high school course, a grade level not performing well on a common assessment, students or an individual not responding well to intervention, or a host of other challenges. Teams or individuals engage in looking at data in search of a solution to that identified problem.

The second purpose for engaging in data analysis is to discover areas of need which had not been previously identified. In this instance, teams gather to review a variety of data to "see what they see." Analysis of this kind may uncover bus routes causing tardies for certain students, the fact that a program isn't having the expected impact on student outcomes or student groups being over identified for interventions. This type of systems data review can help schools and districts plan for changes to improve school processes and/or student learning in unanticipated and impactful ways. Conversations around data that teams, schools and the community engage in help build a culture of data use and continuous improvement.

Best Practices:

When planning data analysis for either purpose mentioned above, it is important to incorporate the following best practices.

- Culture of data use within the school community - How is data used when no one is watching?
    - Develop policies which lead to stakeholders having high confidence and trust in the data they collect.

- Provide professional learning to build capacity in data literacy.
- Ensure data can be easily accessed and understood through data displays.

- A well defined problem solving process - A problem solving process provides a framework for data-based decision making.
    - Problem Identification - What is the need? What is occurring compared to what is expected? Use multiple measures (V. Bernhardt, 2018) of high quality data for a complete picture (including for student groups):
        - Demographic
        - School Process
        - Student Learning
        - Perception
    - Problem Analysis - Why is it occurring? Verify root causes to ensure an accurate hypothesis. This may be done through a RIOT/ICEL process. Click here for an example.
    - Plan Development - What is our plan? Includes a goal statement, action plan, progress monitoring and evaluation of fidelity .
    - Evaluation - Did our plan work?
- Use protocols - Using a consistent process during different levels of data analysis provides common practice to build capacity, fidelity and sustainability in the practice.

Guiding Questions:

1. What professional learning is needed to ensure a culture of data use, a defined problem solving process and consistent use of protocols?
2. What processes or protocols do you use to ensure quality and consistent data analysis at all levels? How do you look at data to uncover patterns of student performance across diverse groups?
3. How is data used in your school and district continuous improvement processes? Are you satisfied with your impact on student outcomes?

For More Information:

- Bernhardt, V. (2018). *Data Analysis for Continuous School Improvement, 4th ed.* New York, NY: Rutledge.
- Love, N., Stiles, K., Mundry, S., DiRanna, K. (2008). *The Data Coach's Guide to Improving Learning for All Students*. Thousand Oaks, CA: Corwin Press