
How Use Data for Data-Informed Instruction to Personalize Teaching & Learning



Office of Educational Accountability

Schools that regularly and openly review data as part of their instructional culture have found the continuous review of data leads to increased student success, deep professional learning, and more collaborative educator teams.

What is Data-Informed Instruction?

Data-informed instruction is a process of collecting and analyzing data from multiple sources to inform teachers on “the next step.” Information gathered from multiple sources, and data that evaluates student progress in multiple ways, create a more complete picture of classroom instruction and student learning. Educators use multiple types of data everyday—from formative, benchmark and summative assessments, to classroom grades, anecdotal evidence and teacher observation—to understand the status and progress of their individual students. Use of data in this way also allows educators to be reflective practitioners, monitoring their own teaching practices and growth.

Incorporating data into the instructional fabric of classrooms is nothing new, yet with the amount of data available to educators increasing exponentially, our students and teachers require a new lens with which to view and incorporate key data into teaching and learning.

Identifying Sources of Useful Data

Educators need to be nimble users of their school and district-based databases, as well as DPI data sources. Locally, teachers will have access to attendance, intervention, behavioral, and classroom data. These data should be considered alongside the indicators that DPI reports:

WINSS (WI Information Network for Successful Schools)
School District Performance Reports
MDAT (Multi-Dimensional Analytic Tool)
SIMS (Student Intervention Monitoring System)
Special Education Indicators

<http://dpi.wi.gov/sig/index.html>
<https://wlds.dpi.wi.gov/spr/spr.action>
<http://dpi.wi.gov/lds>
<http://dpi.wi.gov/rti/sims2.html>
<http://dpi.wi.gov/sped/index.html>

Using Data to Make Decisions about Students

Data-informed instruction means incorporating information from multiple sources—grades, assessment results, student feedback, as well as attendance, intervention, and demographic data—to better understand and appropriately adjust classroom practices that meet the unique needs of individual students. These practices allow for personalization and differentiation. Instructional decisions ultimately need to reflect the local curriculum, and be tied to the learning progressions and state standards. Aligning curriculum, instruction, and assessment to standards requires collaborative teams with a focus on data.

Educators who analyze data on a regular basis, collect data from more than one source, and collaborate with others before making decisions based on student data can make targeted instructional decisions. Through this process they tend to see the greatest improvements in student achievement. Schools that are engaged in a RTI process may already be reorganizing around these principles; however, any teacher—regardless of what school-wide or district-wide efforts are underway—can implement data-based decision making and incorporate a balanced, personalized approach to assessment and data use.