Making Data Meaningful

By Amanda Hankel

We are all surrounded by data that mean something to us. For example, percentages or ratios may tell us which decision is best or most likely to end up in our favor. Even prices can be considered data, helping us make purchasing decisions.

When we have the correct data and can interpret it, it can be extremely valuable in our daily life. But sometimes, data can be overwhelming. When there is too much unnecessary information, or we can't analyze and interpret the data, it hinders our ability to use it effectively to make decisions.

With the idea of data-driven instruction—using data to shape curriculum—becoming increasingly expected of schools today, the ability to collect and interpret data is becoming more important than ever for primary and secondary education teachers. And from standardized test scores to student assessments and assignments, there is no shortage of data available. The problem is that with increasingly less time and fewer resources, teachers are facing difficulty in interpreting data in a way that is meaningful in making instructional decisions.

In this month's *Primary and Secondary Education Brief*, we focus on the topic "Moving Beyond Data Analysis to Data Interpretation and Use in Daily Instruction." We take a look at how teachers can collect the right data that will be useful to them, and then interpret it in way that will be meaningful for guiding instruction.

In the article, "Using Data to Guide Instruction," Becky Martin, continuous improvement and professional development facilitator at Cedar Rapids Community Schools in Cedar Rapids, IA, shares a strategy used in her district for teachers to analyze in-process/formative data to identify learner needs and inform instruction. In the article, Martin explains that using data is not just about analyzing grades and performance from student assessments, but first about establishing learning targets and objectives for students. Only when the definition of proficiency is clear to both the teacher and the student can it be determined whether the student has truly learned.

In the article, "A New Tool to Uncover Curricular Shortcomings," Bill Martin, technology director of Monona Grove School District in Monona, WI, describes a data analysis software solution the district developed that revealed results about student performance the district found

surprising. After having this new information, the district was able to better shape its curriculum and instruction to meet the needs of the students. Martin discusses further how the software can be used between schools and districts to collect more data and analyze it in an even more meaningful way.

In addition, be sure to check out the other articles in this edition of the *Education Brief* that focus on data-driven instruction and other newsworthy topics related to quality in K-12 education:

- [Making Data-Driven Decisions in Rural Schools](#)
- [The Global Search for Education: What Did You Learn Today?](#)
- [States Lead Effort to Utilize Data in Education](#)
- [Quality Counts: Report Awards Grades for Education Performance, Policy](#)

In K-12 education, data can be invaluable in identifying which students are struggling, which students are on target and which students are excelling at the topics they need to learn. However, for data to be useful in guiding instruction, teachers must be able to collect the right data, and interpret it in a way that is meaningful to shape the instruction necessary to ensure each and every student learns.

Do you use data to guide instruction? Are there processes or methods you use to interpret it in a meaningful way? E-mail me at ahankel@asq.org