

## **Plainville Citizen May, 2012 Op Ed**

In the Plainville Community Schools we have learned that in order to stay on the path of continuous improvement we must become users of data to make decisions about our policies, programs and students. Through our partnerships with General Electric, the Connecticut Center for School Change, and Central Connecticut State University, teachers and administrators are learning how to incorporate thoughtful data collection and analysis as tools for classroom and school improvement. We have learned that relying on anecdotal information, our instincts, or our “gut feelings” are poor substitutes for empirical data when we need to make important decisions.

From a district perspective, we have conducted program evaluations in mathematics and reading that have resulted significant changes to our curriculum and instructional practices. A mathematics program evaluation conducted in 2007 is an example of how purposeful data collection and analysis led to systemic improvements in curriculum and instruction, which resulted in strong gains in our middle and high school mathematics scores on the Connecticut Mastery Test and the Connecticut Academic Performance Test. Surveys were administered to students, teachers and parents to gain insight into how effective our instructional and homework practices were in advancing students’ knowledge, understandings and attitudes about mathematics. A team of administrators conducted classroom visits to collect data on instructional strategies and student engagement. A “slice” of homework and assessment practices was collected as teachers were asked to submit homework assignments and assessments over the course of a 3-day period. A team of science teachers analyzed the work using a rubric designed to measure the engagement and rigor of the work. The analysis of these data points enabled us to recommend instructional changes that improved student engagement at both the middle and high school levels. At the same time, we compared our existing mathematics curriculum to the newly adopted state framework and developed a clearer scope and sequence for mathematics instruction in grades 4 through 10. This coordinated and collaborative approach, blending curriculum enhancements with instructional improvements, resulted in improved student achievement at all levels.

In addition to the “big picture” changes that are driven by large scale data collection, research on data-driven decision-making shows that high-performing schools use student data in all facets of their work to continuously inform and improve instruction. Teachers who use data to help them select the most effective instructional strategies for a given unit of study or for a particular lesson or activity generally report higher student achievement. They have also found that they can use information gleaned from data to pace instruction, identify lessons that require re-teaching, guide flexible grouping of students, and target students in need of intervention or remediation.

Data can also help teachers and students set and refine concrete goals. For example, rather than setting a generic goal like “I need to improve my writing”, teachers can use data to help students focus in on a specific component of writing (“I need to pay attention to my word choices and the examples that I use to support my thesis”). This collaborative process of goal setting based upon student work gives students a sense of ownership over their own learning that motivates them to take concrete and specific actions in order to improve their work.

Collaborative analysis of student data in grade level, department, and course-specific data teams is changing the way teachers instruct and the way student learn. Elementary grade level teams work together to analyze student writing, building a shared understanding of the needs of their students as well as developing a common vocabulary and common expectations for student performance. Middle and high school teachers meet in departments to analyze student performance on common assessments and then hypothesize instructional strategies they might use in order to increase achievement on the next round of common assessments.

Providing the time for collaboration is essential for successful implementation of data-driven decision-making. As one teacher put it, “I think that actually allowing teachers to have deep, rich conversations and giving us both the time and the structures to look at student work, not just around what it says, but also around how we are going to address what we see in the work and what we are going to do as a department to change our instruction, is critical for instructional improvement and increased student achievement.” The creative use of scheduling in order to make the time for collaborative analysis of student work and data on standardized tests is a challenge that we face in these efforts. However, there is strong evidence – both in the research and in our own findings over the last five years – that making the time for this work is worth the effort. We will continue to examine our scheduling practices in order to create time for this very important work.