



Student Response Systems Drive Instruction

by Ken Veon, Buckeye Local School District

An effective measurement system should take into consideration the day-to-day information that can be collected, as well as the more formative and summative assessments that are ongoing, year-long or quarterly. The high stakes testing that states are required to deliver gives an overall synopsis of how students are doing and is easily tracked from one year to the next through the value-added measure. The quarterly assessments districts give, or should be giving, are more frequent assessments than state exams. These quarterly assessments allow teachers to guide their big picture items they are going to cover for the quarter or semester. This gives teachers and administrators a prediction of how students are going to do as far as meeting the minimum requirements set forth by the state.

But how many teachers are using day-to-day information to guide their facilitation of learning? How can teachers effectively and continuously assess and track students with all the other obligations they endure, such as individualized education program meetings, response to intervention (RTI), team planning and professional learning communities?

Student response system in action

Ashtabula County Schools in Ohio has turned to technology to help with this dilemma. The district has introduced teachers to the student response system (SRS). The SRS, or clickers as they are called in education, is a way for teachers to assess students in a quick-check manner, depending on the need. This article gives information and examples related to the day-to-day assessments teachers should be giving that help guide them in their learning environment, although they can be used for their more summative counterparts.

The SRS has helped many teachers across the county cut their time to score assessments down to almost zero. Just hand grading a simple five to 10-question quiz, with the analyzing, charting and recordkeeping can take 30 minutes. With the SRS, as soon as the students are finished, the answers—for every single student—are automatically recorded and charted for analyzing. Depending on the need, graphs and charts can be disaggregated by demographic or by student. This information can easily be shared with the special education teacher, gifted teacher or peers to share what is and what is not working in a teacher's classroom or with individual students.



In the Buckeye Local School District (BLSD) classrooms, using turning technologies SRS comes into play. Not only does it engage students in what the lesson is for the day, but it allows teachers to track what students know before they even begin the learning process. This allows teachers to use the data collected in a pre-check to inform them of what students do and do not know and spend more time on the difficult issues students are having within specific subjects. For a teacher to track every single student's answer, it would take much more time than is available for quick checks. With the SRS, the teachers in BLSD are able to make informed decisions about their day-to-day planning based on the data.

Teachers are then better able to differentiate their instruction for specific students based on the data they collect, without ever having to score a paper. They can easily track trends on specific standards, benchmarks and indicators with this technology for not only the class, but individuals to allow remediation, acceleration or continue the course.

The SRS will help students with their learning and help them track their progress. Teachers are able to provide students with up-to-the-minute reporting of their data and show them where their strengths and weaknesses are. In a quality classroom, various tools will allow students to make decisions about their learning and help guide them in a systematic way. Using the SRS only makes these classroom processes easier. A consensogram can be done without the influence of other students, and surveys and nominal techniques can all be accomplished using the student response system.

Creating a quality classroom

Teachers all across Ashtabula County are using this technology tool to help them create an engaging and quality classroom, and they're driving their decisions based on information they collect every day. For example, on a typical day, a teacher may begin the lesson with an essential question, such as this second-grade astronomy question, "What is the brightest star in the sky?" The students will have four choices:

1. North Star.
2. Sun.
3. Sirius.
4. Ragel.

Teachers will then use the information from the data they collect to help dissolve misnomers about each star and how bright they are. The lesson then follows with the teacher



not giving the correct answer directly, but discussing each star and the night sky through various activities and higher-order thinking skills. The lesson, which could range from minutes to days, can be followed up with the same question being asked of the students to see if they mastered the concept. Teachers have these questions in a bank they can pull from at any time, such as during morning work or quick check times, and assess how much the students retained and review as needed.

The teachers then will keep all the information stored on the computer or server that can be pulled up at any time to share with colleagues, parents and students. By creating an information system that is technologically based, teachers are able to share information year to year about how students are doing on specific standards and benchmarks. Students can be tracked for RTI, special education or acceleration. If information was only collected on paper, teachers would not have the capacity to complete as many or save as much information as they could with the SRS. Records and data can be e-mailed to parents or printed in a well-designed graph for students to keep in their data notebooks. Having students track their own data is a proven quality tool for learning.

With the rate of change in today's schools and assessments, teachers need to find efficient and effective ways of engaging students, assessing, scoring and analyzing data in a fast and effective manner. Robert Marzano stated that feedback should be timely and specific.¹ What better way to provide that than right at the very second students answer a question? They can find out if they are right or wrong on a question immediately. This leads to the discussion that will help the teacher understand why students answered the way they did and guide students using misconceptions and lack of understanding.

Assessments are key to guiding students and teachers. Long gone are the days when teachers assess students by raising their hands, listening to the showoffs and ignoring the quiet students. Teachers don't have to wait until the end of a chapter to see what students know. Through the use of the student response system, all students will be counted and teachers will have a reliable measure of what students can do on a specific indicator and be able to track student progress without the time restraints that or just once held them back.

Reference



1. R.J. Marzano, D.J. Pickering and J.E. Pollock, *Classroom Instruction that Works: Research-based Strategies for Increasing Student Achievement*, Association for Supervision and Curriculum Development, 2001.

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