



Video

FULL DETAILS AND TRANSCRIPT

Data-Driven Instructional Decision Making

Laura Hamilton, Ph.D. • October 2009

Topic: Using Student Achievement Data to Support Instructional Decision Making

Highlights

- The Practice Guide includes five recommendations that are intended to form a framework that examines data use at all levels of the system.
- The first recommendation focuses on making data part of an ongoing cycle of instructional improvement.
- The next recommendation focuses on students becoming partners in their own education, and teaching students to use data—to examine it and develop their own learning goals from it—can be one way to foster that partnership and help motivate students and make them really feel like they are part of the educational process.
- The remaining three recommendations focus on what schools and districts need to do to create the conditions that are necessary to support data use and to establish a vision that everyone can get behind in terms of how they want to use data in the school.

About the Interviewee

Laura Hamilton is a senior behavioral scientist at the RAND Corporation and an adjunct associate professor in the University of Pittsburgh's Learning Sciences

and Policy Program. Her research focuses on educational assessment, accountability, instructional practices, and school reform, and she has expertise in psychometrics, survey research methodology, and measurement of instructional practices, leadership, and reform implementation. Dr. Hamilton has directed several large studies, including a study of teachers' and principals' responses to state standards-based accountability policies, an evaluation of a leadership development program for principals in urban school districts, and an evaluation of a performance-based compensation system for principals. She has served on a number of national panels, including the Center on Education Policy's Panel on High School Exit Examinations and its Panel on Student Achievement Under NCLB, the Brookings National Commission on Choice in K-12 Education, and the APA/AERA/NCME Joint Committee to Revise the *Standards for Educational and Psychological Testing*. She received her Ph.D. in educational psychology and an M.S. in statistics from Stanford University and also holds an M.S. in psychology in education from the University of Pennsylvania and a B.S. in music education from Duquesne University.

Full Transcript

I am Laura Hamilton. I am a senior behavioral scientist at the RAND Corporation in Pittsburgh, and I am the panel chair of the Practice Guide on Using Student Achievement Data to Inform Instructional Decision Making.

The Practice Guide includes five recommendations that are intended to form a framework that examines data use at all levels of the system. And so some of the recommendations are geared toward district staff who need to make decisions about what kind of technology to put in place; what kinds of assessments to purchase; what professional development to offer, down to the school level where school leaders need to think about how they might create and foster that data-driven culture in the school; what kinds of scheduling changes they might want to make to facilitate the collaboration that's necessary for teachers to work together to review data; what kinds of changes they might want to make to their curriculum to support student data use within the classroom, and then down to the classroom level, where teachers and students will be working together to look at both aggregate and individual student data and make decisions about instruction.

Our first recommendation focuses on making data part of an ongoing cycle of instructional improvement. The first step in that is to really put in place the data that will support good decision making. The decisions that can be made on the basis of data are only as good as the data that are provided. So district, schools, teachers need to think about what are the assessment systems that they might want to have in place to provide information, what are the other sources of data that teachers use, things that they might collect from their own assessments or even from their oral questioning of students. So all of that counts as data, and that's all part of the first step. So this first step in the cycle is to collect and prepare a variety of data to support instructional decision making.

The second step is to review the data and to come up with some hypotheses about what might be the next most appropriate instructional steps to address what you find when you examine the data. And then the third step in the cycle is to test those hypotheses by implementing those instructional improvements. And as a result of that, it's likely that more data will be collected and further hypotheses will be developed, and so that's why we think about it as a cycle.

Students are really partners in their own education, and teaching students to use data—to examine it and develop their own learning goals from it—can be one way to foster that partnership and help motivate students, make them really feel like they are part of the educational process. There are several steps that need to be taken to do this effectively. First, it's important that students be aware of what the expectations are. They need to understand specifically what's expected of them; the expectations need to be very transparent. Students, once they are given an opportunity to demonstrate what they know and could do, it's important to provide feedback to them that's timely, clear, and very constructive. And so while providing a worksheet that's graded with a percent correct on it provides some information to students, it's much more useful if teachers can identify specifically what are the areas in which students were really strong and where were their weaknesses. And also the teachers, to the extent possible, should help students understand what they can do, what are those next steps that they can take in order to address those weaknesses.

Schools and districts really need to take a number of steps in order to create the conditions that are necessary to support data use and to establish a vision that everyone can get behind in terms of how they want to use data in the school. We have two specific recommendations. One is to develop a written plan for data use that reflects input from all of the different groups of people who would be using data, and so that would include teachers obviously, curriculum coaches, school leaders, might even include students or parents. But all of these users have different needs, and any written plan should reflect what their needs are and how they plan to use the data. Then in addition, we recommend creating a data-wide team in each school, a schoolwide data team that, again, would include representatives from the different groups who are going to use the data. And this team can serve as a liaison between the district and the school staff. So they can communicate from the district to the school staff about what are the changes that are being considered, what new systems might be coming down the line. They can also communicate back up to the district to advocate for things that teachers might decide they need. So it may be that they really need more grade-level planning time, and that's something that this data team can communicate to the district.

As districts are planning for a system to support data use, it's important for them to collect input from all of the different users of that system. So there will be some district-level users who will have certain needs, but there will also be users at the school level and at the classroom level who may have different needs for the data. And so up front, districts should make sure that they talk with each of those user groups to find out exactly what they'll need from the system in terms of analysis and reporting access and so forth. Districts and schools are now receiving large volumes of data, and the use of data to promote instructional decision making is becoming a key school improvement strategy that's being adopted all over the country.

It's important, though, that that be done effectively and that it be done in a way that doesn't result in the data overly driving the goals that the schools have for their students. So the goals should come first. We should think about what it is that we want our students to achieve and to get out of their education, and then we should use the data as appropriate to inform those goals, rather than letting the goals be driven by what happens to be in the data that we collect.