DOINGWHATW⟶RKS

Prepare, Inquire, Act
Elizabeth A. City, Ed.D. • October 2009

Topic: Using Student Achievement Data to Support
  Instructional Decision Making
Practice: Cycle of Improvement

Highlights

- It's important for teachers to establish and use a process for looking at data.
- Teachers should use a problem-solving model that begins with preparing to look at data, asking questions of the data, and then seeking solutions to identified concerns based on the data.
- This process is meant to be an iterative cycle for using data for instructional decision making.

About the Interviewee

Elizabeth A. City is Executive Director of the Doctor of Education Leadership (Ed.L.D.) Program and lecturer on education at the Harvard Graduate School of Education. She has served as a teacher, instructional coach, principal, and consultant, in each role focused on helping all children, and the educators who work with them, realize their full potential. She holds a doctorate in administration, planning, and social policy from the Harvard Graduate School of Education. Her publications include *Strategy in Action: How School Systems Can Support Powerful Learning and Teaching*, coauthored with

Rachel E. Curtis (Harvard Education Press, 2009); *Instructional Rounds in Education: A Network Approach to Improving Teaching and Learning*, coauthored with Richard F. Elmore, Sarah E. Fiarman, and Lee Teitel (Harvard Education Press, 2009); *Resourceful Leadership: Tradeoffs and Tough Decisions on the Road to School Improvement* (Harvard Education Press, 2008); *The Teacher's Guide to Leading Student-Centered Discussions: Talking About Texts in the Classroom*, coauthored with Michael S. Hale (Corwin Press, 2006); and *Data Wise: A Step-by-Step Guide to Using Assessment Results to Improve Teaching and Learning*, coedited with Kathryn Parker Boudett and Richard J. Murnane (Harvard Education Press, 2005).

Full Transcript

My name is Liz City. I am the Executive Director of the Doctor of Education Leadership Program at the Harvard Graduate School of Education, where I am also a lecturer on education.

We find it's very helpful for teachers to use some sort of process or cycle when looking at data. Now, which one they use isn't as important as that it essentially has the elements of a problem-solving cycle. No matter what name it's under, all of the cycles share some characteristics. So they are essentially problem-solving inquiry-based cycles. Usually, at the beginning, you are getting organized. You are preparing. So you are getting organized for collaborative work because it's essentially a collaborative practice. You are deciding what data you are going to look at. You are making sure that you understand how to look at data. So that is the *prepare* part.

Then you move to *inquire*. Inquire is where you start figuring out what questions do we want to ask, what data would we look at to answer those questions. And usually, and this is kind of frustrating, using data leads to more questions than answers. So you start looking at data, you generate more questions. Then you look at some more data. Once you've decided what's the learner problem that we want to focus on, you start trying to figure out solutions. So that gets to the *act* part of any data inquiry cycle. Figure out, what are we going to do about this problem? What are our solutions? Write down the plan. Figure out, how are we going to know if we are successful? And then you are essentially doing an iterative process, so you're going to come around the cycle as many times as you can. So you prepare, you inquire, you act, and you come right back to inquire—probably don't need to prepare again. And you say, now what have we learned, are we making progress or not, let's inquire again, figure out what to do next, see if it's working, and come around again.

One example that I often like to share with people about teachers really using data to improve their instruction is from the Mason School, in Boston. It's an urban public school, K–8 school, and the teachers there decided, "We need to really start using our own data in our own classrooms to drive our instruction." So they started with their standardized test data and they said, "What over several years is our data telling us is a problem?" And they said, "Well, reading. We seem to be making some strides in math, but in reading, we are very flat. We are better than most of the other schools in the district in terms of our performance, but it's relatively flat. Why is that?" And then they looked at their interim assessments and they said, "Well,

it looks like students aren't able to express their understanding about their books in writing very well in our interim assessments." Then they said, "Well, where do we do writing about reading in our daily curriculum." They said, "Ah, we use reading journals. We have students write letters to us about their reading."

I did this when I was a teacher as well. So every week, students are writing a letter to the teacher about their book they are reading, and the teacher writes back—lots of data there. They said, "Let's sit down with some of those notebooks and see what we can see." So this was a third-, fourth-, fifth-grade teacher team. They each brought three notebooks: one high, one medium, one low. They spread them out on the table, and they looked at the notebooks, and they saw huge variation. They also saw that third-, fourth-, and fifth-grade notebooks all sounded pretty much the same. They said, "We are spending tons of time on this, and there is no improvement really. What are we doing?" They said, "Well, we don't think we are clear about what a great letter looks like, and we don't think we have very explicit standards for students about what that letter would look like that they can use to improve their own work. Let's craft a common rubric, and let's decide, what would we teach about this writing letters for comprehension in third grade, what would be different about fourth grade, and what would be different about fifth grade?" So they made a plan.

They came back together a month later with their notebooks and they said, "Let's look at the notebooks now." And they saw a lot of improvement in the student writing. Well, one of the teachers was very into data, total data geek. She had been leading this effort. Her colleagues were okay, but a little reluctant. When they saw how much student writing had improved and how much better students were able to talk about their reading comprehension, everybody got excited. And success breeds success. So then they took that same process right over to math, and they started having a conversation about what was going on in math. And they did all of this in a month or two, and then they came back six months later, looked at those reading journals again, decided how to move them to the next level. So now, over time, they have two or three years worth of data showing how student notebooks are improving as they go through the grades, all from a very small conversation that was grounded in data.

Often when I work with educators about using data, they say, "We like the notion of using data, but we are drowning in data. We don't really know how to be efficient and effective and really use data to drive our instruction. We keep getting bogged down." So I usually give them three tips. The first one is, start small. Think big, think about what you are trying to do overall, but choose something very, very small to work on. Often we are faced with so many problems, so many challenges, we feel we need to bite them all off at the same time. But we don't get the problem small enough that we could actually see progress on it. When you get it small, you can see some progress, which then motivates people to keep working at it. It gives the students and the teachers feedback that what they are doing makes a difference, which is really important. So that's the first one: start small.

Repetition really helps. So the faster and tighter the improvement cycle, the faster the improvement acceleration. So if you are going to take a year to decide what to do, you are not going to make as much progress than if you took a month to decide what to do; you used a bunch of data sources, but you took a

month to decide what to do. You tried it and then you came back a few weeks later to see whether it was working. You will get through the cycle five times in a year instead of one time.

The third tip that I give people is to be audacious. John Dewey has a great quote that, "Every great advance comes from an audacity of the imagination." And I think one of the challenges with using data is it's inherently backward looking because you are problem solving and so you are reacting to something that's already happened. Now, people who are making great improvement strides are also using data prospectively to try to anticipate what students will need. But you need to keep your vision in mind and you need it to be bold. Often when I am working with educators on using data, I will say, "Rate the audacity of this plan for me on the scale of one to five." And they'll look at it and they say, "Well, it's kind of a two. We kind of did it incremental; we tried a little bit." And you need to take those little steps but you need it embedded in a big vision of what's possible for students as learners and also what's possible for teachers as practitioners— what are we capable of? So I encourage you to be audacious as you are using data and not use it to all be reactive to what's already happened. So go out there, think small, get through that improvement cycle a number of times, and be audacious.