# t³

## TEACHERS TEACHING TEACHERS

**EVERY EDUCATOR ENGAGES IN EFFECTIVE PROFESSIONAL LEARNING EVERY DAY SO EVERY STUDENT ACHIEVES**

# Digging into classroom data

## By Anthony Armstrong

"There is a shift occurring," said Jenni Iwanski, instructional support coach for Norton Creek Elementary in West Chicago, Ill., "from a focus on teaching to becoming focused on exactly what the students are learning. Teachers really do understand and know their students, but sometimes we tend to overgeneralize how our students are doing and are not objective about what students can do. But when we have the data, they give us a clear picture."

The availability of student assessment data has increased rapidly over the last decade, especially at state and district levels. While most teachers understand the value of using data to guide instruction, knowing exactly how to use data at the classroom level is a challenge in many schools. Fortunately, teacher leaders and coaches can address this challenge by helping teachers become accustomed to the process of identifying the right data to gather and overcoming the barriers to taking action.

### GET THE RIGHT DATA

Teachers at Norton Creek Elementary started looking at data to help struggling students four years ago. Two years later, the entire school was caught by surprise when less than 50% of the students passed the state writing test. "We were a high-achieving district and school," said Iwanski. "Ninety percent of our kids passed their reading test, and

---

*Continued from p. 1*

97% passed the math, so I knew something was off."

The teachers at Norton Creek thought they were looking at the right data to guide their instruction, but they quickly realized that they had not looked closely enough at the type of data they were collecting.

"We were collecting data on students after they completed a writing process, after they had conferenced with their teachers and used other resources to help them get to their final product," explained Iwanski. "But when it came to how well they do when writing independently, we didn't have a clear picture until we got the test results back and found out that our kids were not really strong, independent writers. We had to back up and change the type of data we were collecting and how we used that data."

**Jenni Iwanski**

After determining that they needed to collect data on the skills students would use as independent writers, Iwanski worked with the teachers to identify targeted writing process skills, and began assessing those specific skills more frequently. Within the year, Norton Creek doubled the number of students passing the writing test.

For Katie Johnson, a middle-level math coach for Fargo (N.D.) Public Schools, finding the right data starts with examining districtwide assessments. "Our teachers take a unit and look for three or four important learning targets that they want students to master before moving on. The teachers then design assessments based on a manageable number of targets. Classroom-based common assessments are an easy way to start working with data because they are teacher-created and something the teachers can relate to."

**Monica Boehle**

During the examination process, Johnson found it helpful to create a template to help keep the teachers focused. "It can easily become a conversation about nothing that can be solved," said Johnson, "so I created a template to refocus the conversation back to the standard, objectives, and what we can do with kids and how that will impact their future."

"Using data can be very confusing," said Monica Boehle, instructional support coach and U.S. history teacher for Saint Charles North High School in Saint Charles, Ill. She noted that the teacher-coach partnership and the professional learning community were the most effective environments for building data-use knowledge. "As a department, we sometimes do presentations and then go to individual teachers to tie the data to their own needs," she said.

Boehle also stresses the importance of making sure that teachers know how to measure and collect data that are realistic and usable. "Once in our history learning community, before I started coaching," said Boehle, "we created random assignments to measure a skill, but no one taught the lesson the same way or gave students the same directions for the assessment, so the data were meaningless. In addition, we all agreed on the skill to measure, but it turned out the skill was not important to the program." Boehle noted that staff felt frustration when they saw the results. "We realized that it doesn't help student learning if we are measuring something that doesn't impact learning in class the next day or the next week. We realized that before we decide which skill to measure, we have to make sure it is relevant to the essential seeds of the unit. That realization came through some very hard conversations. Now, as a coach, I help guide people through those conversations," she said.

Even teachers who seem to buy in to data-driven instruction can fall into the trap of thinking that data collection means intrusive standardized testing that interrupts the teaching process. Other times, particular class instructors are challenged to find ways to formatively assess their students.

"Since we required all of our faculty to gather formative assessment data," said Iwanski, "our specials teachers came up with creative ways to formatively assess the students. For example, part of the physical fitness test that students have to take every year is the push-up. Our coach knew that this was the one skill that most students did poorly on, so she came up with a creative way to formatively assess student push-ups. She set up stations where the kids would complete various activities. One of those stations was the push-up, so she could watch each individual student at that station and record his or her level of skill while all of the other students were busy completing activities at the other stations." The instructor also started having the students self-assess, which made them more aware of their form and technique. This new level of awareness and more frequent assessments led to students assisting each other, offering advice on form, giving each other encouragement, and getting excited about a required skill that they used to dread.

Sharing assessment results with students is something that Boehle encourages. "Teachers can show the assessment results to students and talk with them about their individual scores and how to overcome their weaknesses. I've been using this technique in my classes and the students find it empowering. The response has been overwhelmingly positive. Students understand where they need to go, and my feedback for them is much more specific and targeted because I know that if I can't articulate where they need to go, then there is no way they will get there — it becomes a guessing game. I have several at-risk students whose goal is to do better, but they don't know how. Sharing their assessment results gives them a concrete progression instead of making them feel overwhelmed."

### TO TAKE ACTION, REMOVE THE BARRIERS

Even with the right data to examine, many teachers are still uncomfortable with using data to take action or help guide instructional practices.

"Some groups get into thinking that the data will guide their practices for next year," said Boehle. "Even when they are conducting a lot of reflection over the data, if the teachers stops there, nothing changes.

"For example," Boehle continued, "Pacing guides only allow so many days to cover a unit, so sometimes the teachers are not sure what to do when they need to go back and revisit part of that unit."

Boehle recommends guiding teachers to creatively respond to this challenge by, for example, finding ways to reinforce difficult student skills in new content to keep up with the required pace. "If it is a content issue," adds Boehle, "it might require a frank conversation with the learning community to determine if the instructor should get behind in pacing to revisit the content."

"The biggest obstacle to overcome when showing teachers how to look at data is to help them not take it personally, to look at the data objectively," said Johnson. "You have to show them you are not using the data to judge. You have to show them how you are just looking to determine where students are and how to bridge the gap to where they need to be. You always have to reinforce the goal of student success."

Johnson also takes care to make sure teachers are not overwhelmed when they start looking at the data. Knowledge of how to interpret, organize, and present the data in ways that are usable and understandable for teachers is critical, she says. "The first reports were computer-generated and had so many choices it was difficult to know which data to look at and where to start. I had to fine-tune the reports by going through the data myself and using my teaching background to find out which data were helpful."
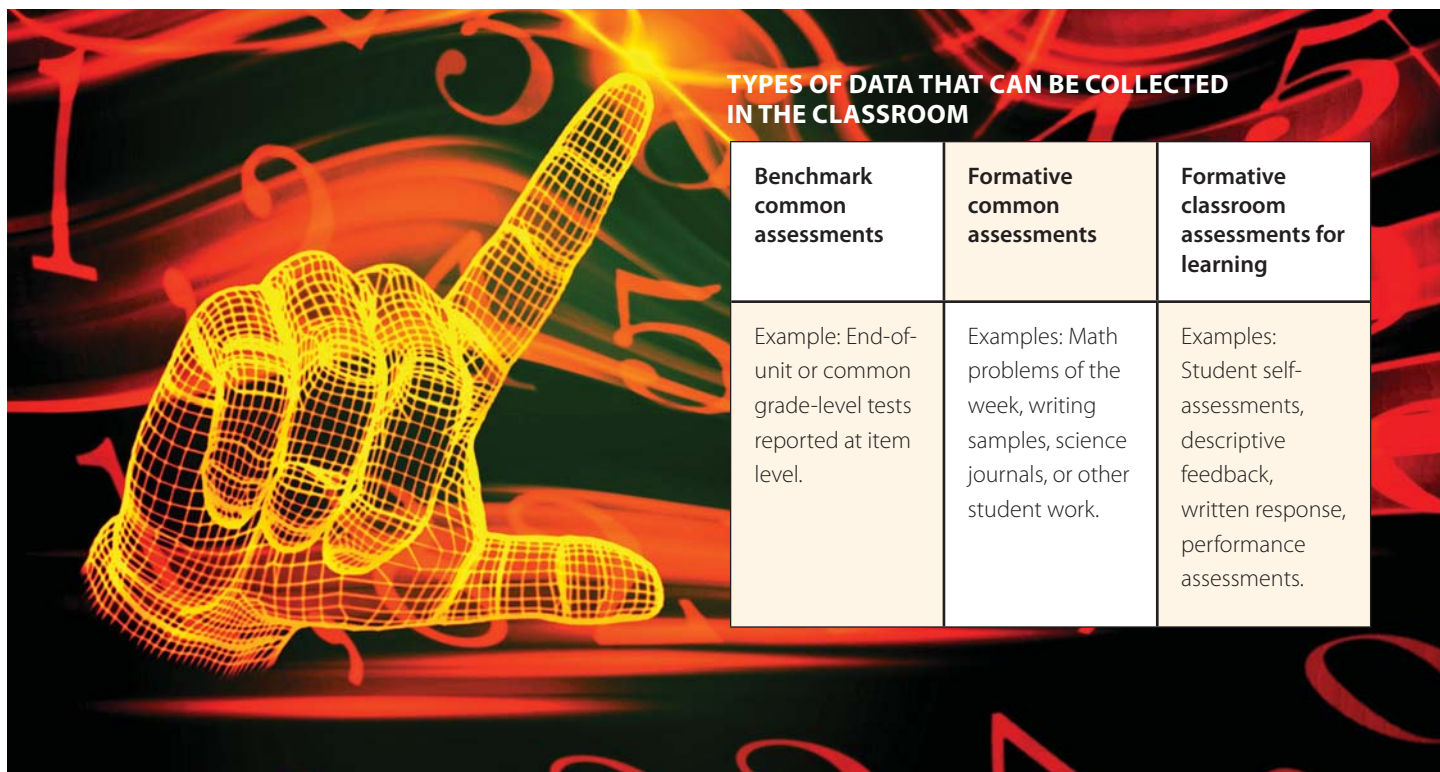
Iwanski encourages coaches to establish the right culture for data discussions. "If we don't make a safe environment to look at data and how they can improve instruction, we are missing a huge opportunity for teachers."

To help create a safe environment, Iwanski uses norms to establish agreements in advance among her and the teachers (see the tool for establishing norms on p. 6). She then uses questions and paraphrasing to encourage teachers to take ownership of the data and talk about what they

> **Learning Forward BELIEF**
>
> Student learning increases when educators reflect on professional practice and student progress.



### TYPES OF DATA THAT CAN BE COLLECTED IN THE CLASSROOM

| Benchmark common assessments | Formative common assessments | Formative classroom assessments for learning |
|---|---|---|
| Example: End-of-unit or common grade-level tests reported at item level. | Examples: Math problems of the week, writing samples, science journals, or other student work. | Examples: Student self-assessments, descriptive feedback, written response, performance assessments. |

**Source:** Adapted from **Love, N. (ed.) (2009)**. *Using data to improve learning for all: A collaborative inquiry approach.* Thousand Oaks, CA: Corwin Press.

*Continued from p. 3*

reveal, including what is working for the students.

"Data can be scary," said Iwanski. "They can reaffirm or point out our weaknesses and make us face the hard realities. It is hard to realize that we are not doing what we are supposed to do. To make the data work for teachers, we have to make sure they keep ownership of the data and the directions they want to take to improve student learning."

Boosting teacher confidence and interest in using data is important for preventing resistance, says Iwanski. To achieve this, she ensures that teachers are learning something that they can take back to their classrooms in all professional development.

Boehle suggests coaches use qualitative adjectives when describing data to make the term more palatable and help soothe faculty fears. "You can describe data as 'observational data' or 'student exit slip data' to make them less intimidating," said Boehle. "Qualify the type of data so teachers understand that they can take different forms. Are they summative, formative, or 'five multiple-choice questions on the math concept'? Get more specific so the teachers see that data don't have to be a final exam or big project. Teachers often don't realize how much data they have at their ready. Data don't have to be spreadsheets. Teachers can collect exit slips and divide them into three different piles to determine who needs more help, who got it, and who needs to be challenged more. It is the coach that guides them through this. Teachers know a lot about their students but don't realize that knowledge is data."

•

*Anthony Armstrong (anthony.armstrong@ learningforward.org) is publications editor at Learning Forward.* **T3**

---

**nsdc** *is ...* **learningforward**

**BACK COPIES**

Articles from all Learning Forward publications are available at no additional charge to members in the members-only area of the Learning Forward web site. Nonmembers may purchase and download individual articles or entire publications for a fee.

**POSTMASTER**

Send address changes to Learning Forward, 504 S. Locust St., Oxford, OH 45056.

**BUSINESS OFFICE**

504 S. Locust St.
Oxford OH 45056
513-523-6029
800-727-7288
Fax: 513-523-0638
office@learningforward.org
www.learningforward.org

**DATA COACH`S GUIDE TO IMPROVING LEARNING FOR ALL STUDENTS:
UNLEASHING THE POWER OF COLLABORATIVE INQUIRY**
*Corwin Press, 2008*
This book offers comprehensive guidance for examining data as a "catalyst for systematic and continuous improvement in instruction and student learning." A CD-ROM with templates, handouts, PowerPoint slides, resources, and sample goals and agendas is included.
**www.learningforwardstore.org**

**TOOLS & TALK: DATA, CONVERSATION, AND ACTION
FOR CLASSROOM AND SCHOOL IMPROVEMENT**
*NSDC, 2009*
With structures and suggestions for how teachers and coaches can start conversations that lead to improved practice, this book includes data-gathering tools for teachers and coaches.
**www.learningforwardstore.org**

**PUTTING DATA INTO PRACTICE: LESSONS FROM NEW YORK CITY**
*Education Sector, October 2010*
Examine key lessons from New York City on implementing data systems that make a difference in the classroom.
**www.educationsector.org/sites/default/files/publications/Putting%20Data%20Into%20
Practice_RELEASE.pdf**

**A WORK IN PROGRESS: FORMATIVE ASSESSMENTS SHAPE TEACHING
AND PROVIDE MUTUAL PROFESSIONAL DEVELOPMENT**
*JSD, January, 2009*
See how grade-level teams use formative assessments to revise their unit planning and curriculum building as they strengthen each other's lesson plans with activities, assignments, and instructional strategies.
**www.learningforward.org/news/articleDetails.cfm?articleID=1903**

**DATA DELIVERS A WAKE-UP CALL:
FIVE-YEAR PLAN UNITES TEACHERS INTO A COLLABORATIVE CULTURE**
*JSD, January, 2007*
Teachers make time for ongoing, job-embedded professional learning that focuses on student achievement, including analyzing test results and developing schoolwide goals to address weaknesses. Student test scores improved significantly.
**www.learningforward.org/news/articleDetails.cfm?articleID=1444**

**DIVING INTO DATA ANALYSIS**
*JSD, January, 2004*
In small grade-level groups, teachers learned to analyze data, map curricula, and review each other's teaching to make changes in their classrooms that led to documented success.
**www.learningforward.org/news/articleDetails.cfm?articleID=295**

# Norms for data discussions

Data conversations are most effective in an environment where teachers feel safe. Establish norms for these discussions to help avoid feelings of risk and blame.

| EXAMPLE #1 |
| --- |
| Create a focus on instruction. |
| Reinforce common core curriculum. |
| Focus on strengths as well as areas of concern. |
| Emphasize common learning based on standards. |
| Identify curricular areas that need attention. |
| Provide objective indicators of effectiveness. |
| Promote collaboration. |
| Set the stage for action plans to improve student learning. |
| Help create an "open mind." |

| EXAMPLE #2 |
| --- |
| No judgments. |
| No blaming. |
| Focus on what the data tell us about current practice. |
| Focus on problem solving and the future. |
| Focus on results for students. |
| Consider all possibilities. |
| Maintain confidentiality. |

**Source:** Adapted from Killion, J. & Harrison, C. (2006). *Taking the lead: New roles for teachers and school-based coaches.* Oxford, OH: NSDC.

# Discussing the data

When engaging teachers in data conversations, examine each piece of data to determine the root causes that contribute to the results indicated. Stay focused on what the data indicate about student learning to empower teachers and keep the conversation positive and productive.

| **1.** Describe what you learned when you looked over your individual student scores. |
| --- |
| What do the data say? |
|  |
| What are the facts? |
|  |
| What are some of your students' areas of strength? |
|  |
| What are your areas of concern? |
|  |
| What are your questions? |
|  |

| **2.** Describe what you discovered in the group data. |
| --- |
| What surprises you or jumps out at you in your analysis? |
|  |
| What patterns do you find among teachers? |
|  |
| What do you think might explain these patterns? |
|  |

| **3.** What might we include in an action plan to support the learning of our students and teachers? |
| --- |
| ✓ |
| ✓ |
| ✓ |
| ✓ |

# Reprising coaching heavy and coaching light



Since I first wrote about coaching heavy and coaching light in the May 2008 issue of this newsletter, I have engaged in multiple conversations with coaches and their supervisors about the idea behind my original article regarding the two kinds of coaching and why I think this concept is crucial to coaches and the success of coaching.

Coaching heavy does not mean being directive, demanding, or authoritative. Heavy means substantive, weighty, valued. It means robustly engaging in the work of coaching with a laser-like focus on improving student learning. Coaching light is more focused on the teaching rather than learning. It emphasizes the sense of being supported rather than the sense of producing results. Some have even suggested that coaches cannot coach heavy without coaching light first to build relationships. Perhaps that is true for some; however, I do not subscribe to that notion.

Coaches often have the notion that they cannot have substantive conversations with their colleagues without first coaching light to build a constructive relationship. I contend that substantive conversations, held in a dialogic manner without judgment or expectations and focused on beliefs and assumptions rather than actions, does far more to build trust than any amount of coaching light. In other words, more substantive conversations about student learning increase trust.

Coaches can also establish trust and respectful, productive relationships with teachers by giving authentic feedback supported with evidence about student learning and identifying and unpacking misconceptions.

So what do coaching light and coaching heavy look like in practice?

In practice, coaches use similar strategies for coaching light and heavy. For example, they may hold pre- and post-observation meetings with teachers before and after visiting the teacher's classroom. However, the topics and the intensity of the professional learning differ. In coaching light, the coach invites the teacher to name a focus for the observation without reference to anything other than his or her preference. In coaching heavy, the coach encourages the teacher to select a focus for their work together, based on the content of professional learning, the school's specific improvement goals, the teacher's own performance improvement goals aligned with the district's performance standards, or student learning goals within the teacher's team or classroom.

In coaching heavy, the coach probes before agreeing, for example, with a teacher who states, "I'd like to work on formative assessment." The coach and teacher engage first in understanding specific student-learning goals and related teacher-learning goals before exploring which particular instructional practice is most likely to achieve those goals. The coach strives to build the precision of the teacher's request so that it

| Coaching light | Coaching heavy |
|---|---|
| Focus on teaching practices identified by teachers | Focus on student learning and the use of specific practices within the school's or district's instructional framework, teachers' performance standards, or aligned with the adopted curriculum |
| Feedback on teaching practices | Feedback on the interaction between student engagement in learning, performance, and achievement and teaching |
| Teacher self-assessment based on perceptions or opinions | Data-driven assessment based on student data |
| Voluntary coaching — only those teachers who request coaching receive it | Expectation for all teachers to engage in coaching — all teachers engage in continuous improvement with specific feedback and support from the coach |
| Focus on adapting or refining instructional strategies | Focus on transforming practice, examining beliefs, and testing assumptions |
| Focus on implementing strategies | Focus on deep understanding of the theory and research underlying strategies to ensure executive control |
| Emphasis on feeling supported | Emphasis on developing expertise |

*Continued from p. 8*

becomes, "I am puzzled that students are not performing as I expect on benchmark assessments. In reality, I am not certain I have adequately assessed students. If I engage students more authentically in the learning process and use more purposeful and frequent formative assessment, I will have more evidence about students' learning. One specific strategy that is identified in our teaching standards is assessment for learning so that I can adjust my teaching so there are no surprises on the benchmark assessments." Coaches contribute to this type of clarity in teachers' thinking by exploring their rationale, motivation, and expected results before providing support.

In discussing teaching, coaching light begins with, "So, how do you think it went from your perspective?" In coaching heavy, the coach begins with, "Let's review the focus for our work together and the reasons for selecting that. Let's also review the data from your classroom. Let's talk about what these data mean and what generalizations emerge from this lesson that will influence future instruction so that student learning increases."

In meeting with teams to plan instruction, coaching light sounds like, "What instructional and learning strategies do you recommend for addressing these ideas?" Coaching heavy, on the other hand, sounds like, "What does research tell us are the most appropriate approaches to address these particular content outcomes and the needs of our learners? Let's unpack that research and study its appropriateness for this portion of the curriculum and our students."

Coaching heavy focuses on developing and using professional expertise of educators and deepening the body of knowledge about the field of teaching. Coaching light focuses on pursuing areas of interest grounded in little more than preference.

Coaching heavy is based on several assumptions. First, teaching is a profession with standards of practice that are grounded in research. Coaches support teachers in linking the body of professional knowledge to their practice by examining the effects of their teaching. Second, teachers develop expertise by engaging in continuous improvement with specific feedback and ongoing opportunities to deepen professional knowledge and practice.

The differences between coaching heavy and coaching light are far from subtle and have significant implications for how coaching affects student learning and teaching.

•

**Joellen Killion (joellen.killion@ learningforward.org) is deputy executive director of Learning Forward.** T3

# Coach's rules of the road keep the journey smooth and successful

**By Valerie von Frank**

**Q** **What should new coaches think about?**

One of the first things I always do is to talk with the principal to get the principal's philosophy and take on the school culture before I go to the classrooms. That builds the principal's comfort level so the principal can step to the side and know where I am coming from. I clarify what my role is and is not. Sometimes the principal may expect the coach to help get a teacher out of the school if the teacher is not performing effectively, or to tell the principal what's going on. The coach is not there to spy, but to help and support the teachers.

I usually observe in the classroom to find out what the teacher's style is so I can adapt. We have conversations about things they may need to reflect on rather than me telling them. I try to get them to say, "Maybe I could have …" or "Maybe I should try …" I believe in the gradual-release model of coaching: I do, we do you do. When I'm working with teachers, I use the analogy of a relay race in which the runners pass the baton. The transition has to be smooth when you let go, so it is essential to know when to make a move.

Finally, have humility. Remember it's your colleagues that you are helping. It doesn't matter how smart you are or how much you know. You want to transfer your ideas in a safe way for those teachers. Be organized. Keep your word. Continue to be a lifelong learner, just as you're asking teachers to be. Have a support system among other coaches to keep yourself energized. When you don't know, find out, because you're the resource person. Find out the need before you try to provide the service.

Be the buffer and the inspiration; the teachers will definitely appreciate it!

•

**Valerie von Frank (valerievonfrank@aol.com) is an education writer and editor of Learning Forward's books.** **T3**

Catina Mason (mathtmason@hotmail.com) has been an instructional coach at several schools, including turnaround schools, and is now an instructional specialist with Detroit Public Schools.

# Embrace the Journey

## for School-Based Professional Learning

**SAVE THESE DATES!**

**July 17–20, 2011**
JW Marriott
Indianapolis

**learningforward**

# 2011 SUMMER CONFERENCE

### For Teacher Leaders and the Administrators Who Support Them

**Keynote Speakers:**

- **Wendy Robinson**
- **Ian Jukes**
- **Mary Cullinane**
- **Sarah Wessling**
  (2010 National Teacher of the Year)
- **Jim Winter**

2011 Learning Forward SUMMER CONFERENCE Embrace the Journey

Learn more and register at
**www.learningforward.org/opportunities/summerconference.cfm**