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## Beyond Looking: Using Data to Coach for Instructional Improvement

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For several years, Judy (a special education teacher who works with students in math and science goals) sat through staff meetings at which the PowerPoint slides containing the results of our statewide assessment data confirmed what she already knew about her students: they were not meeting state standards in math. Since all of the students in Judy's class were on Individualized Educational Plans for math, it was a disheartening experience to see large bar graphs continually broadcasting her students' lack of success. "I know what the data are saying, but what they aren't saying is what I need to do," she remarked. We met a few times after that to discern which data she needed to help her make instructional moves to promote student achievement. In my role as a job-embedded instructional coach in the building, I began with her questions regarding her dilemma. I then accessed quantitative data in the form of statewide standardized assessment scores and data from a district-wide assessment, and recruited help from the district assessment office to compile a portfolio of data about her students.

When Judy and I met again, we reviewed the quantitative data about her students' achievement in math. After building the assessment picture, we were easily able to move from data to practice by using probing questions centered around individual students, such as, "Given that you now know that this student struggles with number sense, how will you help him increase his understanding in this area? What curricular and instruction choices will you make that might help him?" Judy left the meeting with a deeper understanding of what the quantitative data conveyed, and was able to turn what she learned into specific instructional techniques intended to help her students. After our collaboration and reflective conversation using data, Judy began more intentional, flexible grouping for students to deepen their work in a particular math strand. She also incorporated more self-reflection and assessment using language from the standards as part of her routine classroom practice.

As a team of job-embedded instructional coaches in an ethnically and economically diverse learning environment, we are dedicated to thinking through and troubleshooting the improvement of teaching and learning in the three learning communities that make up Clover Park High School. We agree with commentator Laurie Olsen who writes, "Data provide both a stark picture of how we're doing and a wonderful tool for stimulating dialogue about how a school community is faring and what it considers important." We make use of qualitative and quantitative data to form the basis for the professional development—and the goal of improved student achievement—that we create and facilitate. We use a number of quantitative data sets, disaggregated for factors such as gender, ethnicity, and socioeconomic status, content, and grade levels. These include state standardized tests, building-administered assessments, building graduation rates, and grade reports. We use multiple assessments to give us a more complete picture of teaching and learning in the building. Our conversations around improvement often begin with our interpretations of and concerns around the data.

In addition, we spend time in classrooms on a regular basis to collect a variety of real-time, qualitative data. These include artifacts such as observation notes and video. From here, we begin to build professional development that bridges the gaps between the research-based best practices that are supported by our district, the capacities and belief systems of our teachers, the real quantitative and qualitative indicators of achievement by our students, and the overall context in which teaching and learning occur.

Our ability to respond is key to this strategy: because of the embedded nature of our roles as onsite coaches that teachers see on a daily basis, once we are looking at data indicative of student achievement in the

learning communities, we are able to act accordingly. While we sometimes put piece of data in front of teachers, paired with essential questions designed to deepen understanding as inquiry based learning, we as a coaching team use data as a crucial tool in directing our work with teachers. This takes us beyond merely looking at evidence to collaboratively creating the ongoing professional development that truly sustains the change suggested in our observations. Knowing is one thing; being able to act on that knowledge in a timely and coordinated fashion is of paramount importance.

### **One-On-One Coaching: Complex Questions, Thinking and Reflecting**

In terms of coaching processes, the two main modes of interaction with our teachers for coaching for instructional improvement are the one-on-one meeting and meeting in a group composed either of the faculty one of Clover Park's three small school faculties or a group of educators in job-alike roles. One-on-one collaboration occurs in a number of ways: on a by-appointment basis, on a drop-in basis, or it can be as simple as running into someone in the hallway and asking them how things are going. The single most important concern for us when dealing with teachers around data inquiry is asking the right questions. In the vignette at the outset of this article, the coach uses questions—"Given this student's problems with number sense, what particular instructional choices can you make to help him?"—to connect the raw numbers from the data with the lived experience of the teacher working with her students.

In the act of looking at data with teachers, this "Socratic" or dialogical approach to knowledge is important because it takes into account the notion that teachers need to create their own solutions. When looking at evidence of student achievement, we don't give out "right" answers precisely because in teaching the right answers are often a product of the teacher's own experience, combined with shared experiences in a classroom as a teacher with students. The complex nature of teaching is centrally important: in something as intricate as teaching, solutions are sometimes unclear, and simple, general answers are sometimes elusive. We use questions to activate teachers' own judgment in matters that require clear decisions. A key word here then is "judgment:" it is teachers' professional judgment that must be the source of problem solving in the classroom. Though it is tempting on our part to say, "Just do this," the solution offered is often what we would do in a particular situation. But we aren't the ones who must make the subject matter come alive in the classroom. It is the teacher who makes meaning on his or her own based on the reality of his or her classroom context. Just as the notion of student-as-worker has powerful implications for our students, it is the teacher that has to do the work, We can facilitate that work, but it is up to each teacher to fashion appropriate solutions, reflect on their effectiveness, and proceed accordingly.

This does not mean that teachers—or, for that matter, coaches— always possess the expert knowledge needed to tackle the problems at hand. This is where good resources become relevant: sometimes it is crucial to bring in an outside article or video to inform the conversation. Teachers as a whole have limited time to research materials that might actually inform their practice; it is part of our role to scan the latest research. Let's say that a teacher identifies a problem connected to student motivation in the classroom. We might find some relevant passages from Deborah Stipek's *Motivation to Learn* to help that teacher understand the problem and identify possible solutions. A teacher concerned about issues of equity and thinking about the diversity of language and dialects in her classroom might find "Language Diversity and Learning," the chapter from Lisa Delpit's *Other People's Children: Cultural Conflict in the Classroom* helpful. Our Instructional Facilitation office has an extensive professional development library where teachers can check out books on numerous content and pedagogy topics. This also gives us the ability to pull a resource off the shelves and put it into the hands of a teacher at just the right moment, rather than waiting until the designated professional development session.

### **Collaborative Learning Communities: Learning from a Public Exchange of Ideas**

Elizabeth, the teacher leader for one of our small learning communities, is a rare young teachers, as talented at teaching her colleagues as she is at teaching her students. With a half-day for professional development approaching, she came to the Instructional Facilitation office for help in planning out the agenda for her small learning community's professional development time. While she was certainly capable of planning engaging and useful activities for her staff on her own, she recognized that she wanted to use the time to connect to a larger conversation the administrators were having around student failure rates derived from building grade reports. Elizabeth sought our help in sifting through the plethora of qualitative and quantitative data and using that data to inform her decision-making process to plan the upcoming half-day

professional development.

We examined staff surveys on thinking about and practice with standards-based assessment along with Elizabeth's previous observations of and conversations with her colleagues to create a picture of where people were on the path toward the state goal of learning and implementing standards-based assessment. From that data, we were able to tease out several key outcomes needed for the half-day session to be successful. Asking Elizabeth questions about such factors as the purpose of various activities, the ways the activities aligned with her expectations, and her read of her colleagues' current level of understanding, we were able to provide some new tools that would help solidify the group's understanding of the concept. As we moved through brainstorming what the agenda might look like, we continued to ask Elizabeth to reflect on the ways the activity would meet the expectations conveyed by the data we had reviewed. Three tiers of activities emerged for the half-day: activities designed to develop collective understanding, to promote trust and conversation, and to model an effective instructional strategy that teachers could use in their classrooms the next day.

The Clover Park District carves out professional development time during teachers' day once or twice a month with a regular schedule of early-release half-days mixed with several full-release days, giving our teachers the opportunity to meet in groups. In this instance, the district itself has taken on the mantle of change agent and has empowered coaches—in conjunction with educators themselves—to provide in-house professional development in an ongoing and coherent fashion. Our role is to plan and facilitate meetings. Each school or learning community has its own set of requirements for these meetings. The district gives its coaches (formally known as "instructional facilitators") a general framework for teaching and learning and a general set of principles. For example, there should always be some kind of "looking at work" activity or there should always be some kind of "new learning" through an article or video. As a building, we have several teams consisting of one or two instructional facilitators combined with one or two learning community administrators and teacher leaders. Each team collaboratively plans the professional development sessions.

We aim to model the kind of collaboration we would like to see from teachers, including incorporating data-based inquiry as regular habit of our practice. As a facilitation team, we each bring ideas to planning sessions. Some ideas resonate and are incorporated into agendas. Others are discarded or, as is more frequently the case, modified through the input of others. This kind of planning has the advantage of putting several minds together to create learning experiences and solve potential content and process problems.

While the impetus for the content of collaborative learning sessions is in some cases defined by macro-level district change initiatives, much of the content is derived from our readings of the quantitative and qualitative data available to us. For example, a useful tool for us is quarterly grade reports—spreadsheets that detail the letter grades that students receive from teachers across the school, disaggregated by such factors as gender, ethnicity and subject matter—that give us a practical and immediate picture of student learning in the building. Combining this with the qualitative information derived from our classroom observations, and direct responses to immediate problems in the classroom that one or more of the teachers might be experiencing, we try to be as responsive to the needs of teachers (and by extension, students) as possible. In fact, the planning session depicted in the above vignette with Elizabeth occurred amidst a larger conversation about our concern about failure rates represented in our data, especially among ninth grade students of color, who, we had learned from looking at research, have a high risk of dropping out if they have failed a class in their first year in high school. Over the course of the last year and continuing into this year an ongoing series of collaborative professional development sessions worked on the problems around teacher grading practices by focusing on an interconnected set of best practice initiatives that looked comprehensively at the practice of grading.

Talking about teacher grading practices can be a tough conversation, because when looked at in the form of school-wide reports, the letter grades that teachers assign to students can reveal variances and inconsistencies in the ways that teachers report student progress and achievement across and within content areas and learning communities. This grade data can also reveal previously unexamined inequities in terms of ethnicity and gender if particular subgroups have a higher failure rate than others. Another problem is that until now, this information has been in many ways the private domain of the individual teacher. As

Robert Marzano and others have noted, the way teachers grade is part of the great pantheon of “the way things have always been done” in schools and thus resistant to change. From all of this, logical but potentially uncomfortable questions arise: what do grades measure? Should grades take into account effort and attendance, or should they reflect the actual achievement (based on performance standards) of the student? Are grades an effective form of motivation (or coercion) for students?

For us, the answers to these big questions have required ample time to talk: in regularly scheduled professional development sessions the administrators, teachers and instructional coaches in all three of our learning communities examined these questions closely. The stylistic approach of each group differed somewhat, but in each case the learning community was presented with a problem represented by the data: grading is inconsistent and perhaps not as effective in its communication as we assume it to be, and in fact may be prematurely branding our youngest students as failures. To expand understanding of the problem, the three learning communities (one following the lead of another and so on), asked us to help conduct and make focus-group videos of students talking about their experiences with grading. In this, the quantitative abstract information of the grade reports was given a qualitative human face. After viewing one of these videos in a session, one teacher remarked, “they’re as confused about grades as we are,” putting a fine point on the proceedings.

As with our work with individual teachers, this knowledge was then paired with resources in the form of articles and research on best practices. The introduction of these texts is crucial: we don’t want to put problems posed by the data in front of teachers and simply ask “what do we do about this?” Our goal is to use new learning to both activate and enlarge the expertise in the room. We want to provide avenues for action that illuminate the issues but also provide thoughtful solutions based on research. Groups did close readings and had in-depth discussions of articles and research. Articles such as Douglas Reeves’ “The Case Against the Zero,” which explores the illogic around 100 point grading scales in favor of a more equitable 4 point scale, or Ken O’Connor’s *How to Grade For Learning*, which illustrates important links between grades, clear performance standards, and the ways formative feedback assists teachers to focus on achievement and the quality of students’ thinking and learning. Many of these resources suggest practices that can be implemented immediately with little planning—“that we can do Monday”—as well as techniques that require more preparation. Dialogue and risk-taking have been key as teachers might try new techniques and report new learning in subsequent sessions, sharing their experiences (both good and bad, and sometimes on video), getting feedback from colleagues and enlarging their understanding and skill in the classroom.

The logical end of this work has been a move to standards-based grading that gives students clear criteria for excellent performance, based on authentic discipline-centered outcomes. We should note that this work is ongoing: do all of our teachers have a consistent and logical approach to standards-based grading? Not yet. But many are adopting standards-based practice and we’re intentionally, steadily, and methodically building the capacity of all the teachers in the building to follow accordingly. The process is lengthy and requires a lot of talk—even the occasional argument. But for us this capacity building is the *raison d’être* of our work, and when we ask ourselves, “How does change occur?” we can give reasonable answers based on our experiences with the work detailed above.

While our main goal is to solve problems, our focus is also to create a community of learners. We engage teachers in the processes we would like to see them engage with their own students: we place thought-provoking issues in front of them and then ask them to reflect, respond, and act on what they’ve learned in the form of the crucial changes in practice that are suggested. Looking at data is a crucial first step in the process of making meaningful changes in instructional practice. But the real challenge is to create the space for honest and trustful discourse both one-on-one and in groups about what actions those data actually suggest. We are lucky to have a team of people that can put their collective minds together to focus on these issues. We are also fortunate to work with educators and administrators that have the capacity and willingness to talk constructively with each other about data, theories about best practice, and actual teacher practices. The data tell us that the hard work with which the people in our building have been engaged has produced real results: a steady gain in state standardized test scores over the last seven years and a significant and much publicized boost in the graduation rate from 38 percent of students graduating on time in 2001 to 77 percent by 2006. Those data tell us that we are on the right track, but they also show that there is ample room for improvement and that our quest for educational excellence for each member of our

student population is ongoing.

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According to researchers Joellen Killion and Cynthia Harrison, job-embedded coaching stresses an on-site presence of coaches who work with teachers directly, assisting in learning and applying the new knowledge and skills necessary to improve the academic performance of all students. In the Clover Park District, each elementary, middle, and high school has at least one coach. The job-embedded coach works and reports to the building, not to the district's central office or an outside agency. Clover Park's instructional coaches don't just have an office where they hold office hours, hang their coat, and plug in their laptop—they have a central location in the building, a kind of “research and development” center where they work and learn in the same places where the teachers they serve work and learn. They are a visible part of the school culture and are available for spontaneous opportunities for reflective conversations and professional learning with the educators in the building.

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Clover Park High School, a CES Member School and public high school in Lakewood, Washington, serves a diverse population with significant needs. One mile in one direction from the school are multi-million dollar lake-front homes, and one mile in the other direction the school bus picks up children from motels and apartments that serve a transient population. District-wide, slightly more than 39 percent of the students are from military connected families stationed at the Fort Lewis Army and McChord Air Force Bases. Clover Park High School enrolls approximately 1,300 students in grades 9-12 housed in three smaller learning communities on the same campus. The student population is: 54.4 percent male, 45.6 percent female with a free and reduced lunch rate that fluctuates from 54.4 percent on up during the year, depending on enrollment. 37.9 percent of students are Caucasian, 25.6 percent black, 17.9 percent Hispanic, 13.7 percent Asian, 2.6 percent Pacific Islander, and 1.6 percent American Indian/Alaskan Native. 12.3 percent of students receive special education services, and 9.8 percent are transitional bilingual.

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