TALK THAT TEACHES

HOW TO PROMOTE PROFESSIONAL DIALOGUE AND GROWTH

By Lynsey Gibbons and Melinda Knapp

Imagine having opportunities for teams of educators to come together regularly to engage in rich conversations about teaching — conversations so rich that they address problems of practice and support educators to learn on the job (Little, 2002). The instructional leadership team — principals, coaches, and other school leaders — works together to transform instruction by developing schoolwide professional communities that help teachers learn alongside their colleagues.

What types of talk promote teachers' professional growth? In the following vignettes, 4th-grade teachers and instructional leaders examine student work and observe classroom instruction. These learning designs encourage teachers to talk in ways that develop a shared understanding of teaching, which is instrumental to their professional growth (Lampert et al., 2013). A close look at these vignettes shows how instructional leaders establish schoolwide professional communities in which teachers and leaders continually converse about their practice.

VIGNETTE 1:

4th-grade weekly collaborative meeting

During these weekly 30-minute conversations, the leadership team, 4th-grade teachers, and the English language teacher discuss how teaching and learning are playing out during their instruction. Notice the conversation goes beyond talking about pacing matters (i.e. who is teaching what when) to investigating students' mathematical thinking and the implications for instruction.

The discussion focuses on how students are making sense of fractions and how to build on these current understandings. To focus their discussion, they examine a common formative assessment task given to students earlier that morning: four questions about comparing fractions.

The coach begins the conversation by asking teachers to list everything students seem to understand about fractions so far. The group looks through student work to notice how the children are making sense of the problems and what representations they have used to do so.

Teacher 1: I'm noticing about three-fourths of my students got the problems correct and can draw a picture to compare fractions.

Teacher 2: I had all but four students get the comparison fractions correct. Most of my students used drawings, too.

English language teacher: Are their drawings accurate?

Principal: It looks like most of the students are drawing both of the fractions, using the same size whole. So that's good. They then appear to be comparing the shaded portions.

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The teachers begin to look back through student work to assess more closely how students used the drawings. The math coach is glad this question came up. In these teachers' classrooms earlier that day, she had noticed that many students were using drawings to compare fractions but not many were using their knowledge of how far away the fractions were from landmark numbers. This is a problem of practice she wanted to raise in today's meeting.

Principal: When is drawing a picture helpful, and when is it not?

English language teacher: Don't we always want kids to justify their thinking?

Math coach: We know that kids and adults use draw-

ings to solve all types of problems. Kids initially rely on drawings and partitioning to help them make sense of fractions.

Teacher 2: Right. It seems we want kids to use pictures at first. But sometimes pictures are not helpful. For example, when they get complicated fractions like 6/7, it's hard for them to draw.

Math coach: That's true. Eventually, we want them not to rely on drawing fractional amounts in order to compare them. For example, in the first problem, students were asked to compare 7/8 and 4/5. We would like to see them compare both fractions to a whole. Each fraction is just one piece away from a whole — where a 1/8-sized piece is smaller than a 1/5-sized piece. Therefore, 7/8 is greater than 4/5. Almost all of these pairs of fractions (points to student work) could have been compared using similar reasoning — comparing to landmark fractions.

These vignettes show teachers and instructional leaders coming together to think about key matters of teaching, students, and content in the context of their own classrooms.

Teacher 1: It sounds like you're saying drawing pictures helps support students when they are making sense of what a fraction is, but eventually we want students to move away from drawings. Is that right?

During this collaborative meeting, with the support of the math coach and principal, teachers talked with their colleagues about students' reasoning around fractions and, later in the meeting, considered changes in instruction they might want to make in response to what they learned.

VIGNETTE 2:

Reflections on a classroom observation

Here is another vignette with the same group. The leadership team had designed an activity — an observation of a colleague's lesson in mathematics — to encourage teachers to envision how they might support meaningful student discourse. Before beginning the observations, the coach prompted the group to note evidence of student discourse and questions the teacher asked to support higher-level thinking in students. As this conversation begins, the group has finished the observation and is reflecting on the classroom visit.

Math coach: We've talked about the importance of the questions teachers ask to keep students thinking about the big math ideas for the day. During our observation, did you see any questions that the teacher asked that you think prompted higher-level thinking?

Teacher 1: I heard, "What generalization can you make about combining fractions with the same denominator?" and "How can you justify your understanding of that?"

Teacher 2: I heard a student say she thought 1/4 and 4/16 and 8/32 were the same amount. And the teacher asked, "How did you decide they were equivalent?"

Principal: I also heard some students in a group discussing a question the teacher had asked: "How can you combine fractions when they have different denominators?"

Teacher 3: I'm realizing it is not enough to just ask students questions. It's the type of question being asked that allows the students to think in ways that allow them to make sense of the ideas.

Math coach: We can come up with questions that require a single answer response, or we can also press students to justify why their ideas make sense. Giving kids opportunities to makes sense, listening to and watching what they are doing, helps us know how they are making sense of the math and what question to ask next.

Teacher 3: It seems like the questions that we ask can help make the math visible. I might say, "Show me why" or "Show another way." We saw students being asked to explain why and show their reasoning.

Principal: What will you do in your classroom tomorrow as a result of today's work? Let's share our plans now, and then we'll share them with the rest of the staff tomorrow.

In this second vignette, teachers and instructional leaders engaged in a classroom visit, after which they discussed pedagogy, specifically the types of questions that elicited justifications from students and opened their thinking to others. Teachers gained images of the instructional practices of their colleague, who is, as are all teachers in the school, working toward reorganizing her practices to better address students' immediate learning needs.

After the observation, a facilitator with expertise in teaching mathematics and supporting teachers' learning led a targeted conversation. Teachers were able to make connections between the levels of student discourse and the types of questions teachers asked. Finally, the principal pressed the teachers to make public commitments for what they would try out in their classrooms as a result of the experience.

In the following weeks, the principal and coach will visit these teachers' classrooms, looking for their attempts to formulate and ask questions that elicit students' ideas. Data gathered from these visits will help the team plan learning to further develop teachers' understanding of how to respond to ideas elicited from students.

INSTRUCTIONAL LEADERS' ROLES

These vignettes show teachers and instructional leaders coming together to think about key matters of teaching, students, and content in the context of their own classrooms. Carving out time during the school day is challenging, but it is imperative to support teacher's learning goals.

However, instructional leaders go beyond merely creating structures that provide teachers time and space to collaborate. Rather, effective instructional leaders play an active role in promoting and contributing to talk among teachers. While the

principal and coach have unique roles, the pair plans supports collaboratively. Here are important features that influence leaders' ability to create a culture of learning and growth.

SHARED VISION FOR SUPPORTING TEACHERS' COLLECTIVE LEARNING

Just as children are sense makers, adults, too, are sense makers. To make sense of the content they teach in relation to how students learn it, teachers need ongoing opportunities to examine the pedagogy that supports student learning.

If leaders aim to support instructional improvement across an entire school, they must change prevailing norms in schools where teachers have typically worked individually in their own classrooms, experiencing few collaborative activities. Instead, leaders must foster a culture of collaboration that supports the collective improvement of teaching (Fullan, 2010).

Rich conversations must happen not only in grade-level teams or with a department of early adopters, but schoolwide, crossing grade-level teams and departments.

Creating a culture of collaboration requires that leaders challenge long-established norms of privacy and strive to create a culture in which teachers can take risks in front of their colleagues and the leaders who evaluate them (Bryk & Schneider, 2003). A strong professional community allows teachers the degree of trust that lets them try out new instructional practices without fear of being judged. One principal enforces this norm by telling her staff, "You can't look good and get better at the same time."

SHARED VISION FOR HIGH-QUALITY INSTRUCTION

Over the past two decades, prominent professional organizations have articulated goals for student learning (e.g. NGACBP & CCSSO, 2010; NCTM, 2000; NGSS, 2013). These rigorous goals carry implications for instruction, requiring that teachers build on students' reasoning in solving challenging tasks.

Principals and coaches need to develop a shared vision for what high-quality teaching looks like. This vision serves as an endpoint for the instructional practices they intend teachers to develop in the long run. Identifying a destination for teachers' development allows the team to design learning that further teachers' progress towards refining their practices.

Instructional leaders can shape conversations that encourage teachers to develop a shared conception or vision of what high-quality instruction entails. All educators continually refine their vision as they learn alongside one another.

IDENTIFYING COHERENT GOALS FOR TEACHER LEARNING

Identifying goals for teachers as they design professional learning is likewise an essential aspect of instructional leadership. Such goals should grow from an assessment of teachers' current understandings and instructional practices.

To gauge what teachers currently know and can do, leaders have to be present in classrooms regularly. For example, in the first vignette, the coach and principal had visited all 4th-grade classrooms the morning before the collaborative meeting and witnessed that many students were using drawings to represent fractions. The coach and principal used this information to prompt a conversation about instruction that supports students to reason in more sophisticated ways.

Time spent in the classroom allows instructional leaders to maintain an ongoing cycle of assessing teachers' practices, monitoring their progress in trying new instructional strategies, and using the information to plan learning for teachers.

DESIGNING LEARNING FOR TEACHERS

Instructional leaders should be purposeful in designing learning for teachers that is ongoing, embedded in teachers' daily work, and allows teachers to develop a shared language for talking about practice (Desimone, 2011; Gibbons & Cobb, 2015). Here are examples of learning designs that have proven fruitful in supporting teachers' understanding and development of high-quality teaching:

- **Examine student work.** Look at how students responded to a task (Little, Gearhart, Curry, & Kafka, 2003);
- **Co-plan instruction.** Work with other teachers to identify instructional tasks and develop ways to assess student understanding (Smith, Bill, & Hughes, 2008);
- **View video recordings of teaching.** Share and discuss excerpts of classroom videos (Sherin & van Es, 2003);
- **Engage in lesson study or studio day.** Plan a lesson together and experience the enactment (Fernandez & Yoshida, 2004; Higgins, 2013);
- **Engage in instructional rounds.** Visit and observe other teachers' classrooms (City, Elmore, Fiarman, & Teitel, 2009); and
- **Receive follow-up support in classrooms.** Get one-on-one assistance in classrooms to implement what teachers have learned (e.g. through co-teaching) (West & Cameron, 2013).

Ensuring teachers engage in different types of learning supports them in learning about different aspects of their work — including but not limited to the discipline itself, how students learn particular disciplinary ideas, and the pedagogies associated with student learning of those ideas (Ball & Cohen, 1999). The formal structures that allow teachers to converse with school leaders and one another about issues of teaching and learning also trigger increased informal but valuable conversations in hallways or the staff lounge.

MOVING TOWARD RICH PROFESSIONAL DIALOGUE THAT SUPPORTS GROWTH

Grounding conversation in classroom artifacts furnishes a key piece for professional dialogue that moves beyond generali-

ties to concrete elements of practice. The first vignette showed how the use of student work grounded the conversation in ways students were representing fractions and whether teachers needed to encourage students to move away from those representations.

In the second vignette, teachers used their observations during a lesson to examine the types of questioning associated with promoting higher-level thinking. Keeping in mind her goals for teachers' learning, the mathematics coach targeted conversations toward ideas she wanted teachers to consider and discuss with one another. Importantly, the talk was productive because the coach consistently focused on student learning grounded in the context of mathematics the students were currently attempting.

MAKING USE OF PROFESSIONAL DIALOGUE FOR SCHOOLWIDE IMPROVEMENT

To support professional dialogues and growth, instructional leaders need to facilitate ongoing professional conversations around teaching and learning, coordinating a delicate balance between pressing teachers to take up new practices and providing supports for them to do so.

Rich conversations must happen not only in grade-level teams or with a department of early adopters, but schoolwide, crossing grade-level teams and departments. These interactions support the development of schoolwide professional communities (Stoll, Bolam, McMahon, Wallace, & Thomas, 2006). Effective practice becomes more widely available and accessible on a regular basis, generating commitments among educators to continually learn and improve instruction in order to strengthen student learning.

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