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Research Brief VI

Changing Teacher Beliefs and Instructional Practices

High-quality professional learning opportunities for high school teachers



UNIVERSITY OF WASHINGTON College of Education



Professional development that meets the needs of high school teachers? *Possible, but hard*. Change in professional practice? *Possible, but even harder*. Change in how teachers view their students' capabilities? *Tell me how you did that*.

Closing a pernicious achievement gap requires changes in attitudes, beliefs, and teaching practice. The Center for Educational Leadership (CEL) partners with school districts to provide professional development that results in changes in how leaders and teachers view their challenges and promote student learning. As part of a research team studying the relationship between CEL and Highline School District, doctoral student Beth Boatright observed that high school teachers who experienced side-by-side coaching in their own classrooms learned to identify and meet the needs of struggling students. In her dissertation in partial fulfillment of requirements for a doctorate awarded by the University of Washington College of Education in 2007, Boatright identifies the significance of this learning: A central issue is whether teachers "can approach teaching practice in new ways that *enable* a wide range of students to succeed, where formerly they would have been content to identify those who were or could be successful and others who were unlikely to be."

The partnership between CEL and the district provided some essential conditions to effect change: the commitment by the district to invest in high quality professional development, the assignment of a CEL consultant to work directly with high school teachers in their own classrooms, and the impetus provided by

This publication, the sixth in a series of research reports, is based on Constructing High Quality Professional Learning Opportunities for High School Teachers in a Transformation Context, a dissertation by Elizabeth Boatright, and includes quotations from interviews and correspondence with her.



high school transformation to take risks to accelerate student achievement. Given the convergence of these conditions, teachers intent on improving literacy instruction learned "to hold up a mirror to their own practice and simultaneously look into a window to see new things that others were doing," she said.

This publication draws on Boatright's findings and includes:

- the design of CEL coaching and its relationship to quality professional development,
- conditions that resulted in instructional improvement,
- changes in teacher behavior,
- the change in teacher beliefs, and
- the researcher's conclusions on the study.

The design of CEL coaching and its relationship to high quality professional development

Much of what counts as professional development for teachers is the stand-and-deliver model, akin to learning to ride a bicycle by listening to a cyclist describe his thrilling experience at the Tour de France. In contrast, researchers describe high-quality professional development as relevant, on going, personalized, and focused on specific subject matter – descriptors that match what was offered to the high school teachers Boatright observed.

By virtue of the school district's decision to partner with CEL to improve literacy instruction, each of the language arts teachers and teachers of English Language Learners (ELL) in three autonomous, recently converted high schools participated in coaching cycles. They planned a lesson, delivered that lesson while being observed by other teachers and a CEL coach, debriefed what happened, and then applied lessons from the experience to future lessons. (See Table. I, page 4) These exchanges with colleagues and an outside expert were dramatically different from what some researchers describe as the norm for high school teachers. Little (1990) suggests it is more common that "professional advice is given only when solicited, as teachers often consider it 'not their business' to inquire about the nature of instruction in other teachers' classrooms."

Figure 1. CEL Theory of Action

Improving Instruction through Content-Focused Leadership

A theory of action, with a focus on pedagogical content and instructional leadership in all phases

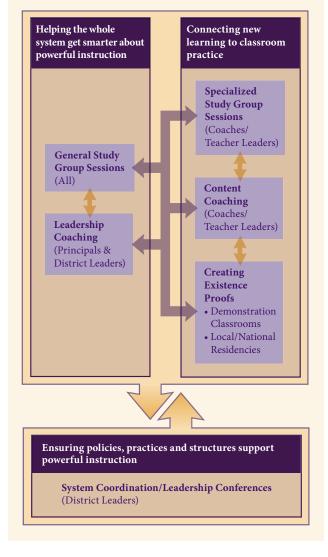


Table 1. Multi-layered participation in a coaching cycle

	Focus teacher	Coach	Other observers (teaching colleagues, building or district- level administrators)
Planning	The focus teacher and coach (a) design lesson objectives and learning tasks for students that will be observed in the next phase by her coach and colleagues, (b) determine the focus teacher's short-term learning goals (e.g., how to gather useful information on how students discuss text), and (c) clarify what her colleagues can do to help her during the next stage (e.g., act as "eyes and ears" to take note of certain students' reading behavior).		Other observers take notes on the coach- focus teacher conversation and listen for ways that they can help the focus teacher during the observation phase. These observers likely have their own learning agenda as well.
Observation	The focus teacher (a) instructs her own students and (b) tries on new practices and (c) checks in periodically with her coach for feedback "in the moment".	Other observers watch students carefully. They may, for example, take notes on what students and the focus teacher say and do during the class period. They may also circulate the room to gather data on the quality and quantity of students' discussions about texts.	
Debrief	The focus teacher talks about her experience trying on the new practices and listens to her coach's and colleagues' observations.	The coach provides direct feedback about what was strong in the observed class, and what they might work on together to improve student learning outcomes in the near future.	Her colleagues and others offer constructive feedback, typically in a neutral, even friendly, manner.
Future Planning	The focus teacher and coach develop a more specific plan for applying the observation feedback to future lessons (which is determined in large part by the teachers' comfort level with various classroom structures and learning tasks).		Other observers sometimes attend this phase of the coaching cycle, often offering suggestions of texts or materials that might help the focus teacher continue to move forward with her instructional improvement.

I definitely take [teachers] through a facilitative process and they get to choose what they want to do. But I'm guiding the questions and I'm suggesting—I'm bringing the readings, I'm taking them through the experiences. And when a bee gets in my bonnet, it's my bee. I say, "You know, we need to look at this."

- CEL COACH

Center for Educational Leadership

Often within the course of the lesson, the CEL coach would step in and work directly with a student, modeling a strategy the teacher could adopt, or raise questions that prompted the teacher to think about the work differently. The coaching was "grounded in pedagogical content knowledge" as teachers "received direction about what individual students need to learn to become better readers, and how teachers might differentiate their instruction for diverse thinkers." For example, after one lesson teachers raised the question of whether class discussion was limited because "students have something to say but need help articulating it, or if they need help developing ideas about books." Brainstorming with the teachers, the coach encouraged them to develop some teaching points for students in each of these circumstances. Reflecting on this discussion, one teacher noted:

I would have normally generalized that students couldn't sustain a conversation for more than a few minutes and that would have missed the mark for a lot of students. I feel like this is much more responsive to their needs, and every teacher should do it.

Instead of the occasional seminar, these teachers worked with their colleagues and the CEL coach on a regular basis and each one took a turn as focus teacher every four to six weeks.

CEL's Vision of Good Instruction

- Knowing students well assessing their prior learning and their learning needs
- Supporting students to become independent learners
- Delivering rigorous, explicit instruction
- Designing a supportive and appropriate classroom environment



Conditions that result in instructional improvement

While high schools are often resistant to change, Boatright's study provides evidence that teachers can become "invested" in instructional improvement, "given the right conditions." Among the conditions the researcher explored were the expectation set by district administrators and building principals that teachers would participate in the coaching sessions; the frequency of interaction among teachers and their coach; the coach's facilitation style; and the students' response to new strategies employed by teachers.

With multiple opportunities to work with the CEL coach, teachers were able to develop a level of trust and comfort that made it possible to be honest about what was happening in their classrooms. They were also appreciative of the coach's experience as a "teacher, professional developer, and researcher in districts undergoing massive instructional improvement initiatives."

To a large degree, the level of teacher participation can be attributed to the coach's facilitation style, which reflected these beliefs and approaches:



- Teachers must play an active role in their own learning.
 "Professional development is more of a lab, rather than taking away specific practices to copy."
- Teachers have a say in prioritizing their learning, but the coach must "balance the evidence of student work with what teachers want to learn professionally."
- Likewise, students must see themselves as readers, writers, and thinkers and become advocates for their own learning.
- Teachers and students both learn well through use of "gradual release"— giving as much assistance as possible initially, and then stepping back to have the teacher or student assume more responsibility for learning.
- What students write and say are valuable sources of information that point to gaps in their learning.

Teachers were also driven to participate in coaching as the result of changes they saw in their students.

All (but one) teachers value the Readers/Writers Workshop model because they see some of their toughest students taking ownership over their learning. When students who previously had not held identities of themselves as readers, thinkers and writers learn to do so, teachers want to participate.

Teachers in all three small schools were eager to work with the coach and hear her ideas on how to improve their teaching, but when offered a chance to give feedback to their colleagues, some of the more experienced teachers declined. Providing expertise was the job of the coach, Boatright learned. "Being knowledgeable was considered being elitist...This raises questions about the sustainability of the instructional improvement agenda. If teachers do not feel comfortable giving advice to their colleagues, who will provide the expertise to grow new teachers' learning?"

Changes in teacher behavior

Observing how the CEL coach had uncovered gaps in student knowledge and understanding, the teachers became researchers and structural engineers: working harder to assess what their students needed and then structuring their classrooms so that students were in charge of their learning. They learned that the first task "was to gather evidence about students, not justify why gaps in knowledge exist or develop possible solutions....For some teachers, seeing students as valuable sources of information—in particular, sources of data about the effectiveness of their teaching—was a new concept."

Teachers' assessment of student needs turned up great differences in students' knowledge and skills: English reading comprehension skills in one classroom ranged from 3rd to 12th grade levels. Uncovering these differences prompted the teacher in this classroom to isolate the specific skills students needed and to develop different "mini-lessons" for groups of students.

As one teacher commented, "I think that students can all achieve at high levels, but the road there looks different for different students. That's what I try to do."

One principal identified this capability to provide differentiated instruction as the "greatest outcome" from this professional development experience.

A change in beliefs about achievement

"Wide gaps in literacy or numeric skills among students" are the norm in high schools, Boatright noted, and "teachers make sense of these gaps in different ways." The result is more often high expectations for some students, and low expectations for others. Changing these beliefs so that teachers have high expectations for all students is "truly difficult work," she said. Teachers in this qualitative study changed their expectations of what students can achieve and "learned to attribute differences (in students' skills and knowledge) to their own teaching and not to work ethic or behavior." The professional development "unveiled ways that teachers had been unintentionally restricting the academic potential of their students." Said one teacher:

My expectations of kids are so much higher now because I've been given the tools and I've been shown what kids are capable of doing....I never really had a vision of what my kids are capable of and I didn't really have any models to look at to see that they were achieving those things.

In one dramatic example, teachers were asked to estimate the ability of a few students who volunteered to take an Informal Reading Inventory measuring such skills as reading comprehension and oral fluency. They were startled to learn that the campus leader struggled with reading, while the slacker student with discipline problems tested above grade level. One teacher concluded, "Here's a student I thought would be completely capable and (he) struggled. Another one who I didn't think was capable and didn't struggle. And so how does that inform my practice, and how do I check myself?"

One of the three principals suggested that beliefs hadn't changed because teachers did not have low expectations to begin with, but "they were developing more accurate measures of students' abilities."

Whether the result of a change in attitude or not, the net effect was that "teachers reported setting higher standards and communicating those standards to students better than they had" before working with the coach. Describing the change in one teacher's classroom, a principal said: I think (the teacher) got that "act as if students can do it" that the coach taught in the very first few weeks....I think she has pushed them as readers because they are reading much more now. Some of them never read a whole book before, not to mention twenty in a school year.

The researcher says: What can be learned from this study

"The task of building expertise at any level requires a clear idea of what "good" instruction entails and the pedagogical content knowledge to do it well. At first glance, the study offers an existence proof of what "powerful" professional learning in the context of high school transformation might look like....There are few such demonstrations of powerful professional development opportunities in high schools. This is one of them."

"The interactions between the CEL consultant, principals, students, and teachers—guided by a particular content focus and facilitation strategy for professional development—resulted in ongoing learning opportunities that teachers considered relevant and beneficial for student learning."

"The kind of professional development documented here takes advantage of the power of teachers' professional communities. Across all three schools, the design of professional learning activities—which emphasized group observation and critique of lessons—harnessed the context of the professional community in service of supporting individual teachers' learning."

"The study offered one example of how ongoing professional learning opportunities based in the high school setting can surface knotty issues about who is meant to succeed and who is not. Furthermore, it speaks to the power of classroomembedded learning experiences to address issues of educational equity."

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