EDUCATOR-CENTERED INSTRUCTIONAL COACHING

What the Research Says

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Schools make considerable investments in teacher professional development. Estimates run between two and five percent of school budgets. This translates into expenditures of thousands of dollars at the school level and, in the aggregate, millions of dollars at the state level. Typically, most of these funds are spent on traditional "one and done" in-service that takes place at scheduled times of the year, with little preparation and little or no follow up. There is almost no evidence that this kind of professional development helps teachers improve at their craft. The return on investment is modest at best.

At a time when educators are acutely aware that they must "do more with less," the Pennsylvania Institute for Instructional Coaching (PIIC), with funding from the Pennsylvania Department of Education (PDE) and the Annenberg Foundation, is taking professional development in a different direction—designing and implementing a statewide instructional coaching model.

This report reviews the large body of evidence that has been collected over the last eight years documenting the contributions to the professional development conversation of the PIIC model: educator-centered instructional coaching (ECIC). Between 2009 and 2017, the PIIC research team conducted more than 50 studies exploring many aspects of ECIC in practice. What follows is an analysis of the team's studies in support of ECIC. It examines our research in a way that could have value to schools, districts, regional education agencies, and state education departments that are considering, or have already adopted, an instructional coaching framework.

We focused our research on four issues that are central to the PIIC model:

- ▶ The impact of instructional coaching on teachers and their instructional practice;
- ▶ The impact of coached teachers on student engagement and student learning;
- > The impact of mentors (the coach's coach) on the skills and capacity of coaches to help teachers; and
- ▶ The role of administrators in instructional coaching.

These domains capture the essence of ECIC, and this report describes and explores the linkages among them.

THE IMPACT OF INSTRUCTIONAL COACHING ON TEACHERS AND THEIR INSTRUCTIONAL PRACTICE

ECIC is based on the premise that when teachers improve their practice, students become better learners. Coaches work primarily with teachers. Over a number of years, we have queried teachers to learn more about their perceptions of and experiences with coaching. We have collected data at several points in time that suggest that coaches have a powerful impact on teachers and their practice. Since one aspect of our argument is that instructional coaching is professional development, and that coaching adds significantly to the quality of teacher professional learning, our teacher data is important to understanding how, and in what ways, instructional coaching makes a difference.

Teacher Participation in Instructional Coaching

In 2008 and 2009, Research for Action (RFA), a research consulting firm, collected data from nearly 2,000 high school teachers in 26 Pennsylvania high schools that provided instructional coaching. In secondary analysis of these data (Medrich and Charner 2009), we found that among the teacher respondents, 35 percent worked one-on-one with a coach at least once or twice a month—meaning that about a third of teachers availed themselves of an intensive form of coaching. Among teachers who were "high one-on-one coached," fully 91 percent reported that their coach addressed their needs.

More recently, we found high levels of teacher participation in coaching in PIIC schools with coaches. In a 2013 study of middle and high school teachers (Charner, 2013), 52 percent of the 204 teacher respondents received one-on-one coaching during the school year; 54 percent participated in coach-led small-group or coach-led school-wide professional development; and 71 percent of the teachers either received one-on-one coaching *or* participated in small-group or whole-school activities led by the coach.

In 2015, we conducted another survey of teachers from schools with coaches (Charner and Mean, 2015). Of the 220 teacher respondents to the 2015 survey, 90 percent received one-on-one coaching during the school year, 69 percent participated in coach-led small-group or school-wide professional development, and 92 percent of the teachers either received one-on-one coaching or participated in small group *or* whole-school professional development activities led by a coach.

Although our two surveys involved different cohorts of coached teachers, the proportions of teachers choosing to work with an instructional coach has continued to climb in schools providing coaches. Coaches are connecting more with teachers. In addition, coaches are extending their reach, offering both more one-one-one coaching to teachers and more small-group and whole-school professional development. As school leaders recognized the contributions that coaches can make, many have invited coaches to lead the in-school professional development team.

Instructional Coaching and Changes in Instructional Practice

In a number of our studies, we found that the act of being coached changes teacher's instructional practice. In our secondary analysis of the 2008-2009 RFA data mentioned above, we found that 77 percent of high one-on-one coached teachers reported that the quality of their instruction improved, and 68 percent reported that because they were coached, they became more involved in discussions of student work with other teachers. As to their own professional growth, 81 percent of high one-on-one coached teachers reported that their knowledge of research-based literacy strategies increased and deepened as a result of working with a coach.

These high one-on-one coached teachers also became more involved in *other* professional development opportunities. In fact, 79 percent of high one-on-one coached teachers reported that the quality of their instruction improved as a result of their involvement in these other professional development opportunities.

An important takeaway from this survey: coaching not only helped these teachers improve their practice, it also encouraged them to become more active participants in other forms of professional development that were available to them. In other words, their experience with coaching led these teachers to find other ways to become better at their craft. They pursued a variety of opportunities to learn and master strategies that would help them become more effective in the classroom.

This study helps us understand some of the ways that coaches help teachers. Not only does coaching make a difference for teachers' instructional practice, but effective coaches also stimulate teachers' interests in other forms of professional development. One coach summed up how she views her contribution to teachers' interests in professional development (PD) this way:

"There is endless demand for PD in my school. I wish there was a more efficient way to do PD, but I have come to realize that part of the job of being a coach means always adding to my list. It makes me feel good when teachers look to me to meet their PD needs. It's actually the only way they really get PD that helps them." (Medrich, 2015)

In the 2015 study of teachers mentioned earlier (Charner and Mean, 2015), 84 percent of teachers who had been coached either one-on-one and/or in small-group professional development reported changes in their classroom practice. The changes that teachers reported included: willingness to try new instructional techniques; reflecting on practice more and more effectively, and assigning more writing and reading in content areas.

These changes persist over time. In the 2016–2017 school year, we conducted a follow-up study of PIIC teachers who were coached in the 2012-2013 school year to examine the sustained impact of PIIC instructional coaching (Mean and Charner, 2017). Teachers were asked how the experience of being coached through PIIC affected instruction, student engagement, and student learning over the years. While the responses come from a small sample of teachers and may not represent the entire PIIC teacher cohort of 2012–2013, the data are nonetheless important to consider. Here are some other findings from the study:

- The overwhelming majority of teachers (89 percent) in this study report that their classroom practice has changed as a result of participating in PIIC instructional coaching. This is slightly higher than the percentage of teachers who reported changes in classroom practice in the 2013 study (83 percent), which indicates that teachers have sustained the changes they made in classroom practice over at least these four years.
- In addition, every one of the teachers (100 percent) who were coached more than one year by a PIIC instructional coach reported that their classroom practice has changed, versus 75 percent of teachers who were coached only for one year, suggesting that continuing, sustained coaching has more impact than being coached in just one year.
- ▶ Teachers indicated that the top three changes were: using more formative assessments, more willingness to try new instructional techniques, and adjusting instruction based on formative assessments.

In the Barrow school district, coaches reported that they found evidence for their impact on teacher instruction during their regular classroom visits, where they saw the instructional strategies they discussed with teachers being implemented (Dailey, 2015).

Based on these studies, we believe that teachers have seen real value from the instructional coaching experience, and that coaching has had a profound and lasting impact on their practice and on their classrooms.

Coaches and Their Process

Building relationships with teachers was a central issue for most coaches. Coaches understood that their relationships with teachers would in part determine whether they were judged to be effective or ineffective.

In the Charner and Mean 2015 study of coaches mentioned above, we found that over half (53 percent) of the 252 responding coaches have been coaches for three or more years. Most of the coaches were either full- or part-time in their positions.

Among the coach respondents, 61 percent had coached more than five teachers the prior year and 87 percent reported using the Before-During-After (BDA) cycle of consultation at least sometimes when working one-on-one with teachers. Topics most frequently addressed one-on-one included: literacy strategies, formative assessments to improve instruction, and modeling reflective practice.

In addition to working with teachers one-on-one, these coaches offered professional development to teachers through both small-group and whole school activities. Ninety-four percent of the coaches offered professional development to teachers through both small-group and whole-school activities. Fully 70 percent of coaches led at least six group-level professional development activities during the year. Topics addressed most frequently included: using data for improving instruction, developing effective literacy strategies, holding grade-level meetings, establishing PLCs, and modeling reflective practice.

In an early study of the role of mentors (Dailey, Bhattacharya, Poliakoff, Smith, and Charner, 2010), all the mentors interviewed agreed that providing instructional support was basic to their role, though the specific contours of that support varied to some degree. Instructional support might consist of a number of different activities, from help in implementing specific instructional strategies to curriculum and assessment design. Like mentors, coaches described their primary role as providing instructional support to teachers. Specific support included: guidance on implementing specific instructional strategies, including strategies promoted by the Penn Literacy Network (PLN) and the BDA model; modeling lessons and/or instructional strategies; co-teaching; assisting with lesson planning and integrating technology into lesson plans; co-creating student assessments; and providing professional development.

These findings confirm that as the instructional coaches matured in their own practice, they came to recognize that there are many ways to help teachers. In addition to increasing opportunities to work one-on-one, they expanded their repertoire of small-group and whole-school professional development offerings. As coaches see the potential of and the limitations associated with one-on-one coaching (especially the time that is required to support teachers one-on-one), they have found other ways to help change teaching and learning. Teachers, in turn, have come to value how this dual approach helps strengthen instructional practice.

THE IMPACT OF COACHED TEACHERS ON STUDENT ENGAGEMENT AND STUDENT LEARNING

The most important question from a policy perspective may be this: If teachers are coached, does student engagement and student learning outcomes improve or change in measurable ways? This is *the* question that proponents of instructional coaching often need to answer in order to gain support for the idea of coaching from policy and decision makers.

Student Engagement

While improvements in student learning may be the ultimate objective, better student engagement helps teachers establish a positive learning environment. We have explored the issue of student engagement by looking at class attendance as a proxy for engagement, and by exploring the perceptions of teachers who have been coached.

Attendance as a Proxy for Engagement

We conducted a study in four Philadelphia high schools intended to address the following question: for a given grade level and subject, how did the students of coached teachers perform in comparison with the students of uncoached teachers from "matched" comparison classrooms (students with similar

demographics and similar statewide test performance for prior years) in the same subjects (Medrich, 2013). This was a one-year study. While we did not have access to individual-level student data, we were able to gather subject-specific student-level data by classroom. We found that the students of coached teachers were far more likely to come to school and attend the class of a coached teacher than were students of teachers who were not coached.

During the school year, students of coached teachers in the focal subject area at High School A attended school on average 7.5 days more than students of their uncoached teacher counterparts; and students of coached teachers in the focal subject area at High School B attended school an average of 17.3 days more than their comparison counterparts. These differences are material. Given a school year of approximately 18O days, the High School B students were at school in the focal subject classroom almost 10 percent more than their comparison school peers, and High School A students were at school over 4 percent more than their comparison school peers. These data suggest an important possibility—perhaps improvements in teacher instructional practice associated with instructional coaching made classes more engaging, such that students chose to attend the classes of the coached teachers more often.

In interviews (Augustus and Dailey, 2015), principals and other school leaders confirmed by observation that the coached teachers in these schools were much more able to teach the curriculum in a way that seemed to engage students. And indeed, their students were coming to class.

We hypothesize that instructional coaching changes the classroom experience for students in ways that can positively affect their behavior and attitudes toward school. Improved student engagement may be a real and important outcome for well coached teachers.

Coaches, Teachers, and Student Engagement

We turn now to our research focused not on students but on coached teachers and their views on the impact of coaching on student engagement.

From the secondary analysis of the 2008 and 2009 coaching study mentioned earlier (Medrich and Charner, 2009), we found that a payoff of coaching came in terms of student engagement: 77 percent of the coached teachers said their students were highly engaged during class, and were more engaged in their own learning—more so than before they were coached.

In the 2015 Charner and Mean study of teachers who had been coached, fully 99 percent of these teachers said that changes in their practice had an impact on student engagement. More of their students were engaged, students in their classes were sharing more with each other, and more students were engaged in reading and writing.

In the 2017 follow-up study of coached teachers, 100 percent of the teachers report that PIIC instructional coaching had an impact on student engagement. This is consistent with what was reported by this same cohort of teachers in 2013. It appears that PIIC instructional coaching has helped teachers better engage students in a variety of ways that have been sustained over time. The top areas of student engagement that were noted include: students share among themselves, students talk about content, students understand concepts, students are active in group work, and students volunteer answers.

In this study, with regard to the specifics of student engagement, there were differences between the impacts of coaching on teachers who were coached one year versus impacts on teachers who were coached more than one year. Here are some comparisons:

- Students share among themselves (91 percent versus 71 percent of teachers who were only coached one year);
- Students are active in group work (91 percent versus 71 percent);
- Students volunteer answers (91 percent versus 69 percent);
- Students work in pairs (87 percent versus 71 percent),
- Students ask questions (82 percent versus 57 percent);
- Students complete assignments (82 percent versus 50 percent); and
- ▶ Student attendance (43 percent versus 21 percent).

Again, this is an indication of the benefits of participating in more than one year of PIIC instructional coaching.

Similarly, administrators, coaches, and teachers in the Barrow school district saw anecdotal and observational evidence that coaching had an effect on teaching practices and student engagement.

We conclude: student engagement is increased in the classrooms of teachers who have worked with instructional coaches. Further, teachers who participate in more than one year of PIIC coaching are more likely to report improvements in student engagement. This speaks to the importance of continuous coaching and additional opportunities for teachers to get support and hone their craft.

Taken together: although students might not even know that their teacher was coached, their coached teacher became better at presenting material in class — and students responded positively.

Student Learning

One reason it is difficult to link student outcomes directly to instructional coaching is that instructional coaches do not work with students — they work with teachers. As a result, it rests with teachers to apply what they learn by working with coaches in ways that help their students. The very nature of the interaction, and the "distance" between coach and student, creates innumerable difficulties for researchers.

Student Learning—Improving Student Outcomes

One approach helped us overcome some of the challenges associated with examining this indirect relationship between instructional coaching and student outcomes. In a few instances, whole schools adopted instructional coaching as a comprehensive approach to professional development. They put all the professional development resources they could muster on the efficacy of instructional coaching. They used their funds to support coaches, understanding that there would be few other resources available for other forms of professional development (beyond that which was required by the state).

For three years, we followed the experience of one school in Pennsylvania that made this choice (Medrich, Fitzgerald, and Skomsveld, 2013). The setting was a small K-8 elementary school that deployed an instructional coach to work with all teachers, at all grade levels.

We identified two nearly identical control schools to compare with the "treatment school." These control schools, located in other parts of the state, shared similar profiles in terms of grade span and school size, student demographics, and results on the statewide standardized test exams given to all students grade 3 and above. What the control schools did not have was any kind of instructional coaching—without regard to whatever other forms of professional development they provided.

In summary, our findings were striking. Over the course of the three years of study, on a longitudinal basis, most students at most grade levels in the school with instructional coaching made gains in standardized test performance that exceeded their counterparts in the control schools and that exceeded their *expected* performance.

The sense of these data were clear. Students of teachers in the school with "wall to wall coaching" as a reform strategy were generally on a strong positive trajectory (reversing a long-standing trend of poor performance at the school in years prior to the introduction of instructional coaching), and the students were showing gains that exceeded their control school counterparts.

Were the teachers at the treatment school better to begin with? Unlikely, since student test results in the years prior to introducing instructional coaching were poor (one of the reasons that the school opted to try instructional coaching in the first place), and in almost every case the teachers at each grade level were the same over the entire three-year cycle (and in the year preceding the intervention).

At the conclusion of the research, we developed a modest theory of momentum that supports what we noted earlier about the skill sets of teachers who were coached for more than one year: over the three years, as teachers became comfortable with the coach and as the coach promoted an increasingly sophisticated professional development agenda, the school culture changed, and the teachers changed. They introduced new instructional practices, and student learning improved. Similarly, as students passed from grade to grade, and went from one coached teacher to another coached teacher, the students gained another advantage—they were exposed to a better and better quality of instruction. Cumulative gains reflect all around, among teachers and students alike.

There is a lot to be done before it is possible to argue the impact of instructional coaching on student learning. But our work persuades us that pursuing this line of inquiry, with methodologically rigorous and carefully constructed research studies will offer evidence to support the basic premise: instructional coaching done well, and done systematically and in a consistent fashion, changes teaching and helps to improve student learning.

Coaches, Teachers, and Perspectives on Student Learning

The class attendance study mentioned above provides one perspective on student learning. Coaches and teachers provide another.

In the 2015 Charner and Mean study of coached teachers, we found that almost all of the teachers reported that changes in their instructional practice had an impact on student learning, including: improvements in students' ability to make connections to prior learning, deeper understanding of concepts; improved quality of writing, and thinking more broadly about the material they studied.

In addition, as with student engagement, almost all teachers in the 2017 follow-up study reported that PIIC instructional coaching had an impact on student learning (this is consistent with the 2013 study). Teachers indicated the top areas of change in student learning included: student understanding of concepts, student retaining information, the quality of student writing, students making connections with prior learning, students demonstrating independent thinking and results on formative and summative assessment. These types of changes in student learning are indications that students will be better equipped to gain 21st century skills and meet benchmarked standards for college and career readiness.

In the case study of the Barrow school district, coaches reported that schools were starting to see measurable improvements in student achievement that they attributed, at least in part, to instructional coaching.

By coaching teachers, it appears that PIIC instructional coaching helped students learn as well, and that the impact on student learning has been sustained over time and improved student learning in a number of ways.

THE IMPACT OF MENTORS ON THE SKILLS AND CAPACITY OF COACHES TO HELP TEACHERS

From the inception of PIIC, we argued that coaches thrive when they have professional development opportunities of their own. While coaches bring considerable expertise to their practice, their own skills need to be continually refreshed and upgraded in order to best serve teachers. We have conducted both survey and observation research to explore the kinds of professional development coaches receive, and how they apply it in their own practice.

In the Charner and Mean 2015 coach survey, we found that almost two-thirds of the coaches (64 percent) had met one-on-one with their mentors during the year. While we hoped that all coaches would meet one-on-one with their mentors, the fact that some mentors were responsible for as many as 30 or more coaches made it difficult for them to provide this intimate level of interaction. Almost all of the coaches, however, reported that they regularly attended mentor-led coach meetings. Topics addressed by mentors while working with their coaches included implementing the BDA cycle of coaching, modeling reflective practice, building a collaborative environment among teachers, and using appropriate literacy strategies. When asked how their coaching practice changed as a result of working with mentors, behaviors most often identified by coaches were: sharing specific strategies from mentor meetings with their teachers (56 percent), collaborating more with other coaches (52 percent), feeling more motivated and confident in their practice (47 percent), and reflecting more effectively on their coaching practices (45 percent). Since teachers report that the greatest change was that they were more willing to try new instructional techniques because of their mentors, it appears that the strategies that coaches learned from mentors have been successfully passed along to the teachers as well.

In addition to our surveys, we conducted two studies exploring the role of mentors. In the first study (Dailey, Bhattacharya, Poliakoff, and Charner, 2010), we asked coaches who had worked with mentors about the role of mentors. They reported that the mentor role included maintaining regular contact with coaches. All of the coaches interviewed had been in personal contact with their Intermediate Unit

(IU) mentor at least monthly, and many spoke with their mentor on a weekly basis. In addition, mentors held monthly coaches' meetings. The mentors reinforce the coaching model and are advocates for coaches in the sense that they offer support and strategies to help coaches show the utility of coaching to administrators and teachers who do not understand or embrace the PIIC model. In this capacity, the mentors support the *role* of "instructional coach" and reinforce its value in the school environment. Finally, the coaches felt that mentors served as a listening ear. As one coach put it, "I see the mentor as a shoulder to cry on. She is not evaluative at all, but definitely...someone to collaborate with and bounce ideas off."

In another study, we observed mentors working with more than 100 instructional coaches and school leaders (Bhattacharya and Dailey, 2012). We observed that mentors provide busy coaches with a variety of essential supports including: helping coaches determine the most appropriate ways to work with teachers, watching coaches during one-on-one meetings working with teachers and providing feedback on how to improve these interactions, and modeling instructional techniques that coaches can then use with their teachers. This support proved invaluable to coaches trying to help teachers with implementation of state standards, to interpret formative assessment data, or to redesign classroom writing instruction.

The importance of the mentor was confirmed in the Barrow school district case study. The IU mentor worked with coaches to develop their coaching practice, focusing on clearly defining their role in the school and emphasizing collaboration with teachers. The mentor was the main source of professional development on coaching for many coaches in the PIIC participating districts. "My role," explained the IU mentor, "is to support the coaches with problem solving, reflecting, and just what it means to be a coach." The mentor led one of the twice-monthly coaches' meetings at the IU and held one-on-one meetings with coaches when possible. Time permitting, the mentor was available to coaches to co-plan or co-lead professional development sessions at schools, meet with administrators, or, most often, troubleshoot challenges around balancing coaches' responsibilities and managing their time. The mentor was on-call for support and never more than a phone call or email away.

Mentors provided general and specific supports to coaches and a problem-solving lifeline when that was necessary. The coach's coach is typically missing from many coaching models or situations. But as suggested by our research, mentors are an essential element of the instructional coaching equation.

THE ROLE OF ADMINISTRATORS IN INSTRUCTIONAL COACHING

Administrators and Instructional Coaches

Our first study of the school principal's perspectives on instructional coaching was undertaken in 2011 (Bhattacharya, Dailey, and Smith, 2011). This survey of principals from 10 IUs found that over half the principals had coaches in their schools. Even though most of these coaches were hired by school districts, 60 percent were supervised at the school level. Survey findings indicate that principals interacted closely with instructional coaches and were satisfied that instructional coaching made a difference in their schools. One principal emphasized the importance of project-based learning promoted by the instructional coach as an example of fostering learning through student engagement. Another principal

described the impact of instructional coaching on teachers as a form of motivation that is "contagious," where the coach provides the means and momentum for spreading good instructional ideas within and across departments.

Based on our prior findings about the importance of coaches' working relationships with school administrators, in 2015 we conducted telephone interviews with principals and administrators from schools with instructional coaches (Augustus and Dailey, 2015). The study examined how coaching fit into the school mission and how school administrators work with and support coaches.

While the school sites varied in demographics and in other ways, there was a common commitment to academic excellence and student achievement. Most of the administrators said that they wanted coaches to help teachers grow as educators, improve classroom instruction, and promote student engagement and learning. This commitment to instructional excellence was the primary reason administrators cited for implementing instructional coaching. Administrators asked coaches to help align curriculum and build teacher capacity. To one administrator, "coaching was an ideal model to build capacity in teachers and teach them how to get students more engaged."

In turn, coaches were clear about what they needed from their school leaders. One coach said: "What I want most is for my principal to talk about instruction with me and discuss how I can help meet the school mission. I don't just want to be left alone, and I don't want the principal on my case all the time. There's a reasonable middle ground that we should share as educators. I wish my principal recognized that that's the best place for us to be." (Medrich, 2015)

In recruiting coaches, administrators sought master teachers with a mix of strong academic and pedagogical knowledge and, crucially, strong interpersonal and leadership skills. Several administrators described looking for coaches with "social capital among teachers," who were "well respected among [their] colleagues" and had "rapport with other teachers so they would not feel threatened," even before mentioning content knowledge. Coaches' ability to develop mutually respectful and trusting relationships with their teaching colleagues was essential in their capacity to influence instruction.

Regardless of grade level or the duration of coaching implementation, administrators relied on their instructional coaches for a variety of specific duties with teachers that supported contextual school-wide goals, including: school-wide professional development, working with teachers in groups, and working with teachers one-on-one.

Coaches were very aware of the important basic support principals could offer. One coach said: "I met with my principal before the school year began. We discussed what I would do. We had some different ideas, but we figured out what would work for us both. He introduced me and allowed me to speak at the first staff meeting. Once the school year began, he took me around to meet every teacher. It was great. Everyone knew that the principal felt I could help each teacher work on their practice. I was very lucky to find myself in that situation." (Medrich, 2015)

Every coach looks for ways to engage her or his principal and every coach wants a positive relationship based on mutual understanding of what it takes for a coach to be effective. Some achieve that relationship; others find themselves unable to garner the support they need. What is interesting is that coaches are keenly aware of the fact that they rely on principals to help set the stage for them to succeed.

In the Barrow case study, coaches described how they worked with their principals to develop a shared understanding of how to prioritize time. Even in schools with a long history of coaching, veteran coaches met with their principals to refine and update their roles and responsibilities as needs evolved. One of the coaches reported that she "reframed" her position in the last several years in response to the needs of teachers in her building. In some instances, this led to distinct changes in coaching practice. Where once she met with teachers mostly in groups, she had moved toward more one-on-one meetings.

How administrators presented the coach to the school faculty was critical. Administrators saw explaining and reinforcing the role of the coach — as a supportive, never evaluative resource for teachers on instructional best practices — as an important part of their role vis-a-vis their coach. Many administrators explained the coaching role directly to their teachers in school staff meetings. They strived to reinforce their message through formal communications such as newsletters or emails (either regularly or on an *ad hoc* basis) throughout the school year (Augustus and Dailey, 2015).

Findings that emerged from the study include:

- The match between coach, administrator, and school must be compatible.
- Administrators were careful to recognize the balancing act coaches must play to promote adult learning among school staff.
- Administrators had difficulty attributing specific successes directly to coaching, yet many administrators believed in and were invested in the role of coaching based on their own observations and positive teacher feedback.
- Administrators who were not able to fund full-time coaching lamented that they were not able to achieve the full benefit of the coach.
- The specific mix of roles and responsibilities varied somewhat across schools.
- Even with the backing of administration, many coaches still struggled to reach all teachers.

In a case study of the Barrow school district, we explored the relationship between coaches and school administrators in more detail. In this district, coaches worked closely with administrators as members of the school leadership team on implementing whole-school initiatives. Coaches and administrators collaborated to identify the professional development needs of the school and of individual teachers. Principals recognized that having a go-to professional development resource was vital to achieving school goals and they promoted this facet of the coaches' job. Administrators and coaches tried to maintain semi-regular check-ins about the role of the coach in the school and how it could or should change in response to evolving needs and the needs of the coach.

It is important to note that the principal-coach relationship faced challenges, chief among them that coaches straddled a fine line between teachers and administrators. We found that administrators tried to be conscientious about preserving coaches' trusting relationships with teachers and were careful not to include any feedback from coaches in formal teacher evaluations. In addition, school administrators relied on coaching to help achieve quality instruction, and, ultimately, student achievement, regardless of differences in individual school contexts. Pursuing shared goals and responsibilities required that coaches and administrators develop strong partnerships balanced on a delicate mix of autonomy and support for coaches.

Administrators and Mentors

Mentors provide an important link between the IU, district, school administrators, and coaches. Mentors help administrators understand what it is that coaches do; provide information from the IU about initiatives and programs, as well as PD and resources that coaches can use in their work from day to day; and facilitate conversations between coaches and school leaders when appropriate or necessary. As representatives of the IU, mentors offer coaches a degree of credibility, and administrators recognize that, because of IU participation, the coaching role is important and valued (Dailey, et. al. 2010).

In our 2011 study of the principals' perspectives on instructional coaching, we examined the relationship between site administrators and mentors. Most of the principals had direct interactions with mentors and reported having met one-on-one with the mentor. Principals took time to observe mentors in workshops or other group events with coaches, and they also queried coaches about resources that mentors had provided. Principals perceived successful mentors as individuals who are more than passive resources for coaches. More specifically, mentors should be actively invested in the professional growth of their coaches. One principal described the mentor's role as fostering collective learning and creating a support network among coaches, thereby compounding individual coach growth with that of other coaches in the network.

In the 2015 study of principals, some administrators reported that they attended regular coaching-focused meetings with the IU mentor and met periodically with mentors individually. For others, their interaction with the mentor was infrequent and ad hoc.

Mentors ultimately link the IU and the coach. In a case study of the Barrow school district, the mentor was called upon to help administrators think through these important questions: "How do I use my coach?" What is appropriate for the coach to do and what is not?" Mentors often facilitate conversations between administrators and coaches, helping to establish parameters for the coaching role.

Mentors are important intermediaries. One mentor described the role this way: "You need to be able to advocate, you need to be able to articulate the (PIIC) model, and you need to be able to do it in a way that makes sense to district leaders and building principals." (Mentor Focus Group, 2016).

Most important, we found that principals who had mentors working with coaches in their schools all agreed that the mentor-coach relationship helped improve teacher instructional practice, student engagement, student achievement, and teacher commitments to helping students improve their achievement (Dailey, et al., 2010).

PUTTING IT ALL TOGETHER: A SYSTEMS APPROACH TO INSTRUCTIONAL COACHING

This summary report has examined findings from our many years of research. We have explored the contributions of coaches, mentors, teachers, school leaders, and administrators to the instructional coaching equation. Now we turn to the instructional coaching delivery system. Reference to the current PIIC system provides insight into structural issues that should be considered when designing a statewide system and strategy.

It is important to have a delivery system that meets two essential conditions and that provides specific management, accountability, and implementation processes.

TWO FUNDAMENTALS

Commitment to Actualizing an Agreed-upon Instructional Coaching Model

From our research on the implementation of PIIC and its instructional coaching model, we found two conditions that are central to creating an effective educator-centered instructional coaching delivery system.

Agreement on goals and purpose

CONDITION 1: Goals and purpose come first. Plans for instructional coaching must align with the agreed-upon goals and purpose.

From the research, it is clear that the focus of instructional coaching should be on coaches helping teachers strengthen their instructional practice with the goal of increasing student engagement and improving student learning.

A theory of action specifies how goals and purpose will be achieved. In the case of PIIC, the theory of action involves *process*, *pedagogy*, and *practice*. The *process* is the BDA—delivered one-on-one or in small-groups. *Pedagogy* and *process* are built around three foci: evidence-based literacy; data collection and analysis; and non-evaluative, confidential collaboration and self-reflection.

CONDITION 2: Whatever the stated goals and purposes for instructional coaching, all parties and participants must agree to support and pursue those goals.

This may seem self-evident, but there must be commitment to adhere to the direction that is chosen: IUs, districts, schools, principals, and teachers must vigorously support the instructional coaching model and process.

At the least, commitment means supporting three principles:

- **UBIQUITY:** agreement that in every school that offers instructional coaching, to the greatest extent possible, all teachers should have an opportunity to be coached.
- **DOSAGE:** agreement that all teachers at schools offering instructional coaching will receive an agreedupon minimum amount of coaching (through school-wide or small-group professional development led by a coach or through one-on-one instructional coaching), and that interested teachers will have an opportunity to receive additional coaching.
- **FIDELITY:** perhaps most important, agreement to deliver instructional coaching in accord with the model's defined structure and processes.

DESIGNING THE BUILDING BLOCKS TO SUPPORT INSTRUCTIONAL COACHING

Once goals, purpose, and approaches are agreed upon, the next steps involve specifying the management and accountability systems and the implementation strategy that will support service delivery.

Management

There must be a sufficiently robust structure to assure that the system is able to achieve its goals.

The PIIC experience is instructive. A management team ensures that coaches and mentors in the field are all "on the same page," acting with one voice. As the research shows, professional development is important at all levels of the system and the management team should be responsible for providing coaches, mentors, and school and district administrators with professional development opportunities as well as resources in the form of books and other publications, website content, newsletters and blogs. Further, in the case of PIIC, an online resource guide has given coaches access to materials that are shared in common. Finally, the management team is responsible for monitoring the instructional coaching work of mentors and for providing basic administrative services, which frees coaches and mentors so that they can spend their time working to promote the coaching mission.

Implementation Strategy

A carefully designed and executed implementation strategy is key to success.

Lessons from PIIC suggest that a strong implementation strategy requires a state-wide organizational unit at its core. This unit may be part of the state department of education, a regional education agency, or some other sub-state structure. Mentors who work with and support coaches should be part of the state-wide unit and should be convened periodically by the management team to share experiences, success, and challenges. As the research also shows, mentors themselves need support. There should be experienced and seasoned professionals, under the direction of the management team, who serve as coaches to the mentors.

Accountability

The management team must design and execute an accountability process.

Major accountability tasks include budget and program oversight, and research and evaluation. Research and evaluation helps all levels in the system understand how the implementation and accountability mechanisms are working, and it offers insight into outcomes while the program is ongoing, which promotes opportunities for continuous improvement of the instructional coaching process.

THE MESSAGE

Taken together, these component parts define the system. The conditions and functions are central to creating process that will support the instructional coaching initiative. PIIC serves as an example of a systems approach that has proven especially effective in administering and supporting such a system of instructional coaching throughout the Commonwealth.relied on coaching to help achieve quality instruction, and, ultimately, student achievement, regardless of differences in individual school contexts. Pursuing shared goals and responsibilities required that coaches and administrators develop strong partnerships balanced on a delicate mix of autonomy and support for coaches.

HOW OUR RESEARCH HAS HELPED US REFLECT UPON AND STRENGTHEN OUR EDUCATOR-CENTERED INSTRUCTIONAL COACHING FRAMEWORK

Our research for PIIC has supported a continuous improvement strategy. Based on research findings, we believed from the outset that we should be prepared to refine and retune the instructional coaching initiative in response to evidence gathered on the ground.

As an example, consider one-on-one coaching. In a perfect circumstance, every coach would work with teachers one-on-one and every teacher would have a coach. In fact, however, one-on-one coaching is time intensive (how many teachers can a coach work with each week?), and may not apply to every teacher. Particularly early in a coach's tenure, it may be much more appropriate to use coaching time to organize small-group or whole-school professional development around particular teacher interests, and build credibility that will encourage teachers to follow up and, perhaps, ask for one-on-one assistance.

From our research, we have come to understand that many teachers may not be ready for one-on-one coaching, but they are willing to participate in group activities led by coaches. We learned that there is particular power in mixing one-on-one and group coaching activities, and that teachers who participated in both were the greatest beneficiaries of a coaching relationship.

We know that policymakers and school leaders are always asking "Does it work?" By that they mean, "Does coaching help improve student outcomes?" We understood further that the question was not "Did it work someplace else?" In our experience, the question was "Did it work here?" For that reason, we designed and executed research to explore what we could learn in the PIIC settings. In the end, we were able to report that our research found improvements in student learning and student engagement, as evidenced by gains in student scores on standardized tests, and attendance levels among students of coached teachers. We also found many changes in classroom instruction suggesting not only that the vast majority of coached teachers changed their practice but also that teachers believed that these changes have had a positive impact on student engagement and student learning. Indeed, while our findings are based on small studies, they indicate that the school communities that embraced educator-centered instructional coaching value the results.

There have been many other changes to instructional coaching practice as a result of our research. PIIC now supports more small and large group professional development gatherings, PIIC has placed more emphasis on the BDA cycle of coaching in our training, and we initiated a website to put new resources in the hands of our coaches, rather than have each of them spend time looking on their own. In addition, PIIC has intensified the commitment to providing every coach with a coach (referred to as mentor) and has even provided additional support to the mentors through regional mentor coordinators. As important, our research has been used to provide instructional coaches with evidence that their work was in fact affecting how teachers teach and how students learn. This may seem obvious, but it is far from it; many who participate in school-based initiatives like educator-centered instructional coaching never have any sense of "how they are doing," or whether they are making a difference—or research findings become known only when the program is at the end of its funding cycle. In contrast, we have shared findings from the research as they become available with the PIIC management team, school administrators, the mentors, and the coaches, so that it can affect changes in the delivery of instructional coaching and ultimately in changes in classroom practice.

We have tried to focus our research on issues that mattered to policymakers, school leaders, and teachers in our statewide community. The research is modest, but it offers some tentative indications of how instructional coaching has come to impact teachers and students. We have not offered definitive answers to any of the issues we have explored. We have, however, used our research to confront issues of special import and provide *some* evidence that educator-centered instructional coaching is effective and that it can contribute to building a new approach to professional development and teacher professional learning.

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